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ENVIRONMENTAL & WATER-RESOURCE CONSULTANTS

June 26, 2023

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Subject: **Sparton Technology, Inc: Former Coors Road Plant Remedial Program 2022 Annual Report**

Ladies and Gentlemen:

On behalf of Sparton Technology, Inc. (Sparton), S.S. Papadopulos & Associates, Inc. (SSP&A) is pleased to submit the subject report. The report presents data collected at Sparton's former Coors Road Plant during the operation of the remedial systems in 2022 and evaluations of these data to assess the performance of the systems.

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We certify under penalty of law that this document and all attachments were prepared under our direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based upon our inquiry of either the person or persons who manage the system and/or the person or persons directly responsible for gathering the information, the information submitted is, to the best of our knowledge and belief, true, accurate, and complete. We further certify, to the best of our knowledge and belief, that this document is consistent with the applicable requirements of the Consent Decree entered among the New Mexico Environment Department, the U.S. Environmental Protection Agency, Sparton Technology, Inc., and others in connection with Civil Action No. CIV 97 0206 LH/JHG, United States District Court for the District of New Mexico. We are aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions concerning the report, please contact us.

Sincerely,

S.S. PAPADOPULOS & ASSOCIATES, INC.

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Sparton Technology, Inc.
Former Coors Road Plant
Remedial Program

2022 Annual Report

Prepared for:

Sparton Technology, Inc.
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S.S. PAPADOPULOS & ASSOCIATES, INC.
Environmental & Water-Resource Consultants

June 26, 2023

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List of Acronyms

µg/L	microgram per liter
Agencies	The USEPA and the NMED, collectively
COA	City of Albuquerque
Cr	chromium
DCE	1,1-dichloroethylene
DFZ	Deep Flow Zone below the 4800 – foot clay
dioxane	1,4-dioxane
EA	EA Engineering, Science, and Technology, Inc., PBC
Fe	iron
ft	foot or feet
ft MSL	feet above mean sea level
ft/d	feet per day
ft/yr	feet per year
ft^2	square feet
ft^2/d	feet squared per day
ft^3	cubic feet
g/cm^3	gram per cubic centimeter
gpd	gallon per day
gpm	gallon per minute
GWQB	Ground Water Quality Bureau of the NMED
hr	hour
kg	kilogram
lb	pound
lb/hr	pound per hour
LFZ	Lower Flow Zone (ULFZ and LLFZ)
LLFZ	Lower Flow Zone
MCL	maximum contaminant level
Metric	Metric Corporation
mg/L	milligram per liter

min	minute
Mn	manganese
MSL	mean sea level
ND	not detected
NMED	New Mexico Environment Department
NMWQCC	New Mexico Water Quality Control Commission
O/S	on-site
RFI	RCRA Facility Investigation
rpm	revolution per minute
Sparton	Sparton Technology, Inc.
SSP&A	S.S. Papadopulos & Associates, Inc.
SVE	soil vapor extraction
TCA	1,1,1-trichloroethane
TCE	trichloroethylene
UFZ	Upper Flow Zone
ULFZ	Upper Lower Flow Zone
USEPA	United States Environmental Protection Agency
USF	Upper Santa Fe Group
USGS	United States Geological Survey
VC	vinyl chloride
VOC	volatile organic compound

REPORT

Section 1
Introduction

The former Coors Road Plant of Sparton Technology, Inc. (Sparton) is located at 9621 Coors Boulevard NW (on the west side of the boulevard), Albuquerque, New Mexico, north of Paseo del Norte and south of the Arroyo de las Calabacillas (see Figure 1.1). Investigations conducted between 1983 and 1987 at and around the plant revealed that on-site soils and groundwater were contaminated by volatile organic compounds (VOCs), primarily trichloroethene (TCE), 1,1,1-trichloroethane (TCA) and 1,1-dichloroethene (DCE), and by chromium, and that contaminated groundwater had migrated beyond the boundaries of the facility to downgradient, off-site areas.

These investigations also indicated that groundwater contamination was primarily within a sandy unit that lies above a 2-4 feet (ft) thick clay unit referred to as the 4,800-ft clay unit. This unit was encountered in every deep well installed during site investigations and in the U. S. Geological Survey (USGS) Hunter Ridge Park 1 Boring about 0.5 mile north of the site. The saturated thickness of the sands above the clay unit is about 160 ft. Beneath the facility, and in an approximately 1,500 ft wide band trending north from the facility, a silty clay unit of variable thickness (from zero at the edges to about 23 ft at monitoring well MW-20) and of variable elevation, has been mapped between the elevation interval of about 4,955 ft above mean sea level (ft MSL) and 4,980 ft MSL. In general, this unit has an average thickness of about 10 ft and is referred to as the 4,970-ft silt/clay unit.

Depending on the depth of their screened interval, wells installed at the site and its vicinity during site investigations, or later, have been referred to as Upper Flow Zone (UFZ) wells if screened across, or within 15 ft of, the water table, Upper Lower Flow Zone (ULFZ) wells if screened 15-45 ft below the water table, Lower Lower Flow Zone (LLFZ) wells if screened more than 45 ft below the water table, and Deep Flow Zone (DFZ) wells if screened below the 4,800-ft clay. The USGS boring also indicates a 15-ft thick clay unit below the DFZ between elevations of 4,705 and 4,720 ft MSL. At the on-site area, the 4,970-ft silt/clay unit separates the UFZ from the ULFZ. Well locations are shown in Figure 1.2 and their screened interval in relation to these flow zones is shown in Figure 1.3.

On March 3, 2000, the United States Environmental Protection Agency (USEPA), the State of New Mexico Environment Department (NMED), the County of San Bernalillo, the City of Albuquerque (COA) and Sparton entered into a Consent Decree that set the terms for addressing soil and groundwater contamination. Under the terms of this Consent Decree, Sparton is currently operating an off-site and a source containment system to address groundwater contamination.[1] The off-site containment system consists of a containment well, CW-1, that fully penetrates the saturated portion of the sand unit above the 4,800-ft clay, a treatment building with

[1] Under the terms of the Consent Decree, Sparton also operated a Soil Vapor Extraction (SVE) system to address on-site soil contamination; this system was operated for a total of about 372 days between April 10, 2000 and June 15, 2001 and was dismantled in May 2002 after data indicated that the requirements and performance goals of the Consent Decree were met (Chandler and Metric Corp., 2001).

an air stripper to treat the pumped water, a pipeline to the nearby Arroyo de las Calabacillas, and an infiltration gallery in the arroyo for returning the treated water to the aquifer (see Figure 1.4). The source containment system also consists of a containment well, CW-2, with a 50-ft screen across the upper part of the sand unit, an on-site treatment building with an air stripper[2] to treat the pumped water, and pipelines to two on-site ponds[3] for returning the treated water to the aquifer (see Figure 1.5).

Prior to the implementation of the remedial measures discussed above, the predominant contaminants at the off-site areas were VOCs, primarily TCE followed by DCE and TCA. In past Annual Reports the initial horizontal extent of these three contaminants was presented in plume maps prepared using November 1998 data from monitoring wells that existed at that time. At the on-site area, these plume maps did not distinguish between shallow wells completed above the 4970-ft silt/clay and deeper wells completed below the 4970-ft silt/clay. After chromium concentrations in the water pumped from the source containment system increased in 2013, and a chromium removal unit was installed to address them in 2014, the USEPA and NMED requested that Sparton in the 2015 and subsequent Annual Reports include maps showing the extent of chromium contamination.[4] In preparing chromium plume maps for the 2015 Annual Report, it became apparent that a distinction needed to be made between plume extent above and below the 4970-ft silt/clay unit. This distinction was made not only in preparing the initial and the 2015 chromium plume maps, but also in revising the initial and preparing the 2015 plume maps for the predominant VOCs. Annual Reports prepared since that time distinguish between plume extent above and below the 4970-ft silt/clay unit.

The extent of the initial TCE plume above the 4970-ft silt/clay unit (hereafter the on-site plume) is shown in Figure 1.6 and that of the plume below the 4970-ft silt/clay and at the off-site areas (hereafter the regional plume) is shown in Figure 1.7. The corresponding initial DCE plumes are shown in Figures 1.8 and 1.9, and the initial TCA plumes are shown in Figures 1.10 and 1.11. Dissolved chromium concentrations, or total chromium concentrations wherever dissolved chromium data were not available, were used in determining the initial extent of the chromium plumes. The extent of the initial on-site chromium plume is shown in Figure 1.12 and that of the regional chromium plume is shown in Figure 1.13.

As indicated by these figures, the largest initial plume was that of TCE. Based on the initial horizontal and vertical extent of the plume for this compound, and a porosity of 0.3, the initial pore

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[2] A chromium removal unit was added to the treatment system in early 2014 to address increased chromium concentrations in the influent. In late 2019 and early 2020 chromium concentrations in the influent decreased below the New Mexico standard; therefore, the chromium removal unit started being bypassed in early March 2020 and decommissioned in October 2020 when monthly data indicated that chromium concentrations in the influent continued to remain below the New Mexico standard.

[3] The original design consisted of six infiltration ponds. Based on performance data from these ponds, two ponds were backfilled in late 2005 and another two in early 2014 with the approval of the regulatory agencies.

[4] Letter dated February 5, 2016 from Chuck Hendrickson of USEPA and Dave Cobrain of NMED to Ernesto Martinez of Sparton, re: Approval with Modifications, Request for Approval of Changes to Reporting Requirements and to Sampling Methodology, Sparton Technology, Inc., Former Coors Road Plant Remedial Program, EPA ID No. NMD083212332.

volume of the plume was estimated to be approximately 150 million cubic ft (ft^3), or 1.13 billion gallons, or 3,450 acre-ft [see the 1999 Annual Report (S.S. Papadopulos & Associates, Inc. [SSP&A], 2001a)].

Based on trends in the monthly mass removal rates by the off-site and source containment systems and the mass of VOCs removed as of the end of 2022, the initial dissolved VOC mass within the aquifer underlying the site and its vicinity is currently estimated to be about 8,840 kilograms (kg) or 19,490 pounds (lbs), consisting of approximately 8,150 kg (17,970 lbs) of TCE, about 665 kg (1,465 lbs) of DCE, and about 25 kg (55 lbs) of TCA.[5] Available data are not adequate for estimating the initial mass of dissolved chromium.

The off-site containment well began operating on December 31, 1998 and is currently operating at an average pumping rate of about 300 gallons per minute (gpm). The year 2022 constitutes the 24th year of operation of the off-site containment system. The source containment system began operating at an average rate of about 50 gpm on January 3, 2002. Thus, the year 2022 constitutes the 21st year of operation of this system.

Between the beginning of the current remedial operations in December 1998 and the end of May 2011, Metric Corporation (Metric) of Albuquerque and then of Los Lunas, New Mexico was responsible for the operation of the remedial systems, the collection of monitoring and system performance data, and for other field activities. SSP&A was responsible for these activities between June 1, 2011 and July 31, 2014, and OCCAM/EC (formerly Easterling Consultants, LLC) of Albuquerque, New Mexico between August 1, 2014 and June 30, 2018. Since July 1, 2018 these activities are conducted by EA Engineering, Science, and Technology, Inc., PBC (EA) of Albuquerque, New Mexico.

The objectives of the containment systems are:

- To contain and capture contaminated groundwater in the off-site area;
- To contain and capture most of the contaminated groundwater leaving the on-site area;
- To treat the captured water and return it to the aquifer; and
- Achieve groundwater standards to the extent required by the terms of the Consent Decree (2000).

The purpose of this 2022 Annual Report is to:

- Discuss problems encountered during the 2022 operation of the systems;
- Present the data collected during 2022 from operating and monitoring systems; and
- Evaluate the performance of the systems with respect to meeting the above cited objectives, and the requirements of the site's permits.

This report was prepared by SSP&A on behalf of Sparton. Issues related to the year 2022 operation of the off-site and source containment systems are discussed in Section 2. Data collected to evaluate system performance and to satisfy permit or other requirements are presented in

[5] This estimated initial VOC mass does not include VOCs that were removed from groundwater by SVE systems that were operated at the on-site area.

Section 3, and Section 4 presents evaluations of these data with respect to the performance and the goals of the remedial systems. A summary and conclusions of the report and a discussion of future plans are presented in Section 5. Section 6 lists previous reports and documents pertinent to site investigations and activities, including references cited in this report.

Section 2
System Operations

2.1 Monitoring Well System

During 2022, water levels were measured in and samples were collected from all accessible monitoring wells as required under the terms of the Groundwater Monitoring Program Plan[6] (Monitoring Plan) and the State of New Mexico Groundwater Discharge Permit DP-1184 (Discharge Permit) at the frequency specified in these documents.

The completion flow zone, location coordinates, and measuring point elevation of all wells that existed during 2022 are presented on Table 2.1;[7] their diameters and screened intervals are summarized on Table 2.2. The wells sampled under the requirements of the Monitoring Plan and the Discharge Permit are listed on Table 2.3; also shown on this table are the sampling frequency of these monitoring wells, the method used for purging and sampling each well and, for wells sampled by a pump, the depth to the intake of the pump. Note that twelve, mostly on-site, 2-inch diameter, and relatively shallow, wells are purged and sampled by bailer; the remaining monitoring wells are purged and sampled by dedicated pumps. Also note that, to minimize the required purge volume for some of the deeper monitoring wells, an inflatable packer has been installed a few feet above the top of the screen; before purging, the packer is inflated to isolate the pump and the screened interval from the water column above the packer, and purge volume is based on the volume of water below the packer. After the end of purging, the sample is collected from the purged isolated interval below the packer.

2.2 Containment Systems

2.2.1 Off-Site Containment System

Water levels in the off-site containment well, CW-1, the two nearby observation wells, OB-1 and OB-2 (see Figure 1.2), and the infiltration gallery piezometer, PZG-1 (see Figure 1.4), were measured quarterly. Samples of the influent to and effluent from the treatment plant were collected monthly for water-quality analyses. The off-site containment system operated about 99.1 percent of the time available during 2022; the total hours of operation and the downtime for the system during the year are summarized on Table 2.4.

2.2.2 Source Containment System

Water levels in the source containment well, CW-2, were measured quarterly, and water-quality samples of the influent to and effluent from the treatment system were collected monthly. The source containment system operated about 96.3 percent of the time available during 2022; the

[6] Attachment A to the Consent Decree.

[7] Also included in this table are the location coordinates and measuring point elevation of the infiltration gallery piezometer PZG-1, which monitors water accumulation in the gallery, if any, for the purpose of providing a warning system for potential maintenance or replacement requirements at the gallery.

totals hours of operation and downtime for the system during the year are summarized on Table 2.5.

2.3 Problems and Responses

2.3.1 Monitoring Wells

There were no problems associated with the operation of the monitoring well network during 2022.

2.3.2 Containment Systems

At the off-site containment system, there were two downtimes during 2022 (see Table 2.4). The first downtime occurred in February and was due to the malfunctioning of the level sensor on the air stripper (about one day); the second downtime was in early March when the system was shut down to clean and service the air stripper (a little over two days).

At the source containment system, there were six downtimes during 2022 (see Table 2.5). Three of these downtimes were for routine maintenance issues that lasted less than two hours each, and a shutdown of about 8 hours occurred in July due to power failure. The longer downtimes during the year were associated with the cleaning up of the containment well and the inspection of the pumping system (about 26 hours) and the failure of the submersible pump on the containment well and its repair (about 12 days).

Section 3
Monitoring Results

The following data were collected in 2022 to evaluate the performance of the operating remedial systems and to meet the requirements of the Consent Decree and of the permits for the site:

- Water-level and water-quality data from monitoring wells;
- Data on containment well flow rates; and
- Data on the quality of the influent to and effluent from the water-treatment systems.

3.1 Monitoring Wells

3.1.1 Water Levels

Water levels during 2022 were measured quarterly, in February, May, August and November. During each round of measurements, the depth to water was measured in all accessible monitoring wells, the off-site and source containment wells, the two observation wells near the off-site containment well, and the piezometer installed in the infiltration gallery. The corresponding elevations of the water levels during each of the four measurement rounds, calculated from these data, are summarized on Table 3.1. Selected monitoring well hydrographs are presented in Figure 3.1. As these hydrographs indicate, prior to and after the start of remedial operations at the site, regional water-levels had been declining due to groundwater production from deeper aquifers and a reduction in the extent of irrigated lands in the vicinity of the Site. The declining trend was reversed in 2013 and since then water levels have a generally rising trend. This reversal in water-level trends was attributed to a reduction in groundwater pumping through surface water use from the San Juan-Chama Drinking Water Project (Powell and McKean, 2014), and to increases in recharge due to recent improvements at the Arroyo de las Calabacillas. The water-level data from the last several years suggest that the effects of the reduced pumping and of the increased recharge on water levels may have been fully dissipated by now and that another reversal in trends may be in process.

Water levels in some on-site wells completed above the 4970-foot silt/clay unit are also affected by the operation of the source containment system; they particularly respond to the discharge, or lack of discharge, of treated water into the infiltration ponds, depending on their proximity to the pond that is active at a given time (see, for example, the hydrographs of wells MW-17 and MW-22 in Figure 3.1).

3.1.2 Water Quality

Under the terms of the Consent Decree, Sparton is required to collect groundwater samples from the monitoring wells listed in the Monitoring Plan (Attachment A to the Consent Decree), or from their replacements or modified versions, and from new monitoring wells installed under subsequent agreements between the Agencies and Sparton, at the frequency specified in the Monitoring Plan, or in the agreements, and analyze these samples for VOCs and for total chromium. Sparton is also required, under the terms of the Discharge Permit DP-1184, to collect

quarterly groundwater samples from the infiltration gallery and pond monitoring wells and monthly samples of the influent to and effluent from the off-site and source containment systems, and analyze these samples for VOCs and dissolved chromium, iron, and manganese.

On March 20, 2019, NMED notified Sparton that, due to amendments to the New Mexico Ground and Surface Water Protection Regulations (20.6.2 NMAC), a pending application from Sparton for the renewal of Discharge Permit DP-1184 be revised to include sampling for 1,4-dioxane (dioxane).[8] This notice was followed by another on April 8, 2019 from the Agencies requiring that dioxane be added to the Monitoring Plan of Sparton's remedial program.[9]

After several communications between representatives of the Agencies and Sparton, including a Notice of Dispute filed by Sparton on April 30, 2019,[10] a June 26, 2019 meeting in Albuquerque, New Mexico, four quarterly rounds of sampling from all monitoring wells for dioxane,[11] and other communications between the parties, Sparton agreed to add dioxane to the compounds for which all water samples collected under the Monitoring Plan and the Discharge Permit are analyzed effective August 1, 2020.[12] Thus, in addition to the compounds specified in the Consent Decree and the Discharge Permit, water samples collected during 2022 were also analyzed for dioxane.

The results of the analyses of the samples collected during 2022 from the Monitoring Plan wells are presented on Table 3.2 and of those collected from the infiltration gallery and pond monitoring wells are presented on Table 3.3. Note that the Fourth Quarter (November) samples from the Monitoring Plan wells (Table 3.2) were also analyzed for dissolved chromium[13] and that

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[8] Letter dated March 20, 2019 from Michelle Hunter of NMED to Ernesto Martinez of Sparton, Re: Discharge Permit Modification Required for Additional Contaminant, and Abatement Plan Required for Vadose Zone Contamination, Sparton Technology Site, Albuquerque, NM.

[9] Letter dated April 8, 2019 from Dave Cobrain of NMED and Chuck Hendrickson of USEPA to Ernesto Martinez of Sparton, Re: Notification of Regulation Change and Requirement to Add 1,4-Dioxane to the Monitoring Plan, Sparton Technology Site, Albuquerque, NM.

[10] Letter dated April 30, 2019 to Dave Cobrain of NMED and Chuck Hendrickson of USEPA from James B. Harris of Thompson & Knight LLP, Re: Notice of Dispute.

[11] The first two rounds of these dioxane sampling events were carried out during the Fourth Quarter 2019 and the First Quarter 2020 monitoring events; the results of these two dioxane sampling events were reported to the Agencies on April 16, 2020 in a Status Report prepared by SSP&A on behalf of Sparton (SSP&A, 2020a). The second two rounds of the dioxane sampling events were conducted during the Third and Fourth Quarter 2020 monitoring events; the results of these two dioxane sampling events were reported in a Status Report submitted to the Agencies on January 29, 2021 (SSP&A, 2021a). These dioxane results were also reported in the 2019 and 2020 Annual Reports (SSP&A, 2020b; 2021b).

[12] See Monthly Progress Report for month ending July 31, 2020, CV-967-0206 (D.N.M.), Albuquerque v. Sparton Technology, Inc., 08/07/2020, Tasks Planned, Item I Groundwater Monitoring Plan.

[13] Total chromium concentrations in samples from monitoring wells are often affected by suspended sediments and, therefore, dissolved chromium concentrations are more reliable for evaluating temporal and spatial variations in chromium concentrations such as those presented in Section 4.2. It is for this reason that the Fourth Quarter samples from the Monitoring Plan wells are also analyzed for dissolved chromium.

samples from pond monitoring well MW-17 (Table 3.3) were analyzed for both total and dissolved chromium.[14]

Concentrations of VOCs and metals that exceed the more stringent of their Maximum Contaminant Levels (MCLs) for drinking water or their maximum allowable concentrations in groundwater set by New Mexico Water Quality Control Commission (NMWQCC) are highlighted on Tables 3.2 and 3.3. For dioxane, concentrations on these tables are highlighted when exceeding the NMED Risk Assessment Guidance tap water screening level. The laboratory reports for all water quality analyses conducted during 2022 are presented in the Attachment to this report.

The March 20, 2019 letter from NMED referred to earlier (see Footnote 8 on page 3-2) also notified Sparton that an abatement plan must be prepared to address potential vapor intrusion associated with groundwater down gradient of the Coors Road facility. Vapor intrusion was, therefore, also the subject of discussions and correspondence between representatives of the Agencies and Sparton. On behalf of Sparton, a proposal for investigating this issue was submitted to the Agencies by SSP&A in March 2020.[15,16]

3.2 Containment Systems

3.2.1 Flow Rates

The monthly and total volumes of groundwater pumped by the off-site and source containment wells during 2022 and the corresponding flow rates are summarized on Table 3.4.

3.2.2 Influent and Effluent Quality

Concentrations of TCE, DCE, TCA, dioxane, total and dissolved chromium, iron, and manganese in monthly influent and effluent samples collected from the off-site containment system during 2022 are summarized on Table 3.5; the concentrations of the same constituents in monthly influent and effluent samples collected from the source containment system during 2022 are summarized on Table 3.6.[17] Concentrations of these constituents that exceed the more stringent of their MCLs for drinking water or their maximum allowable concentrations in groundwater set by NMWQCC, if any, are highlighted on Tables 3.5 and 3.6. Note that none of these monthly samples had dioxane concentrations that exceeded the NMED Risk Assessment Guidance tap

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[14] Well MW-17 is also a Monitoring Plan monitoring well and analysis of Fourth Quarter samples from this well for total chromium is required under the Monitoring Plan.

[15] Letter dated March 6, 2020 to Charles Hendrickson of USEPA and to Dave Cobrain, Kevin Pierard, Michelle Hunter, Naomi Davidson and Melanie Sandoval of NMED from Stavros S. Papadopulos and Alex Spiliotopoulos of SSP&A, Re: Sparton Technology, Inc. Former Coors Road Plant Remedial Program, *Revised Response to NMED's Discharge Permit-1184 Modification Request for an Abatement Plan for Vadose Zone Contamination*.

[16] A response to this proposal was received during the preparation of this 2022 Annual Report: Letter dated May 8, 2023 from Justin Ball, Chief Ground Water Quality Bureau (NMED), to Benjamin Kohr, Deputy General Counsel, Elbit Systems of America (Sparton Corporation), Re: *Revised Stage 1 Abatement Plan Proposal Required, Former Sparton Technology Site, 9621 Coors Blvd NW, Albuquerque, New Mexico*.

[17] The data from the January 2023 samples are also included on Tables 3.5 and 3.6 because they are used to calculate the average contaminant concentrations in the influent during December 2022; these average concentrations are then used to calculate mass removal rates for the month of December.

water screening level. The laboratory reports for these analyses are also presented in the Attachment to this report.

Section 4
Evaluation of Operations

As stated in the Introduction (Section 1), the objectives of the off-site and source containment systems are:

- To contain and capture contaminated groundwater in the off-site area;
- To contain and capture most of the contaminated groundwater leaving the on-site area;
- To treat the captured water and return it to the aquifer; and
- Achieve groundwater standards to the extent required by the terms of the Consent Decree (2000).

This section presents evaluations of the performance of the off-site and source containment systems, based on data collected during 2022, with respect to their meeting the above-stated objectives.

4.1 Hydraulic Containment

4.1.1 Water Levels and Capture Zones

The water-level elevation data presented in Table 3.1 were used to evaluate the performance of both the off-site and source containment wells with respect to providing hydraulic containment for the regional plumes and potential on-site source areas. Maps of the elevation of the on-site water table and of the water levels in the UFZ/ULFZ and the LLFZ during each quarterly round of water-level measurements in 2022 are shown in Figures 4.1 through 4.12. The quarterly on-site water tables are shown in Figures 4.1, 4.4, 4.7, and 4.10; also shown on these figures are the capture zone of the source containment well in UFZ/ULFZ and the extent of the on-site TCE plume. The quarterly water levels and the capture zones of the off-site and source containment wells within the UFZ/ULFZ are shown in Figures 4.2, 4.5, 4.8, and 4.11, and those within the LLFZ are shown in Figures 4.3, 4.6, 4.9, and 4.12; also shown on these figures is the extent of the regional TCE plume. The extent of the TCE plume shown in Figures 4.1 through 4.9 is based on last year's (November 2021) water-quality data from monitoring wells, and that of the plume shown on the water-level maps for November 2022 (Figures 4.10 through 4.12) is based on the November 2022 water-quality data.

The on-site TCE plume lies along the southern limit of the 4970-ft silt/clay unit; the configuration of the on-site water table (Figures 4.1, 4.4, 4.7, and 4.10) indicates that groundwater from the plume area discharges into the regional aquifer over the southern edge of the 4970-ft silt/clay unit, mostly within the capture zone of the source containment well in the UFZ/ULFZ; vertical leakage of contaminated water across the silt/clay unit is also mostly within the capture zone of the source containment well. The water levels in the UFZ/ULFZ (Figures 4.2, 4.5, 4.8, and 4.11) and in the LLFZ (Figures 4.3, 4.6, 4.9, and 4.12) show that at a pumping rate that averaged 296 gpm during 2022, the capture zone of the off-site containment well CW-1 extends beyond the November 2021 or November 2022 extent of the regional TCE plume and provides an ample safety margin to the hydraulic containment of this plume. These water levels also indicate that

at an average pumping rate of 49 gpm for the year, the source containment well CW-2 continued to capture most of the contaminated groundwater at the on-site area.

Water-level measurements in the three DFZ wells, MW-67, MW-71R, and MW-79, for each quarterly round of 2022 are shown in Figure 4.13. Also shown in this figure is the average water level in these wells, calculated from the quarterly measurements, and the direction of groundwater flow and the hydraulic gradient during each quarterly measurement event and under average conditions. During 2022 the direction of groundwater flow in the DFZ ranged from W 21.1° N in February to W 24.6° N in May, and the hydraulic gradient from 0.00285 in February to 0.00311 in November. The average direction of groundwater flow in the DFZ during 2022, as calculated from the quarterly water-level measurements, was W 23.3° N with an average hydraulic gradient of 0.00297.

4.1.2 Effects of Containment Well Shutdown on Capture

The containment systems are occasionally shut down for maintenance and repairs, and sometimes due to power or equipment failures (see Tables 2.4 and 2.5). The potential effects of such shutdowns on contaminant migration are discussed below.

The capture zone of the source containment well lies within the capture zone of the off-site containment well, and its downgradient limit is within the plume area. Any shutdown of this well would cause some contaminants to escape beyond its capture zone, but these contaminants remain within the capture zone of the off-site containment well and will eventually be captured by this well.

Given the distance between the leading edge of the off-site plume and the limits of the capture zone of the off-site containment well, it is highly unlikely that any contaminants would escape beyond the capture zone of this well during a shutdown of limited duration. Under non-pumping conditions, the hydraulic gradient near the leading edge of the plume is about 0.003. The aquifer above the 4800-ft clay has a hydraulic conductivity of 25 feet per day (ft/d) and a porosity of about 0.3. Thus, the rate at which groundwater, and hence contaminants, would move under non-pumping conditions is 0.25 ft/d or about 90 feet per year (ft/yr). The downgradient distance between the limit of the capture zone of the off-site containment well and the leading edge of the plume is about 200 ft (see for example Figures 4.2 and 4.3 or 4.11 and 4.12). Thus, shutdowns of the length that have been experienced in the past, and of even much longer periods, could not cause any contaminants to escape beyond the capture zone of the well. Hydraulic containment of the plume has been, therefore, maintained during any past shutdowns of the off-site containment system, and will continue to be maintained during any future shutdowns of reasonable duration.

4.2 Groundwater Quality in Monitoring Wells

4.2.1 Concentration Trends

Plots showing temporal changes in the concentrations of TCE, DCE, TCA, and dissolved chromium, or total chromium when data on dissolved chromium were not available, were prepared for several on-site and off-site monitoring wells to demonstrate long-term water-quality changes at the Sparton site. Plots for six on-site wells completed above the 4970-ft silt/clay unit are shown in Figure 4.14; plots for three on-site wells completed below the 4970-ft silt/clay unit and for three off-site wells are shown in Figure 4.15.

In general, VOC concentrations in both on-site and off-site wells have a decreasing trend. Significant decreases in VOC concentrations occurred in most on-site wells completed above the 4970-ft silt/clay unit between 1998 and the mid-2000s (see plots for wells MW-16, MW-23, MW-25, and MW-26 in Figure 4.14). This is primarily due to the operation of SVE systems at the site during short periods in 1998 and 1999, and again for about a year between April 2000 and June 2001, and to the flushing effects of the water infiltrating from the infiltration ponds of the source containment system since the start of the system operation in 2002. Wells along the southern limit of the 4970-ft silt/clay unit (see plots for wells MW-07 and MW-12 in Figure 4.14), however, also have a declining trend but do not appear to have been significantly affected by the SVE operations or the infiltration ponds; this is attributed to the presence of a low permeability zone that somewhat isolates the sands above the southern limit of the 4970-ft silt/clay unit from those to the north of this zone.

The VOC concentration trends in on-site wells completed below the 4970-ft silt/clay unit are illustrated by the plots for wells MW-19, MW-42, and MW-72 shown in Figure 4.15. Prior to the start of the source containment system, well MW-19 had a declining trend, and in fact VOC concentrations in this well had declined below the regulatory standards by 2000; however, after the start of the source containment system in 2002, VOC concentrations in the well sharply increased until 2004, primarily due to increased vertical leakage, and then resumed a declining trend. Most other on-site wells completed below the 4970-ft silt/clay unit, except MW-72, have a declining trend similar to that of MW-42, or are free of any VOCs. Well MW-72 had high concentrations of VOCs when it was installed in early 1999 but, after a few years, concentrations began declining; this declining trend continued until 2008 when VOC concentration started increasing again. A large decline in the TCE and DCE concentrations in this well occurred in 2016 when the concentration of these compounds declined from 980 and 150 micrograms per liter (µg/L), respectively, in November 2015 to 26 and 1.3 µg/L in November 2016; the November 2022 TCE and DCE concentrations in the well were 6.4 and <1 µg/L, respectively (see Table 3.2).

The VOC concentrations in most off-site wells have also been declining (see plots for wells MW-37/37R and MW-60 in Figure 4.15). Until 2019, except for 2018, well MW-60 was the off-site monitoring well with the highest TCE concentrations. The TCE concentration in this well increased from 7,700 µg/L in 1998, prior to the start of the off-site containment system operation, to 18,000 µg/L in 2005; since then, VOC concentrations in the well have been declining and during the last several years this well has not been the well with the highest VOC concentrations. In November 2022, there were four off-site monitoring wells (MW-37R, MW-46, MW-53D and MW-56) which had TCE concentrations (33 µg/L, 47 µg/L, 23 µg/L, and 180 µg/L, respectively) higher than the TCE concentration in MW-60 (18 µg/L).

Chromium concentrations in some monitoring wells completed above the 4970-ft silt/clay unit have been high, mostly above the NMWQCC standard of 50 µg/L, and remained high (see for example wells MW-16, MW-23, MW-25 and MW-26 in Figure 4.14); an increase occurred soon after the start of the source containment system due to the rise of the water levels in the sands above the 4970-ft silt/clay unit and the resulting mobilization of chromium that was present in the previously unsaturated zone above the former water table. A second, similar increase occurred during the early to mid-2010s due to rising regional water levels (see Figure 3.1).

Chromium concentrations in on-site monitoring wells completed below the 4970-ft silt/clay (see plots for wells MW-19, MW-42 and MW-72 in Figure 4.15) also began rising after the start of the source containment system; this is attributed to increases in the leakage through the 4,970-ft silt/clay unit that resulted from steeper downward gradients; these steeper gradients were caused by the rise in water levels above the 4970-ft silt/clay unit due to infiltration from the ponds and the decline of water levels below this unit due to pumping from well CW-2. After this initial rise, chromium concentration trends in these wells varied from time to time. Wells in the off-site area (see plots for wells MW-37/37R, MW-55 and MW-60 in Figure 4.15) also display varying trends in chromium concentrations.

Of the three monitoring wells completed in the DFZ, wells MW-67 and MW-79 have been clean since their installation in 1996 and 2006, respectively. The third DFZ well, MW-71R, located about 70 ft south of MW-60, was installed in February 2002 as a replacement for DFZ well MW-71 which was plugged and abandoned in October 2001 because of contamination.[18] The first sample from MW-71R, obtained in February 2002, had a TCE concentration of 130 µg/L; the TCE concentration in the well increased to 210 µg/L by August 2003 and then began declining with occasional minor fluctuations. Concentrations of TCE in the well during quarterly sampling events in 2022 ranged from 10 µg/L in August to about 6.5 µg/L (based on duplicate samples) in November (see Table 3.2).

4.2.2 Concentration Distribution and Plume Extent

In past Annual Reports, the extent of groundwater contamination near the end of the year was illustrated by presenting isoconcentration (plume) maps for TCE and DCE based on the Fourth Quarter water-quality data for that year.[19] As stated in Section 1, because of the increased chromium concentrations that led to the installation of the chromium removal unit at the source containment system, the USEPA and NMED requested that Sparton also include plume maps for chromium in the 2015 and subsequent Annual Reports (see Footnote 4 on page 1-2). To prepare the 2022 plume maps for TCE, DCE, and chromium, the Fourth Quarter 2022 data presented in Tables 3.2 and 3.3 and the concentrations of these compounds in the CW-1 and CW-2 influent samples from the November monthly sampling event (see Tables 3.5 and 3.6) were used. Also, as mentioned in Section 1, a distinction was made between the extent of these compounds above the 4970-ft silt/clay unit (on-site plumes) and that below this unit and in the off-site areas (regional plumes).

The horizontal extent of the on-site TCE plume is shown in Figure 4.16 and that of the regional TCE plume is shown in Figure 4.17.[20] The concentration of DCE in wells completed

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[18] See 1999 Annual Report (SSP&A, 2001a) for a detailed discussion of the history of well MW-71, and SSP&A and Metric (2002) for actions taken prior to its plugging and abandonment.

[19] Until and including the 2008 Annual Report, plume maps for TCA were also included in the Annual Reports. Because TCA concentrations since 2003 have been below regulatory standards, this practice was discontinued, with the approval of the agencies, starting with the 2009 Annual Report.

[20] At well cluster locations, the concentration used for plume generation is that for the well with the highest concentration. In cases where the concentrations in all wells of the cluster are the same, the well identified in the plume figures is the deepest well in the cluster. Also, when duplicate samples with reported concentrations above

above the 4970-ft silt/clay unit is shown in Figure 4.18; note that an on-site DCE plume[21] did not exist during 2022 as it has been the case since 2005. In fact, DCE concentrations above the detection limit of 1 µg/L have not been detected since 2014 in any well completed above the 4970-silt/clay unit. The extent of the regional DCE plume is shown in Figure 4.19.

The extent of the on-site chromium plume is shown in Figure 4.20 and that of the regional chromium plume is shown in Figure 4.21. These chromium plume maps were prepared using measured dissolved chromium concentrations.

Note that, at the on-site area, there were only three monitoring wells completed above the 4970-ft silt/clay unit (MW-12, MW-25 and MW-26) and two monitoring wells completed below this unit (MW-19 and MW-72) where TCE concentrations exceeded the regulatory standard in November 2022. The only other compound that was detected above its regulatory standard in on-site monitoring wells was chromium; this occurred in ten wells, five completed above the 4970-ft silt/clay unit (MW-9, MW-16, MW-23, MW-25 and MW-26) and five completed below the silty/clay unit (MW-14R, MW-19, MW-39, MW-72 and MW-73).

At the off-site area, the highest November 2022 concentration of TCE in a monitoring well within the regional plume was 180 µg/L[22] detected in well MW-56 (see Figure 4.17), and the highest concentration of DCE, 16 µg/L, was detected in well MW-52 R (see Figure 4.19). The areas of higher TCE and DCE concentrations upgradient from the off-site containment well CW-1, implied by Figures 4.17 and 4.19, are based on past concentrations of these contaminants in well MW-60, which are now moving towards the off-site containment well, and the fact that monthly TCE and DCE concentrations in the influent from the off-site containment well (see Table 356) are higher than those detected in all but one (MW-56 for TCE and MW-52R for DCE) of the off-site monitoring wells within the regional plumes. Chromium concentrations in all off-site monitoring wells were below the regulatory standard of 50 µg/L (see Figure 4.21); the extension of the plume boundary towards well MW-56 is based on chromium concentrations observed in this well and in well MW-37R during the last several years.

As discussed in Section 3.1.2, effective August 1, 2020, water samples collected under the site's remediation program are also analyzed for dioxane. The results of dioxane analyses of samples collected from monitoring wells are included on Tables 3.2 and 3.3.

4.2.2.1 Changes in Concentrations

A total of 57 monitoring wells and the influent from the two containment wells were sampled in November 2022 to provide data for the preparation of the TCE, DCE and chromium plume maps that are presented in Figures 4.16 through 4.21. Of these 57 wells, 40 are wells that existed in November 1998 (prior to the implementation of the current remedial activities), 8 are replacement or deepened versions of wells that existed in November 1998, and the remaining 9

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detection limits are available for a well that is used for plume generation, the concentration used and posted in the figures is the average of those reported for the duplicate samples, rounded to two significant figures; if one of the duplicates has a detection but the other is reported as ND, the detected value is used in plume generation.

[21] That is, an area where DCE concentrations exceed its MCL of 5 µg/L.

[22] Average of duplicate samples.

are wells that were installed in later years. Changes between the TCE, DCE, and chromium concentrations measured in these wells in November 2022 and those measured in November 1998, or during the first sampling event after their installation, are summarized on Table 4.1. Note that Table 4.1 also identifies wells which have been used in the preparation of both the initial (Figures 1.6 through 1.9, 1.12 and 1.13) and the 2022 (Figures 4.16 through 4.21) extent of the TCE, DCE, and chromium plumes. The initial extents of the TCE, DCE, and chromium plumes are compared to the current, 2022, extents of the plumes in Figures 4.22 through 4.27; the on-site plumes are compared in Figures 4.22, 4.24, and 4.26, and the regional plumes in Figures 4.23, 4.25, and 4.27. Also posted on these figures are changes in concentrations in wells which have been used to delineate the initial and/or current plumes.

As Table 4.1 indicates, current TCE and DCE concentrations in most, if not all, wells are much lower than those that existed prior to the start of the current remedial operations. There are only six wells where the concentrations of either TCE or DCE (CW-1, MW-29 and MW-62R) or both (MW-19, MW-52R and MW-56) were higher in 2022 than they were in 1998. These increases in concentration range from 1 µg/L (MW-29) to 40 µg/L (MW-56) for TCE and 0.3 µg/L (MW-56) to 36.3 µg/L (CW-2) for DCE.

The changes in chromium concentrations, however, indicate increases in the source containment well CW-2 and in 23 monitoring wells, particularly in on-site wells completed both above and below the 4970-ft silt/clay unit (16 monitoring wells), or near on-site wells (MW-51 and MW-59). As discussed earlier (see Section 4.2.1), these increases in chromium concentrations are attributed to the mobilization of chromium that was present in the previously unsaturated zone above the former water table, and to increases in the leakage across the 4,970-ft silt/clay unit that resulted from steeper downward gradients. It should be noted that, for monitoring wells with only total chromium concentrations available for 1998, or for their first sampling event, the concentration changes reported on Table 4.1 or shown in Figures 4.26 and 4.27 represent changes between the initial total chromium concentrations and the current dissolved chromium concentrations measured in the well.

It should also be noted that, for wells that have been replaced because they went dry, the concentration changes are between the original wells and the replacement wells which are not screened at the same depth interval and are not always located near the original well.

4.3 Containment Systems

4.3.1 Flow Rates

The volume of water pumped from the off-site containment well during 2022 was about 155.8 million gallons and that pumped from the source containment well was about 25.6 million gallons (see Table 3.4). The corresponding average annual pumping rates were 296 gpm and 49 gpm, respectively, and the average pumping rates during operating hours were about 299 gpm and 50.6 gpm, respectively. A plot of the volume of water pumped by each well during each month of 2022 and of the total monthly volume is presented in Figure 4.28. The total volume of water pumped by both wells during 2022 was about 181.4 million gallons and corresponds to an average pumping rate of about 345 gpm for the year.

The volume of water pumped during each year of the operation of the containment wells is summarized on Table 4.2, and a plot of the cumulative volume pumped by the wells since the

beginning of their operation is presented in Figure 4.29. As shown on Table 4.2, the total volume of water pumped by the off-site containment well since the beginning of its operation in December 1998 is about 3.212 billion gallons, and that pumped by the source containment well since the beginning of its operation in January 2002 is about 0.524 billion gallons; these volumes of pumped water correspond to 284 percent and 46 percent, respectively, of the estimated initial plume pore volume. The total volume pumped from both wells since the beginning of remedial pumping is about 3.735 billion gallons and corresponds to an average rate of 296 gpm over the 24 years of operation. This volume represents approximately 330 percent of the initial plume pore volume.[23]

4.3.2 Influent and Effluent Quality

The concentrations of TCE, DCE, TCA, dioxane, total chromium, and dissolved chromium, iron, and manganese in the monthly samples of influent to and effluent from the off-site treatment system during 2022 were presented on Table 3.5; the corresponding concentrations in the monthly samples of influent to and effluent from the source treatment system were presented on Table 3.6. Plots of the TCE, DCE, and chromium concentrations in the influent to both systems, prepared from these data, are presented in Figure 4.30.

Concentrations of TCE and DCE in all monthly influent samples from the off-site containment system continued to be considerably above the regulatory standards; TCA concentrations, however, were below the detection limit as they have been since 2015. Dioxane was present in the influent samples at concentrations below the NMED Risk Assessment Guidance tap water screening level of 4.59 µg/L that ranged from 1.4 to 2.6 µg/L, and both total and dissolved chromium were reported to be below the detection limit of 6 µg/L. Concentrations of TCE, DCE, and TCA in the effluent samples were below detection limits, and dioxane concentrations were at about the same levels as those in the influent. As was the case for the influent, total and dissolved chromium concentrations in the effluent were reported to be below the detection limit of 6 µg/L.

Concentrations of TCE in the influent of the source containment system during 2022 exceeded the regulatory standard of 5 µg/L only in the January, February, March and October samples (5.4 to 6.1 µg/L); during the remaining months the TCE concentrations were at or below the regulatory standard (4.2 to 5 µg/L). Both DCE and TCA were below the detection limit of 1 µg/L. Dioxane was present in the influent samples at concentrations below the NMED Risk Assessment Guidance tap water screening level of 4.59 µg/L and ranged from 1.4 to 2.8 µg/L, and chromium concentrations did not exceed the NMWQCC standard of 50 µg/L. Concentrations of TCE, DCE, and TCA in the effluent samples were below detection limits, and dioxane and chromium concentrations were at about the same levels as those in the influent.

[23] The plume pore volume was calculated from the horizontal and vertical extent of the initial TCE plume (see Appendix B of 1999 Annual Report [SSP&A, 2001a]). Note however, that most of the water pumped by the offsite containment well comes from areas outside of the extent of the initial plume.

4.3.3 Contaminant Mass Removal

The monthly and total mass of VOCs removed by the off-site and source containment Systems (TCE and DCE) during 2022, calculated from the monthly flow volumes reported on Table 3.4 and the influent and effluent concentrations reported on Tables 3.5 and 3.6, are summarized on Table 4.3; also shown on this table is the total mass of VOCs removed by both systems.

A total of about 83.4 kgs (184 lbs) of VOCs, consisting of 74.1 kgs (163 lbs) of TCE and 9.23 kg (20.4 lbs) of DCE were removed by the two containment wells during 2022. A plot of the TCE, DCE and total VOC mass removed by the two containment wells during each month of 2022 is presented in Figure 4.31. The total mass of VOCs (TCE, DCE, and TCA) removed by the two containment wells during each year of their operation is summarized on Table 4.4, and a plot of the cumulative TCE, DCE, and total VOC mass removed by the wells is presented in Figure 4.32. As shown on Table 4.4, the total VOC mass removed by the containment wells, since the beginning of the current remedial operations in December 1998, is about 8,400 kgs (18,500 lbs), consisting of about 7,780 kgs (17,100 lbs) of TCE, 604 kgs (1,330 lbs) of DCE, and 20.4 kgs (44.9 lbs) of TCA. This represents about 95 percent of the total dissolved VOC mass currently estimated to have been present in the aquifer prior to the testing and operation of the off-site containment system.

The chromium removal unit at the source containment system was removed in 2020 because it was no longer necessary; therefore, there has been no chromium mass removal since then. The total chromium mass removed during past chromium removal operations at the off-site and source containment system was about 28 kg (61.5 lbs) as summarized on Table 4.5.

4.4 Site Permits

The infiltration gallery associated with the off-site containment system and the rapid infiltration ponds associated with the source containment system are operated under a State of New Mexico Groundwater Discharge Permit (DP-1184). This Discharge Permit was originally issued by the Groundwater Bureau of the NMED for a five-year period on June 23, 1998, and renewed for two more five-year periods on December 29, 2006, and on October 18, 2012. On May 4, 2017, Sparton timely submitted an application to NMED for another five-year renewal of the Discharge Permit.[24] As discussed in Section 3.1.2 of this report, on March 20, 2019 NMED requested that Sparton (1) revise the application to renew the Discharge Permit to authorize the discharge of dioxane, and provide for the sampling of this and (2) develop an Abatement Plan to investigate and, if necessary, remediate vadose zone impacted by chlorinated solvents (see Footnote 8 on page 3-2). The request of sampling for dioxane was reiterated in a joint letter by the Agencies dated April 8, 2019 (see Footnote 9 on page 3-2).

As also discussed in Section 3.1.2, Sparton eventually agreed to add dioxane to the compounds for which water samples collected from the site are analyzed effective August 1, 2020

[24] On behalf of Sparton, the completed application for the renewal of Discharge Permit DP-1184 and the application fee of $100 was transmitted on May 4, 2017 to Program Manager, Ground Water Pollution Prevention Section, New Mexico Environment Department, P.O. Box 5469, Santa Fe, NM 87502 by Stavros S. Papadopulos and Alex Spiliotopoulos of SSP&A.

and submitted a proposal to the Agencies on March 6, 2020 (see Footnote 15 on page 3-3) for vadose zone investigations to address potential vapor intrusion. In its May 8, 2023 response to Sparton (see Footnote 16 on page 3-3), NMED indicated that it found the scope of the proposed investigation "deficient in both geographic extent and in the number of representative samples" and requested Sparton to submit a revised proposal that resolves these deficiencies.[25] In the meantime, as authorized by regulation, Sparton is continuing to discharge the treated water into the infiltration gallery and ponds under the terms of the October 18, 2012 permit.

The air stripper associated with the off-site containment system is operated under Air Quality Source Registration No. NM/001/00462/967, issued by the Air Quality Services Section, Air Pollution Control Division, Environmental Health Department, City of Albuquerque, and the source containment system air stripper is operated under Albuquerque/Bernalillo County Authority-to-Construct Permit No. 1203.

The performance of the off-site and source containment systems with respect to the requirements of these permits is discussed below.

4.4.1 Off-Site Containment System

Discharge Permit DP-1184 requires quarterly sampling of the infiltration gallery monitoring wells MW-74, MW-75 and MW-76, and monthly sampling of the treatment system effluent. The results of these sampling events during 2022 (see Tables 3.3 and 3.5) were reported to the NMED Groundwater Bureau in the 2022 Annual Monitoring Report for the permit submitted to the Bureau on January 31, 2023.[26]

Calculations of VOC emissions made in June 1999 indicated that the off-site air stripper was in full compliance with the limits (0.32 pound per hour [lb/hr] or 1.37 tons/yr) specified in Registration No. NM/001/00462/967. Under the terms of the registration, further monitoring and/or reporting of the emissions from the air stripper was not required and has not been carried out since that time.

No violation notices were received during 2022 for activities associated with the operation of the off-site containment system.

4.4.2 Source Containment System

The rapid infiltration ponds associated with the source containment system are also subject to the above-stated requirements of Discharge Permit DP-1184. The monitoring wells for this system are MW-17, MW-77 and MW-78; the quarterly data collected from these wells and from the monthly sampling of the treatment system effluent (see Tables 3.3 and 3.6) were included in the 2022 Annual Monitoring Report for the permit (see Footnote 26 on page 4-9).

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[25] On behalf of Sparton, SSP&A had a Team's meeting with staff members of the NMED Ground Water Quality Bureau (GWQB) to get clarification on the requested revisions. Sparton is currently evaluating the requested revisions and will be submitting a revised proposal during the next few months.

[26] Letter to Ms. Melanie Sandoval of the Ground Water Quality Bureau, NMED from Stavros S. Papadopulos and Alex Spiliotopoulos of SSP&A, Re: Sparton Technology, Inc. – Former Coors Road Plant Remedial Program, 2022 Annual Monitoring Report for Discharge Permit DP-1184.

Emissions of VOCs from the source containment system air stripper during 2022 (0.00012 lb/hr or 0.00053 ton/yr) met the requirements of The Authority-to-Construct Permit No. 1203 and were reported to the Albuquerque Environmental Health Department, Air Quality Division in the 2022 Annual Report on Air Emissions which was submitted on March 8, 2022.[27]

No violation notices were received during 2022 for activities associated with the operation of the source containment system.

4.5 Contacts

Under the terms of the Consent Decree[28] Sparton is required to prepare an annual Fact Sheet summarizing the status of remedial activities as of the end of the previous year, and after approval by USEPA/NMED, distribute this Fact Sheet to property owners located above the plume and adjacent to the off-site treatment plant water discharge pipeline. This Fact Sheet is usually prepared after the Annual Report for the previous year has been approved by the Agencies. Since approval of the 2020 and 2021 Annual Reports (SSP&A, 2021b and 2022) by the Agencies was not received by Sparton as of the end of 2022, 2021 and/or 2022 Fact Sheets were not prepared during 2022.

[27] Letter dated February 16, 2023 to Ms. Regan Eyerman, Health Scientist, Air Quality Division, City of Albuquerque Environmental Health Department, from Stavros S. Papadopulos and Alex Spiliotopoulos of SSP&A, Re: "Sparton Technology Inc., Former Coors Road Plant Remedial Program – Air Quality Authority-to-Construct Permit #1203 – 2022 Annual Report on Air Emissions".

[28] Public Involvement Plan for Corrective Measure Activities. Attachment B to the Consent Decree in Albuquerque v. Sparton Technology, Inc., No. CV 07 0206 (D.N.M.).

Section 5
Conclusions and Future Plans

5.1 Summary and Conclusions

During 2022, considerable progress was made towards achieving the goals of the remedial measures:

- The off-site containment well operated 99.1 percent of the time available in 2022 at an average rate of 296 gpm and maintained hydraulic containment of the off-site plume.
- The source containment well operated 96.3 percent of the time available in 2022 at an average rate of 49 gpm and continued to capture contaminated groundwater leaving the on-site area.
- The treated water from both systems was returned to the aquifer through the infiltration gallery in the Arroyo de las Calabacillas and the on-site infiltration ponds.
- Groundwater monitoring was conducted as specified in the Monitoring Plan, the Discharge Permit, and recent agreements between the Agencies and Sparton.
- Samples were obtained monthly from the influent and effluent of the treatment plants for the off-site and source containment systems and analyzed for VOCs, chromium, iron, and manganese as specified in the Discharge Permit; these samples were also analyzed for dioxane.
- The concentrations of constituents of concern in the treated water discharged into the infiltration gallery and the infiltration ponds met the requirements of the Discharge Permit for the site.
- Dioxane concentrations in the discharged treated water were also below the NMED Risk Assessment Guidance tap water screening level for this compound.
- Water levels in all accessible wells and/or piezometers were measured quarterly.
- Samples were collected for water-quality analyses from monitoring wells at the frequency specified in the Monitoring Plan and analyzed for VOCs, dioxane, and chromium.
- Samples were also obtained from the infiltration gallery and infiltration pond monitoring wells at the frequency specified in the Discharge Permit. These samples were analyzed for VOCs, dioxane and dissolved chromium, iron, and manganese. Changes in contaminant concentrations observed in monitoring wells since the implementation of the current remedial measures indicate that VOC concentrations decreased significantly both at the on-site and off-site area, and that chromium concentrations increased, primarily at the on-site area.
- A total of about 181.4 million gallons of water were pumped from the wells during 2022. The total volume of water pumped since the beginning of the current remedial operations on December 1998 is about 3.735 billion gallons and represents 330 percent of the initial volume of contaminated groundwater (pore volume).

- A total of about 83.4 kgs (184 lbs) of VOCs were removed from the aquifer by the two containment wells during 2022. The total VOC mass that was removed since the beginning of the current remedial operations through the end of 2022 is about 8,400 kgs (18,500 lbs) and represents about 95 percent of the total dissolved VOC mass estimated to have been initially present in groundwater.
- Mass removal by the containment systems also includes about 28 kg (61.5 lbs) of chromium removed during past chromium removal operations at the containment systems.

5.2 Future Plans

The off-site and source containment systems will continue to operate during 2023 at pumping rates that are as close as possible to their current design pumping rates of 300 gpm and 50 gpm, respectively.

Data collection will continue in accordance with the Monitoring Plan, the Discharge Permit, agreements between the regulatory Agencies and Sparton, and as necessary for the evaluation of the performance of the remedial systems.

The USEPA and the NMED will continue to be kept informed of any significant milestones or changes in remedial system operations. The goal of the systems will continue to be the return of the contaminated groundwater to beneficial use.

Any other tasks that might arise during the implementation of the remedial program in 2023 or because of potential discussions and/or negotiations between Sparton and the Agencies will be addressed as appropriate and/or as necessary.

After the approval of the 2020 and 2021 Annual Reports, a combined Draft Fact Sheet summarizing remedial activities during those years will be prepared and submitted to the USEPA and NMED for approval; upon approval, it will be distributed to property owners located above the plume and adjacent to the off-site treatment plant water discharge pipeline.

Section 6
List of Reports and Documents

Bedekar, V., R.G. Niswonger, K. Kipp, S. Panday and M. Tonkin. 2012. Approaches to the Simulation of Unconfined Flow and Perched Groundwater Flow in MODFLOW: *Ground Water* 50, no. 2: 187-198.

Bexfield, L.M., and S. K. Anderholm. 2002. Estimated Water-Level Declines in the Santa Fe Group Aquifer System in the Albuquerque Area, Central New Mexico, Predevelopment to 2002. USGS Water-Resources Investigations Report 02-4233.

Black & Veatch. 1997. Report on Soil Gas Characterization and Vapor Extraction System Pilot Testing, Report prepared for Sparton Technology, Inc. June.

Chandler, P.L., Jr. 2000. *Vadose Zone Investigation and Implementation Workplan,* Attachment E to the Consent Decree, City of Albuquerque and The Board of County Commissioners of the County of Bernalillo v. Sparton Technology, Inc. U.S. District Court for the District of New Mexico, Civil Action No. CIV 97 0206. March 3.

Chandler, P.L., Jr. and Metric Corporation. 2001. *Sparton Technology, Inc., Coors Road Plant Remedial Program*, *Final Report on the On-Site Soil Vapor Extraction System*, Report prepared for Sparton Technology, Inc. in association with S.S. Papadopulos & Associates, Inc. November 29.

Consent Decree. 2000. City of Albuquerque and the Board of County Commissioners of the County of Bernalillo v. Sparton Technology, Inc., U.S. District Court for the District of New Mexico. CIV 97 0206. March 3.

Doherty, J. 2006. PEST: Model Independent Parameter Estimation. Version 11.8. Queensland, Australia: Watermark Numerical Computing.

Harbaugh, A.W., E. Banta, M. Hill, and M. McDonald. 2000. MODFLOW-2000, The U.S. Geological Survey Modular Ground-Water Model-User Guide to Modularization Concepts and the Ground-Water Flow Process. USGS Open-File Report 00-92. Reston, Virginia.

Harding Lawson Associates. 1983. *Groundwater Monitoring Program, Sparton Southwest, Inc.*, Report prepared for Sparton Corporation. June 29.

Harding Lawson Associates. 1985. Hydrogeologic Characterization and Remedial Investigation, Sparton Technology, Inc., 9261 Coors Road Northwest, Albuquerque, New Mexico, Report prepared for Sparton Technology. March 13.

Harding Lawson Associates. 1992. *RCRA Facility Investigation*, Report revised by HDR Engineering, Inc. in conjunction with Metric Corporation, Report prepared for Sparton Technology, Inc. May 1.

Hawley, J.W. 1996. *Hydrogeologic Framework of Potential Recharge Areas in the Albuquerque Basin, Central New Mexico*, New Mexico Bureau of Mines and Mineral Resources, Open-File Report 402D. Chapter 1.

HDR Engineering, Inc. 1997. *Revised Final Corrective Measure Study*, Report revised by Black & Veatch, Report prepared for Sparton Technology, Inc. March 14.

Johnson, P.S., S.D. Connell, B. Allred, and B.D. Allen. 1996. Field Boring Log Reports, City of Albuquerque Piezometer Nests (Sister City Park, Del Sol Dividers, Hunters Ridge Park 1, West Bluff Park, Garfield Park. New Mexico Bureau of Mines and Mineral Resources, Open-File Report 426.

Metric Corporation. 2005. Sparton Technology, Inc., Former Coors Road Plant Remedial Program, Request to Modify Approved Source Containment System Workplan. April 22.

New Mexico Environment Department. 2019. Risk Assessment Guidance for Site Investigations and Remediation, Revision 2. June 19.

Pollock, D.W. 1994. User's Guide for MODPATH/PODPATH-Plot, Version 3: A Particle Tracking Program for MODFLOW. USGS Open-file Report 94-464.

Pollock, D. W. 2008. MODPATH Version 5.0: A Particle Tracking Post-Processing for MODFLOW 2000 and MODFLOW 2005. USGS Website.

Powell, R.I., and S.E. McKean. 2014. Estimated 2012 Groundwater Potentiometric Surface and Drawdown from Predevelopment to 2012 in the Santa Fe Group Aquifer System in the Albuquerque Metropolitan Area, Central New Mexico. USGS Scientific Investigation Map 3301.

S.S. Papadopulos & Associates, Inc. 1998. *Interim Report on Off-Site Containment Well Pumping Rate*, Report prepared for Sparton Technology, Inc. December 28.

S.S. Papadopulos & Associates, Inc. 1999a. *Report on the Installation of On-Site Monitoring Wells MW-72 and MW-73*, Report prepared for Sparton Technology, Inc. April 2.

S.S. Papadopulos & Associates, Inc. 1999b. Groundwater Investigation Report: Performance Assessment of the Off-Site Containment Well, Sparton Technology, Inc., Report prepared for Sparton Technology, Inc. August 6.

S.S. Papadopulos & Associates, Inc. 2000a. *Work Plan for the Off-Site Containment System*, Attachment C to the Consent Decree, City of Albuquerque and The Board of County Commissioners of the County of Bernalillo v. Sparton Technology, Inc., U.S. District Court for the District of New Mexico, CIV 97 0206. March 3.

S.S. Papadopulos & Associates, Inc. 2000b. *Work Plan for the Assessment of Aquifer Restoration*, Attachment D to the Consent Decree, City of Albuquerque and The Board of County Commissioners of the County of Bernalillo v. Sparton Technology, Inc., U.S. District Court for the District of New Mexico, CIV 97 0206. March 3.

S.S. Papadopulos & Associates, Inc. 2000c. *Work Plan for the Installation of a Source Containment System*, Attachment F to the Consent Decree, City of Albuquerque and The Board of County Commissioners of the County of Bernalillo v. Sparton Technology, Inc., U.S. District Court for the District of New Mexico, CIV 97 0206. March 3.

S.S. Papadopulos & Associates, Inc. 2001a. *Sparton Technology, Inc., Coors Road Plant Remedial Program, 1999 Annual Report*, Report prepared for Sparton Technology, Inc., in association with Metric Corporation and Pierce L. Chandler, Jr. Original issue: June 1, 2000; Modified issue: February 9.

S.S. Papadopulos & Associates, Inc. 2001b. *Sparton Technology, Inc., Former Coors Road Plant Remedial Program, 2000 Annual Report*, Report prepared for Sparton Technology, Inc., in association with Metric Corporation. May 17.

S.S. Papadopulos & Associates, Inc. 2002. *Sparton Technology, Inc., Former Coors Road Plant Remedial Program, 2001 Annual Report*, Report prepared for Sparton Technology, Inc., in association with Metric Corporation. May 7.

S.S. Papadopulos & Associates, Inc. 2003. *Sparton Technology, Inc., Former Coors Road Plant Remedial Program, 2002 Annual Report*, Report prepared for Sparton Technology, Inc., in association with Metric Corporation. May 16.

S.S. Papadopulos & Associates, Inc. 2004. *Sparton Technology, Inc., Former Coors Road Plant Remedial Program, 2003 Annual Report*, Report prepared for Sparton Technology, Inc., in association with Metric Corporation. May 28.

S.S. Papadopulos & Associates, Inc. 2005. *Sparton Technology, Inc., Former Coors Road Plant Remedial Program, 2004 Annual Report*, Report prepared for Sparton Technology, Inc., in association with Metric Corporation. May 31.

S.S. Papadopulos & Associates, Inc. 2006. *Sparton Technology, Inc., Former Coors Road Plant Remedial Program, 2005 Annual Report*, Report prepared for Sparton Technology, Inc., in association with Metric Corporation. May 31.

S.S. Papadopulos & Associates, Inc. 2007. *Sparton Technology, Inc., Former Coors Road Plant Remedial Program, 2006 Annual Report*, Report prepared for Sparton Technology, Inc., in association with Metric Corporation. May 30.

S.S. Papadopulos & Associates, Inc. 2008. *Sparton Technology, Inc., Former Coors Road Plant Remedial Program, 2007 Annual Report*, Report prepared for Sparton Technology, Inc., in association with Metric Corporation. May 29.

S.S. Papadopulos & Associates, Inc. 2009a. *Sparton Technology, Inc., Former Coors Road Plant Remedial Program, 2008 Annual Report*, Report prepared for Sparton Technology, Inc., in association with Metric Corporation. June 11.

S.S. Papadopulos & Associates, Inc. 2009b. Sparton Technology, Inc., Former Coors Road Plant Remedial Program, Evaluation of Alternative Systems and Technologies for Aquifer Restoration, Report prepared for Sparton Technology, Inc. November 25, corrected December 3.

S.S. Papadopulos & Associates, Inc. 2010. *Sparton Technology, Inc., Former Coors Road Plant Remedial Program, 2009 Annual Report*, Report prepared for Sparton Technology, Inc., in association with Metric Corporation. June 11.

S.S. Papadopulos & Associates, Inc. 2011a. *Sparton Technology, Inc., Former Coors Road Plant Remedial Program, 2010 Annual Report*, Report prepared for Sparton Technology, Inc., in association with Metric Corporation. June 20.

S.S. Papadopulos & Associates, Inc. 2011b. Sparton Technology, Inc., Former Coors Road Plant Remedial Program, Work Plan for Plugging and Abandoning Three Monitoring Wells and for Installing a Replacement Well, Report prepared for Sparton Technology, Inc., and transmitted to USEPA and NMED on November 22.

S.S. Papadopulos & Associates, Inc. 2012. *Sparton Technology, Inc., Former Coors Road Plant Remedial Program, 2011 Annual Report*, Report prepared for Sparton Technology, Inc. June 29.

S.S. Papadopulos & Associates, Inc. 2013. *Sparton Technology, Inc., Former Coors Road Plant Remedial Program, 2012 Annual Report*, Report prepared for Sparton Technology, Inc. June 28.

S.S. Papadopulos & Associates, Inc. 2014. *Sparton Technology, Inc., Former Coors Road Plant Remedial Program, 2013 Annual Report*, Report prepared for Sparton Technology, Inc. May 20.

S.S. Papadopulos & Associates, Inc. 2015. *Sparton Technology, Inc., Former Coors Road Plant Remedial Program, 2014 Annual Report*, Report prepared for Sparton Technology, Inc. June 30.

S.S. Papadopulos & Associates, Inc. 2016. *Sparton Technology, Inc., Former Coors Road Plant Remedial Program, 2015 Annual Report*, Report prepared for Sparton Technology, Inc. June 24.

S.S. Papadopulos & Associates, Inc. 2017. *Sparton Technology, Inc., Former Coors Road Plant Remedial Program, 2016 Annual Report*, Report prepared for Sparton Technology, Inc. June 23.

S.S. Papadopulos & Associates, Inc. 2018a. *Sparton Technology, Inc., Former Coors Road Plant Remedial Program, 2017 Annual Report*, Report prepared for Sparton Technology, Inc. July 12.

S.S. Papadopulos & Associates, Inc. 2018b. Sparton Technology, Inc., Former Coors Road Plant Remedial Program, Work Plan for Plugging and Abandoning Monitoring Well MW-62 and for Installing Replacement Well MW62R, Prepared for Sparton Technology, Inc. August 29.

S.S. Papadopulos & Associates, Inc. 2019. *Sparton Technology, Inc., Former Coors Road Plant Remedial Program, 2018 Annual Report*, Report prepared for Sparton Technology, Inc. June 28.

S.S. Papadopulos & Associates, Inc. 2020a. Sparton Technology Inc. Former Coors Road Plant Remedial Program, Status Report on 1,4-Dioxane Sampling Events Fourth Quarter 2019, and First Quarter 2020. April 16.

S.S. Papadopulos & Associates, Inc. 2020b. *Sparton Technology, Inc., Former Coors Road Plant Remedial Program, 2019 Annual Report*, Report prepared for Sparton Technology, Inc. June 30.

S.S. Papadopulos & Associates, Inc. 2021a. Sparton Technology, Inc. Former Coors Road Plant Remedial Program, Status Report on 1,4-Dioxane Sampling Events Third and Fourth Quarters 2020. January 29.

S.S. Papadopulos & Associates, Inc. 2021b. *Sparton Technology, Inc., Former Coors Road Plant Remedial Program, 2020 Annual Report*, Report prepared for Sparton Technology, Inc. July 13.

S.S. Papadopulos & Associates, Inc. 2022. *Sparton Technology, Inc., Former Coors Road Plant Remedial Program, 2021 Annual Report*, Report prepared for Sparton Technology, Inc. June 29.

S.S. Papadopulos & Associates, Inc. and Metric Corporation. 2002. Sparton Technology, Inc., Former Coors Road Plant Remedial Program, Results of Investigation Conducted in Monitoring Well MW-71, Report prepared for Sparton Technology, Inc. January 9.

S.S. Papadopulos & Associates, Inc. and Metric Corporation. 2004a. *Sparton Technology, Inc., Former Coors Road Plant Remedial Program Work Plan for the Proposed MW-71R Pump-and-Treat System*, Report prepared for Sparton Technology, Inc., and transmitted to USEPA and NMED on January 14.

S.S. Papadopulos & Associates, Inc. and Metric Corporation. 2004b. Sparton Technology, Inc., Former Coors Road Plant Remedial Program, Work Plan for Installing a Monitoring/Standby-Extraction Well in the Deep Flow Zone, Report prepared for Sparton Technology, Inc., and transmitted to USEPA and NMED on December 6.

S.S. Papadopulos & Associates, Inc. and Metric Corporation. 2010. *Sparton Technology, Inc., Former Coors Road Plant Remedial Program, Work Plan for Installing Monitoring Well MW-80*, Report prepared for Sparton Technology, Inc., and transmitted to USEPA and NMED, original issue May 4, revised issue May 25.

Vogel, T.M., and P.L. McCarty. 1987. Abiotic and Biotic Transformations of 1,1,1-Trichloroethane under Methanogenic Conditions: *Environmental Science & Technology* 21, no. 12: 1208-1213.

Zheng, C. 2008. MT3DMSU5.2, A Modular Three-Dimensional Multispecies Transport Model for Simulation of Advection, Dispersion and Chemical Reactions, Supplemental Users Guide. Prepared for U.S. Army Corps. of Engineers.

Zheng, C. 1991. PATH3D, A Groundwater and Travel-Time Simulator. Version 3.2. Bethesda, Maryland: S.S. Papadopulos & Associates, Inc.

Zheng, C., and S.S. Papadopulos & Associates, Inc. 1999. MT3D99, A Modular, Three-Dimensional Transport Model for Simulation of Advection, Dispersion, and Chemical Reactions of Contaminants in Groundwater Systems. Bethesda, Maryland: S.S. Papadopulos & Associates, Inc.

FIGURES

Figure 1.1: Location of the Former Sparton Coors Road Plant

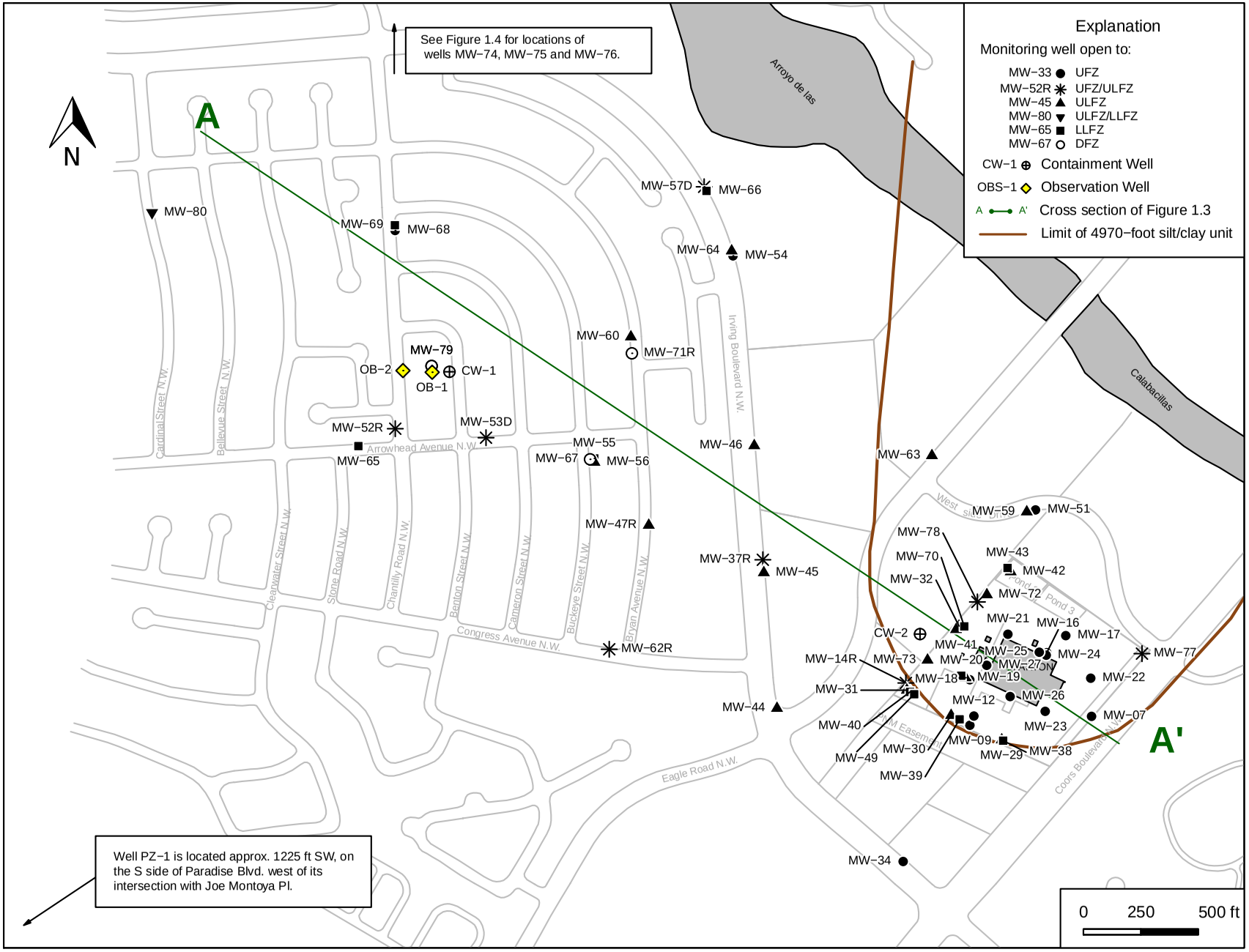


Figure 1.2: Location of Existing Wells

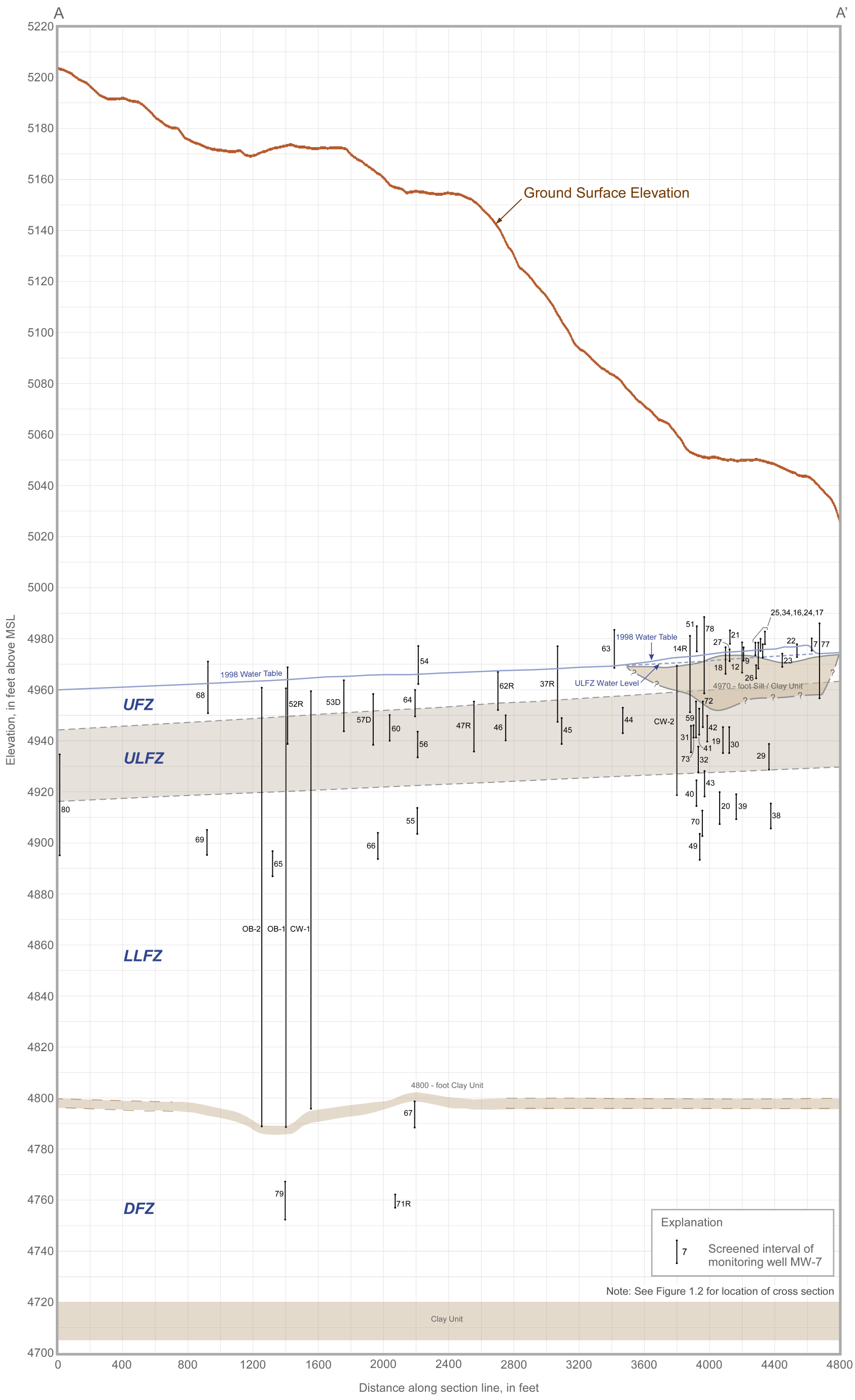


Figure 1.3: Schematic Cross-Section Showing Screened Interval of Wells and Relation to Flow Zones

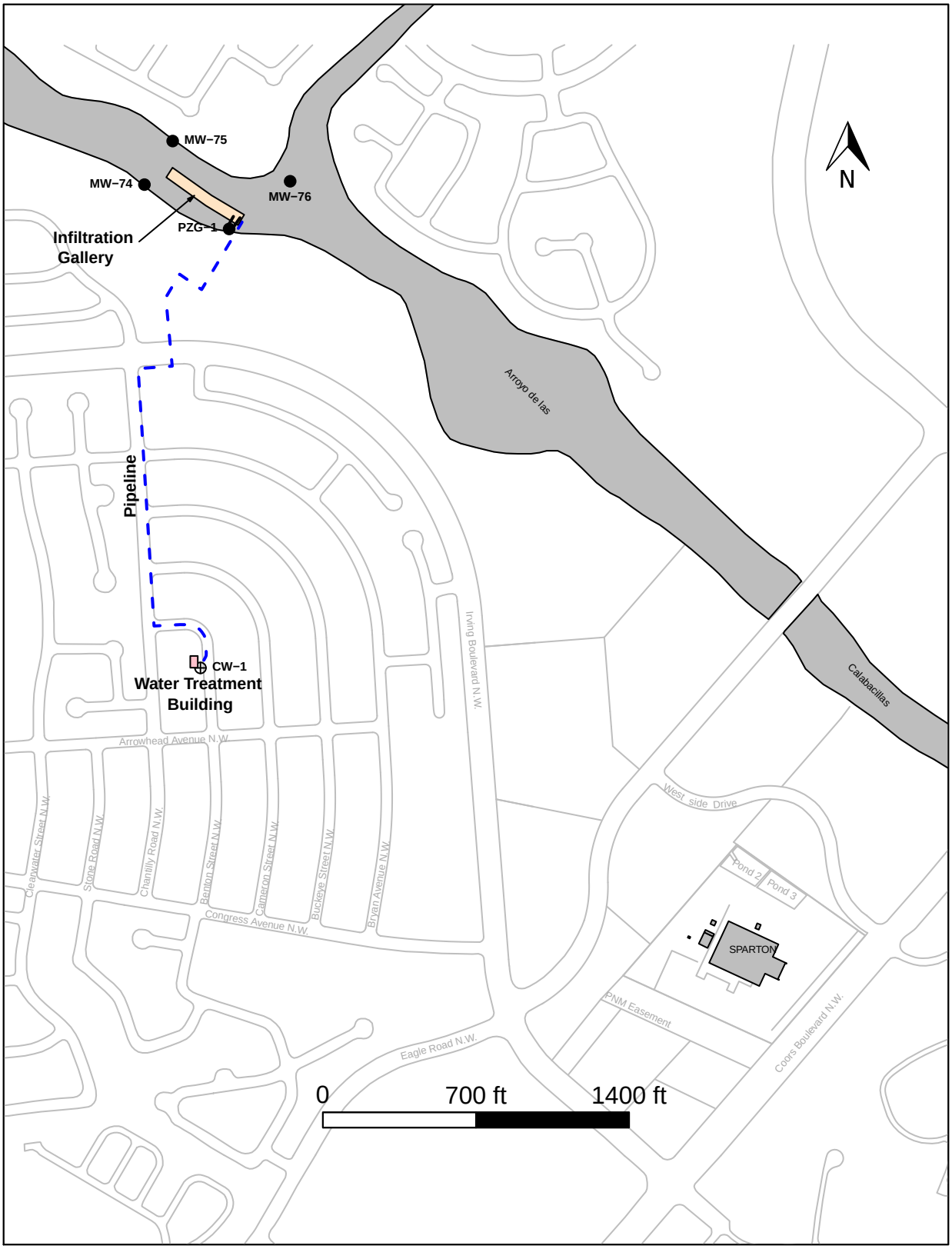


Figure 1.4: Layout of the Off-Site Containment System

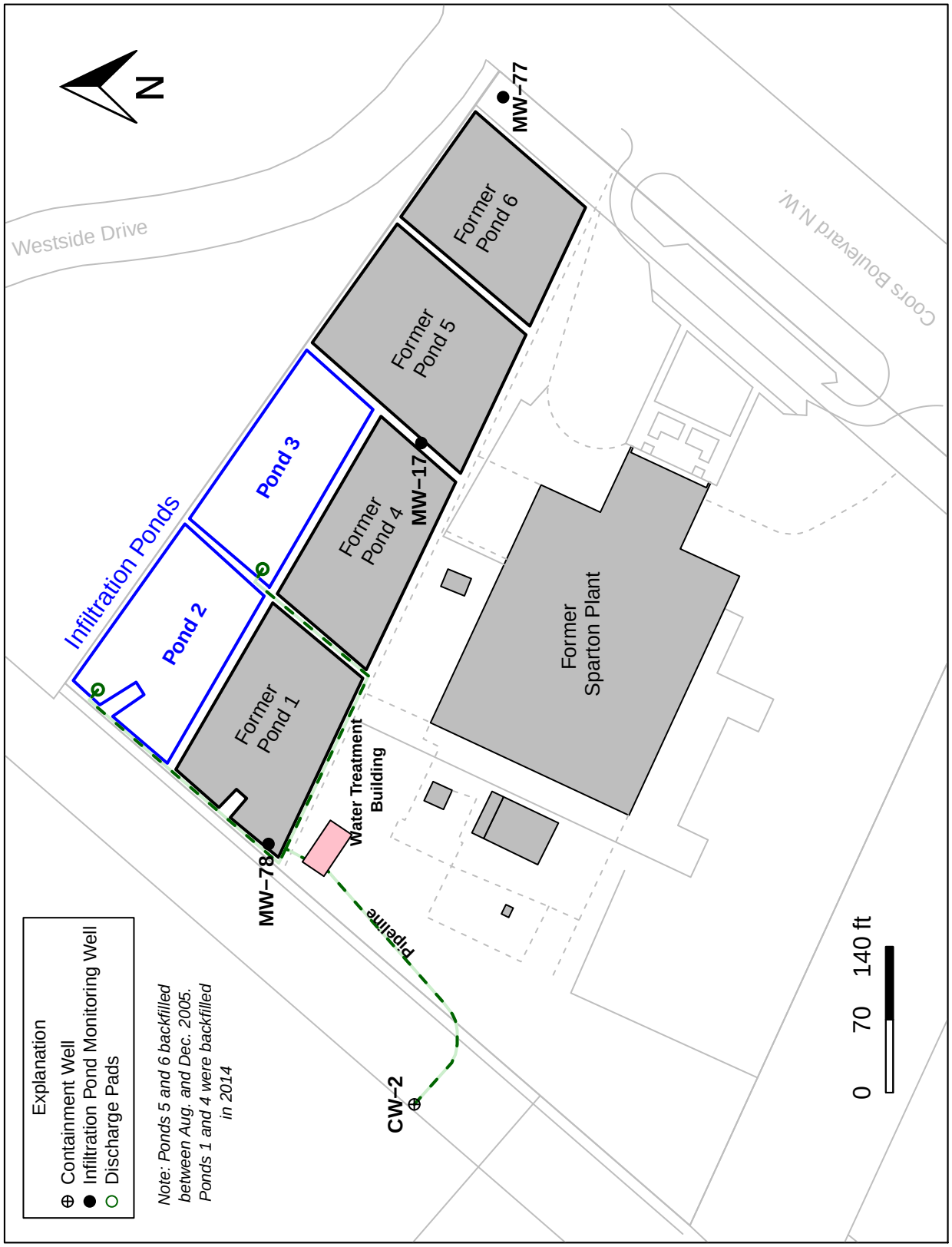


Figure 1.5: Layout of the Source Containment System

Figure 1.6: Horizontal Extent of the Initial On-Site TCE Plume

Figure 1.7: Horizontal Extent of the Initial Regional TCE Plume

Figure 1.8: Horizontal Extent of the Initial On-Site DCE Plume

Figure 1.9: Horizontal Extent of the Initial Regional DCE Plume

Figure 1.10: Horizontal Extent of the Initial On-Site TCA Plume

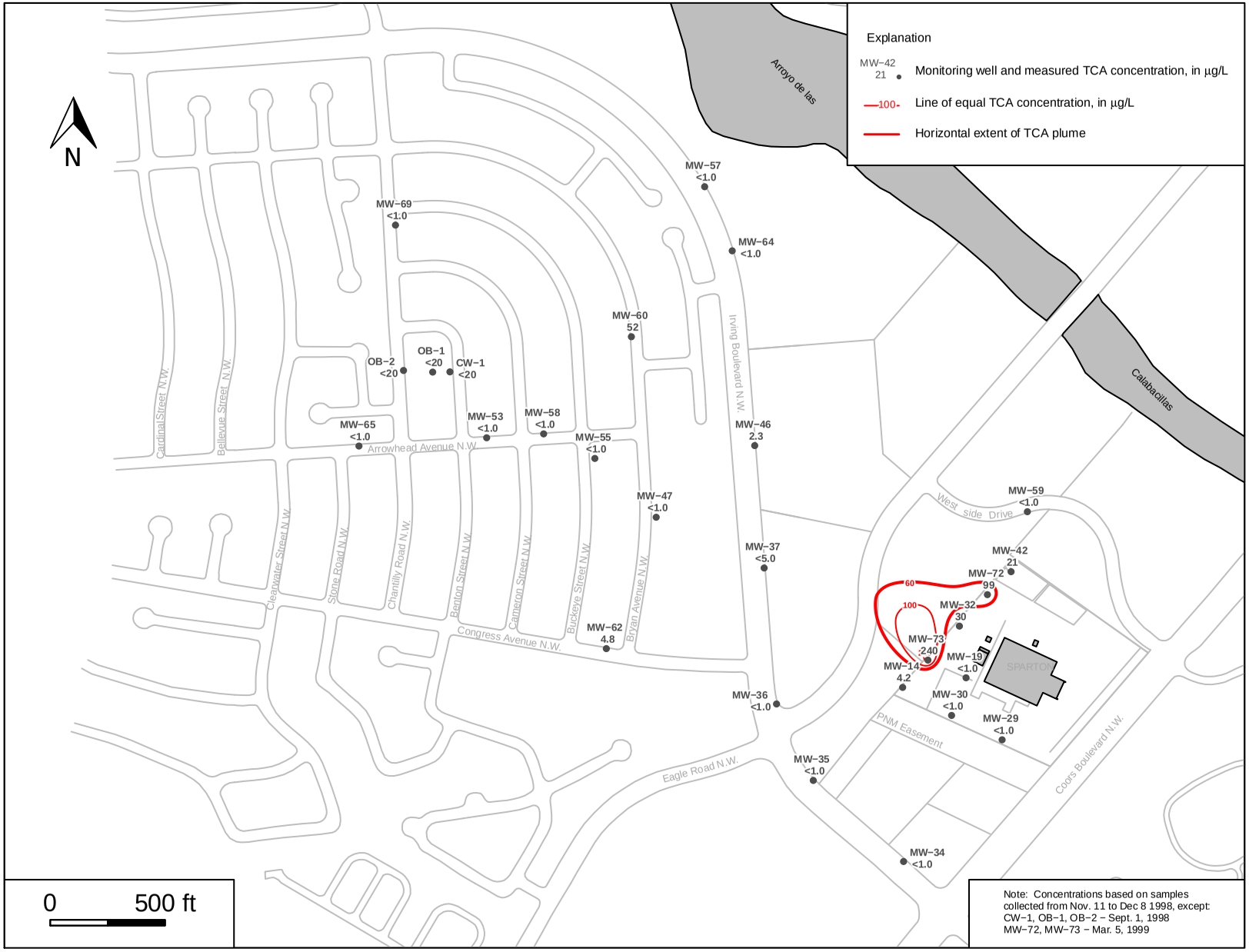


Figure 1.11: Horizontal Extent of the Initial Regional TCA Plume

Figure 1.12: Horizontal Extent of the Initial On-Site Chromium Plume

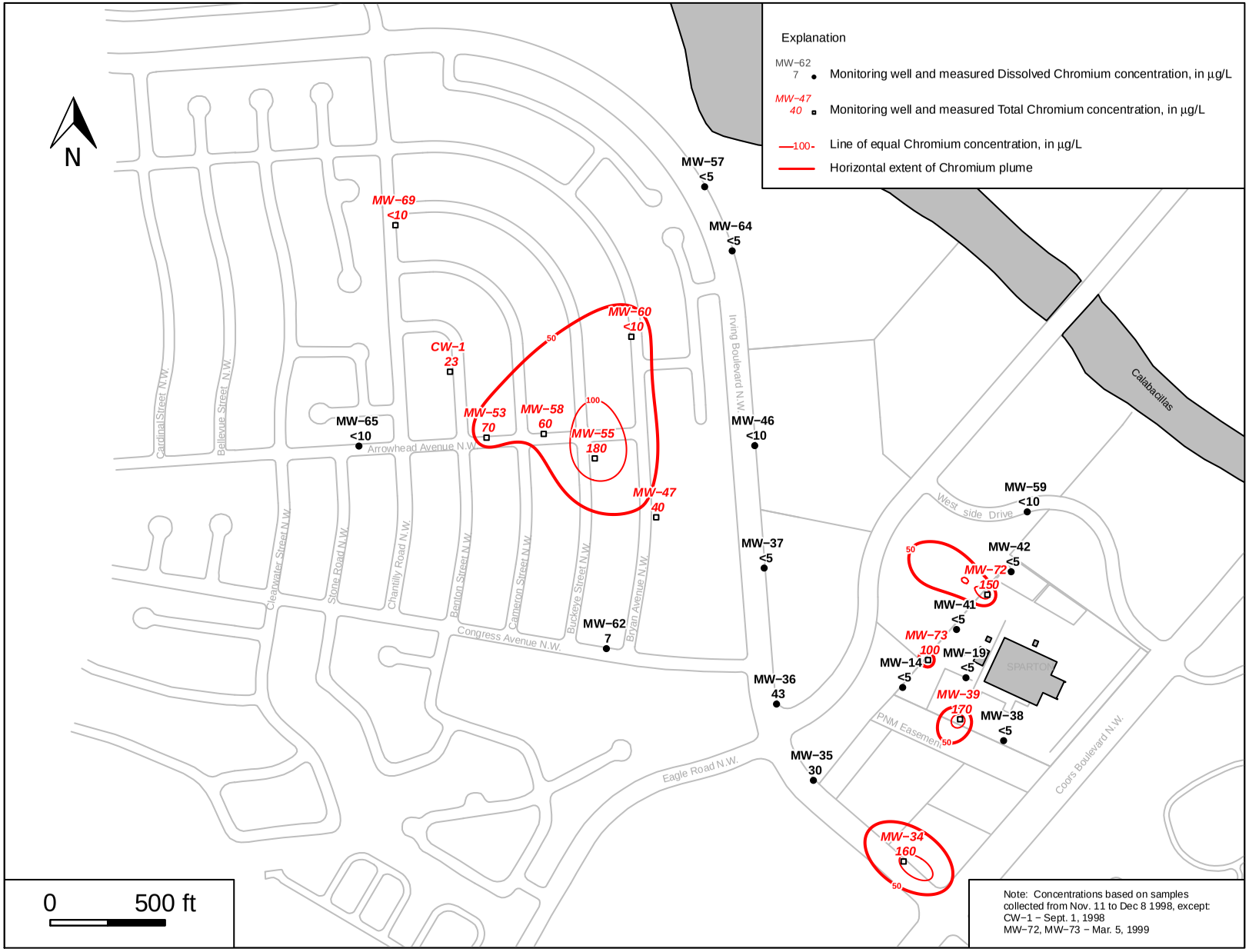


Figure 1.13: Horizontal Extent of the Initial Regional Chromium Plume

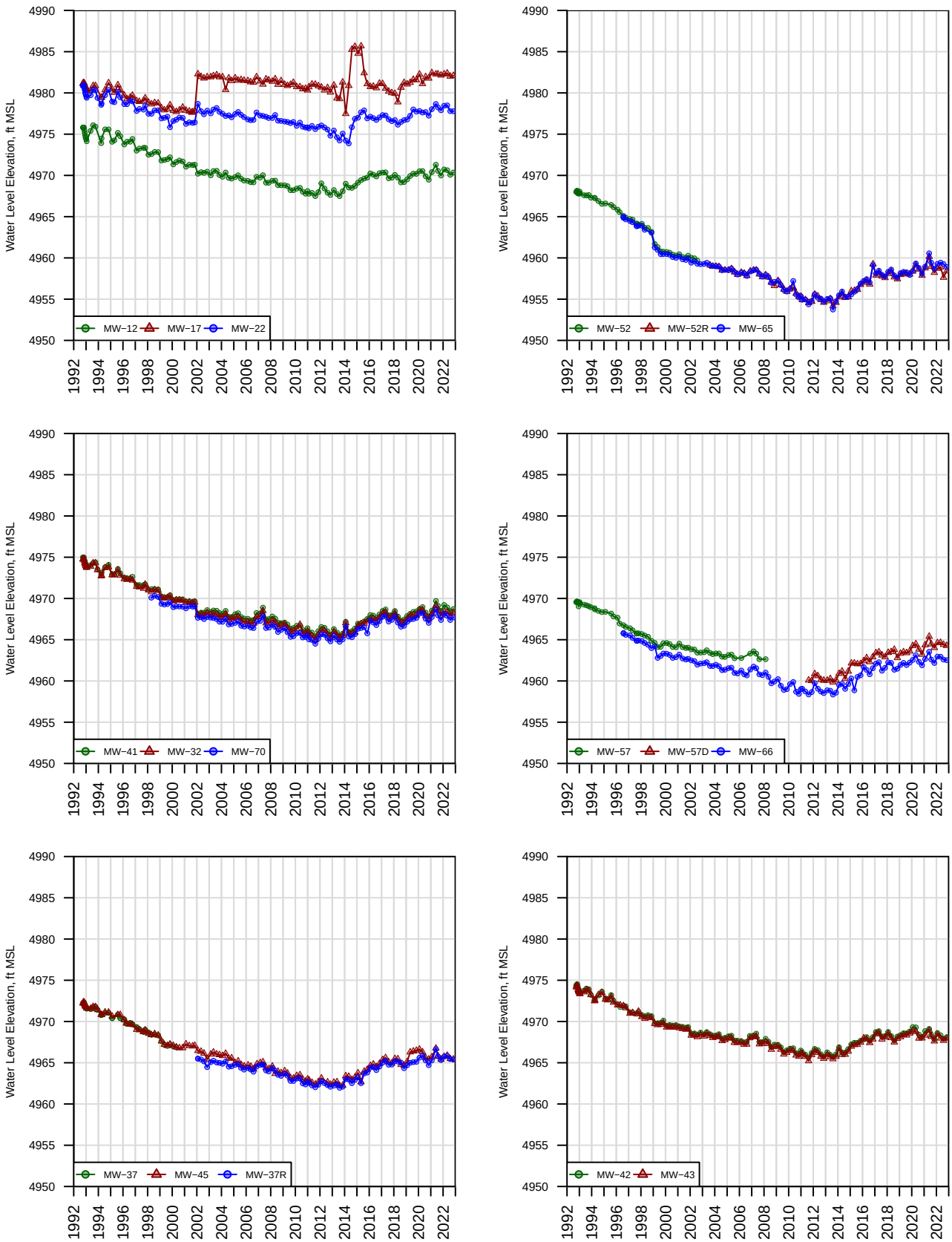


Figure 3.1: Monitoring Well Hydrographs

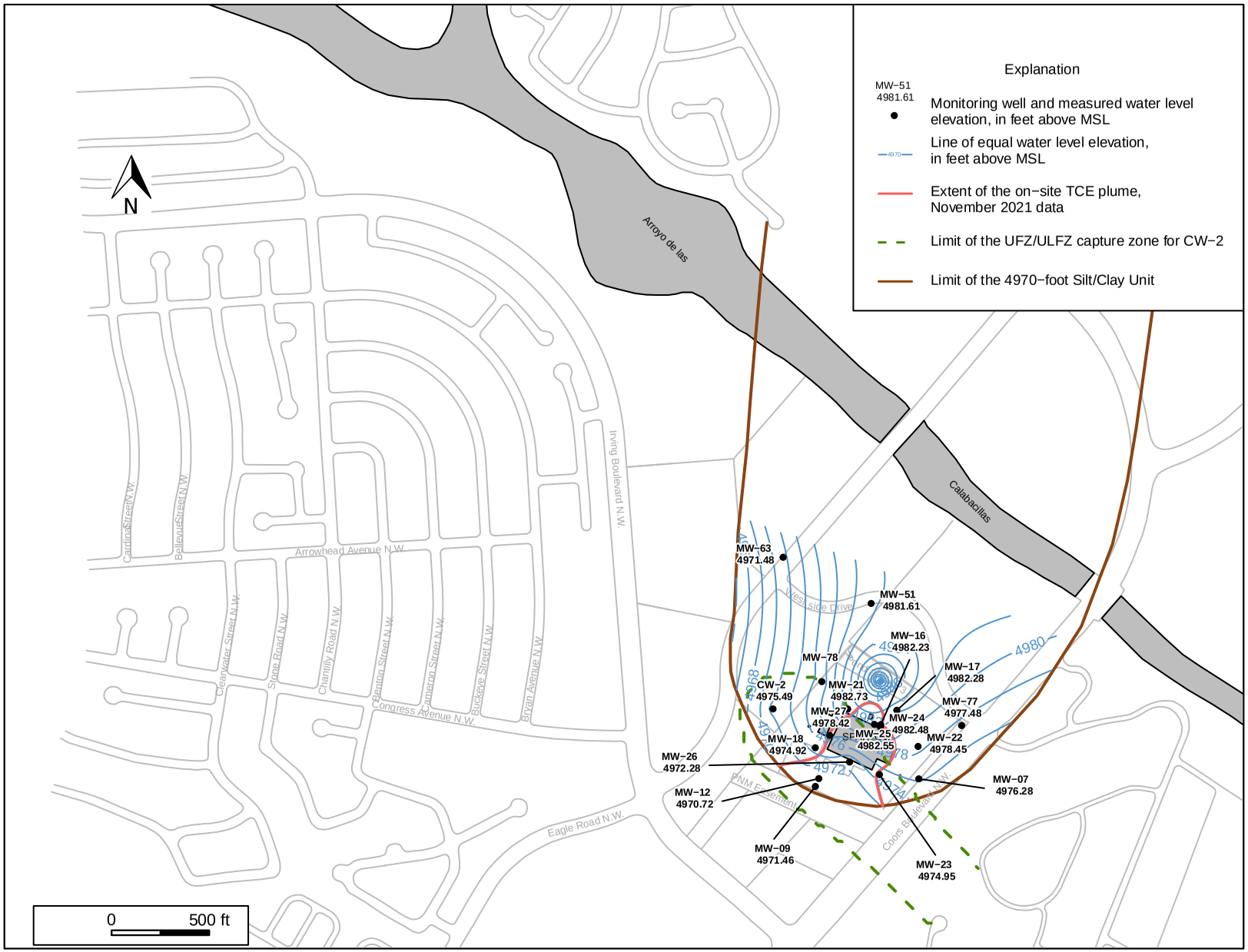


Figure 4.1: Elevation of the On-Site Water Table - February 2022

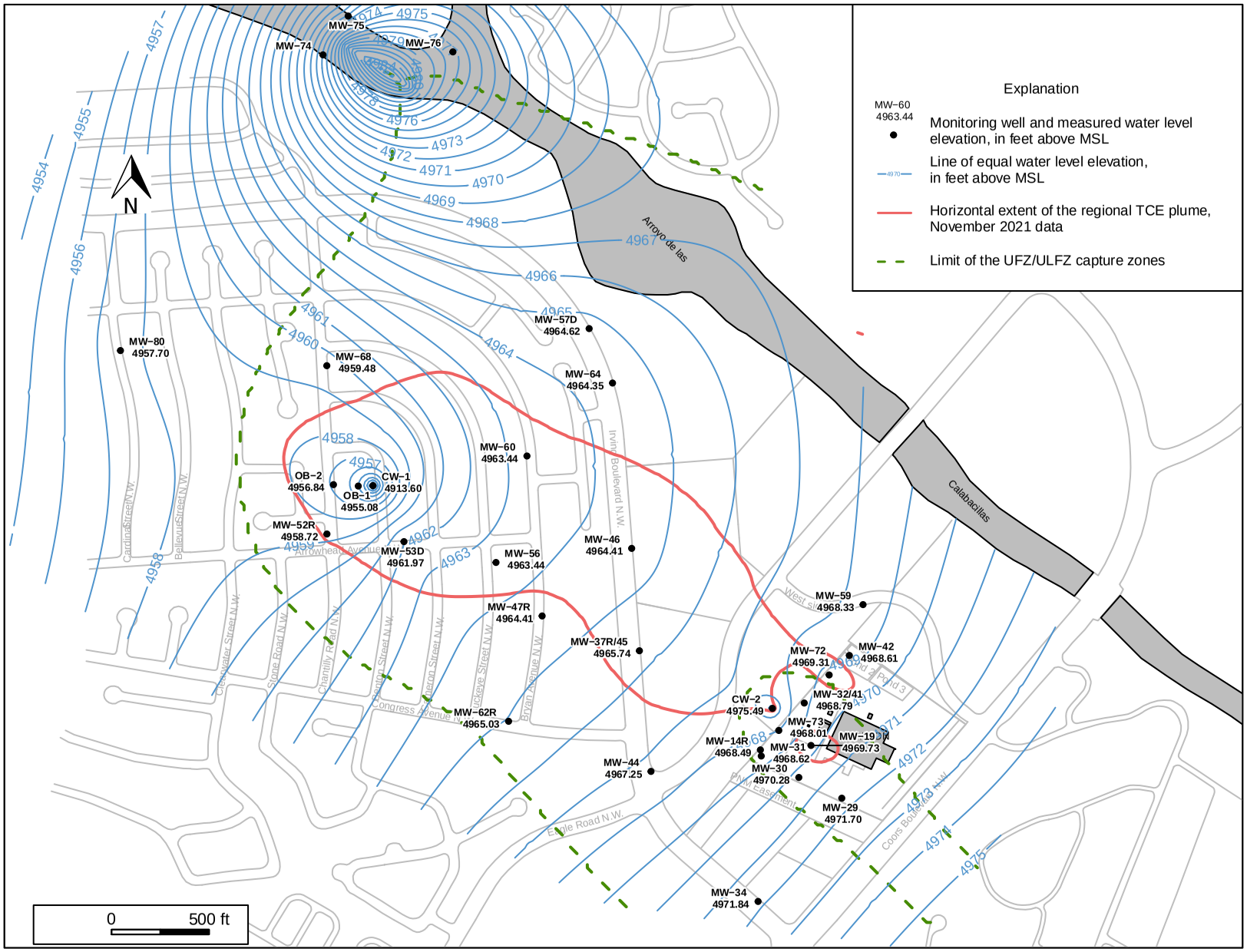


Figure 4.2: Elevation of Water Levels and Limits of Containment Well Capture Zones in the UFZ/ULFZ - February 2022

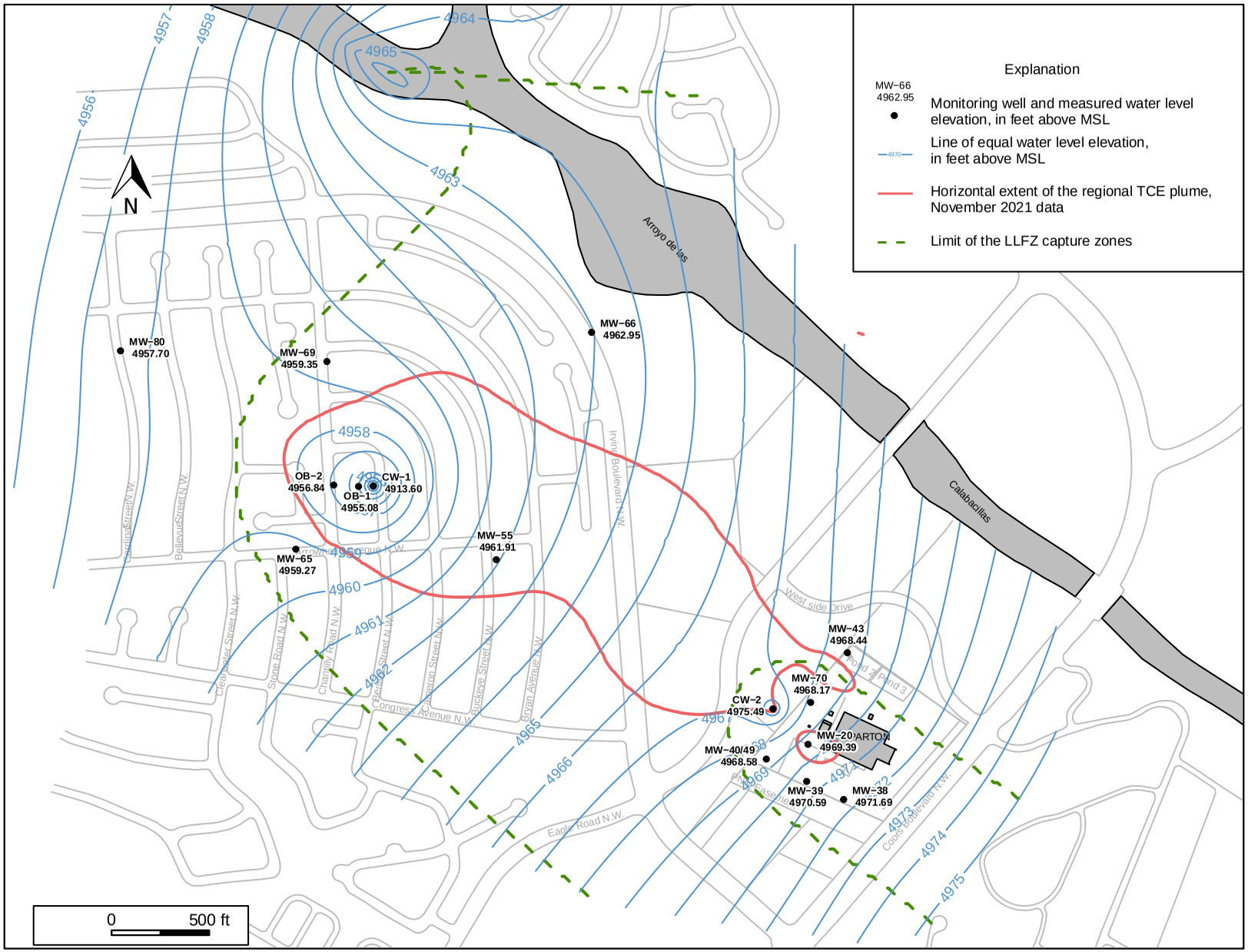


Figure 4.3: Elevation of Water Levels and Limits of Containment Well Capture Zones in the LLFZ - February 2022

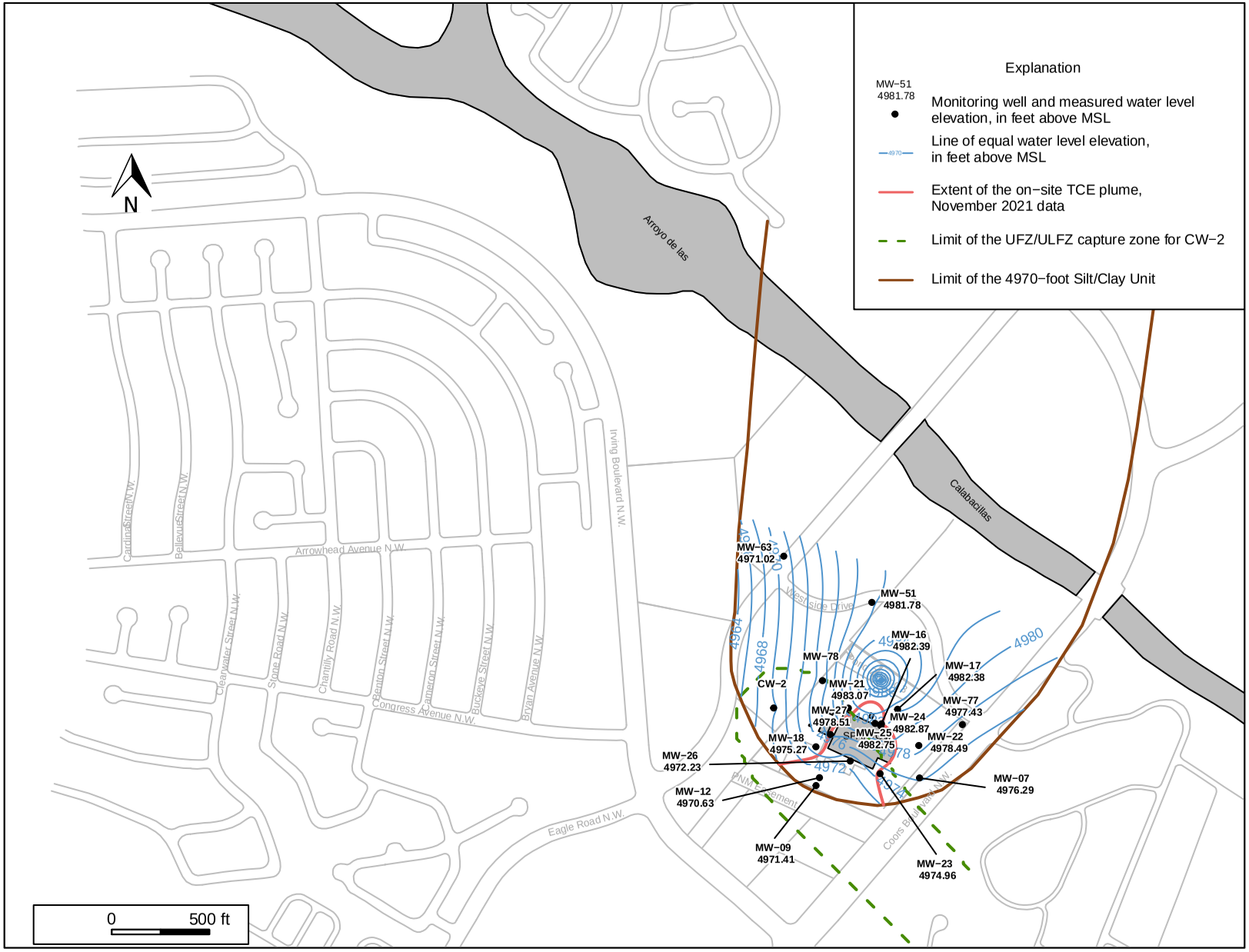


Figure 4.4: Elevation of the On-Site Water Table - May 2022

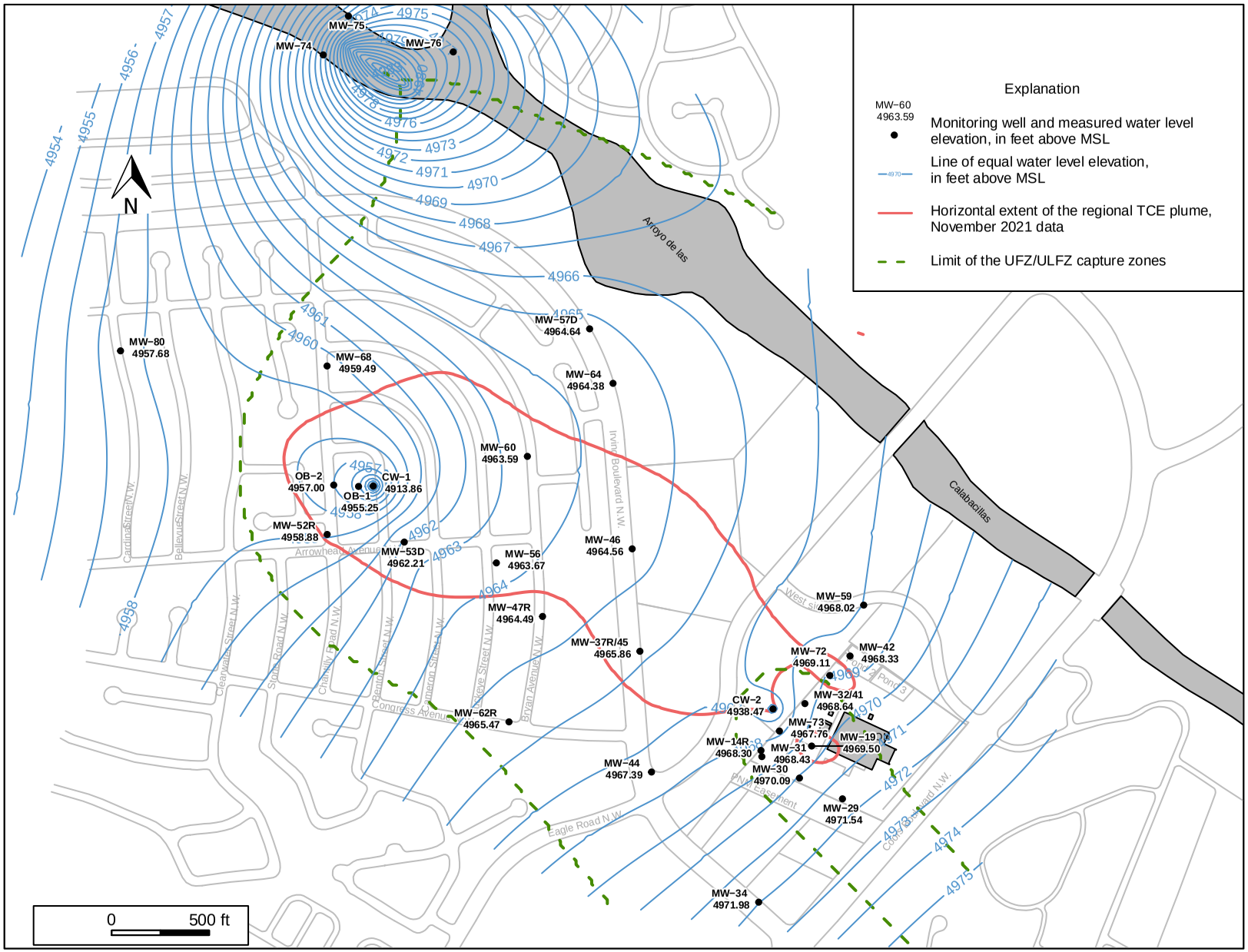


Figure 4.5: Elevation of Water Levels and Limits of Containment Well Capture Zones in the UFZ/ULFZ - May 2022

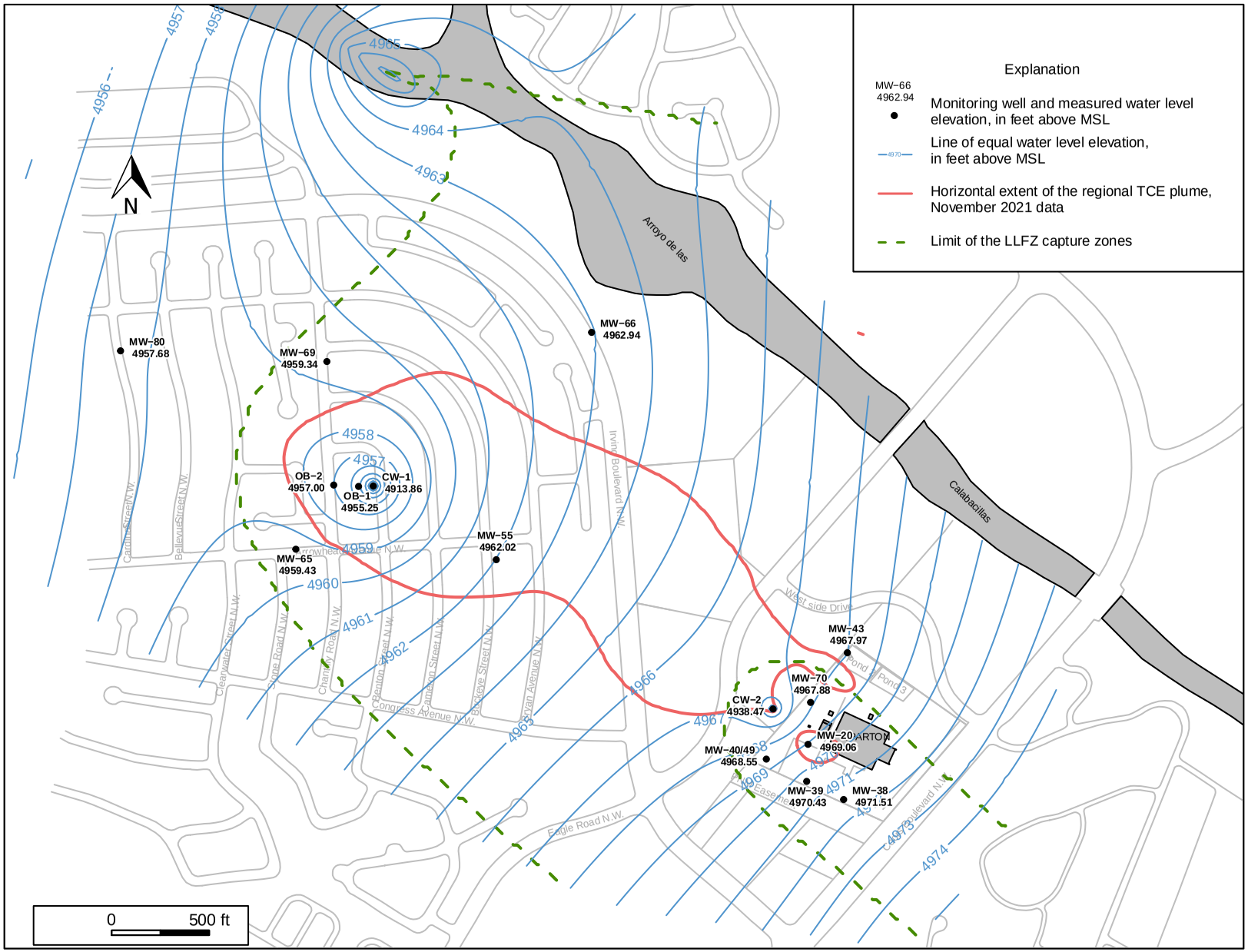


Figure 4.6: Elevation of Water Levels and Limits of Containment Well Capture Zones in the LLFZ - May 2022

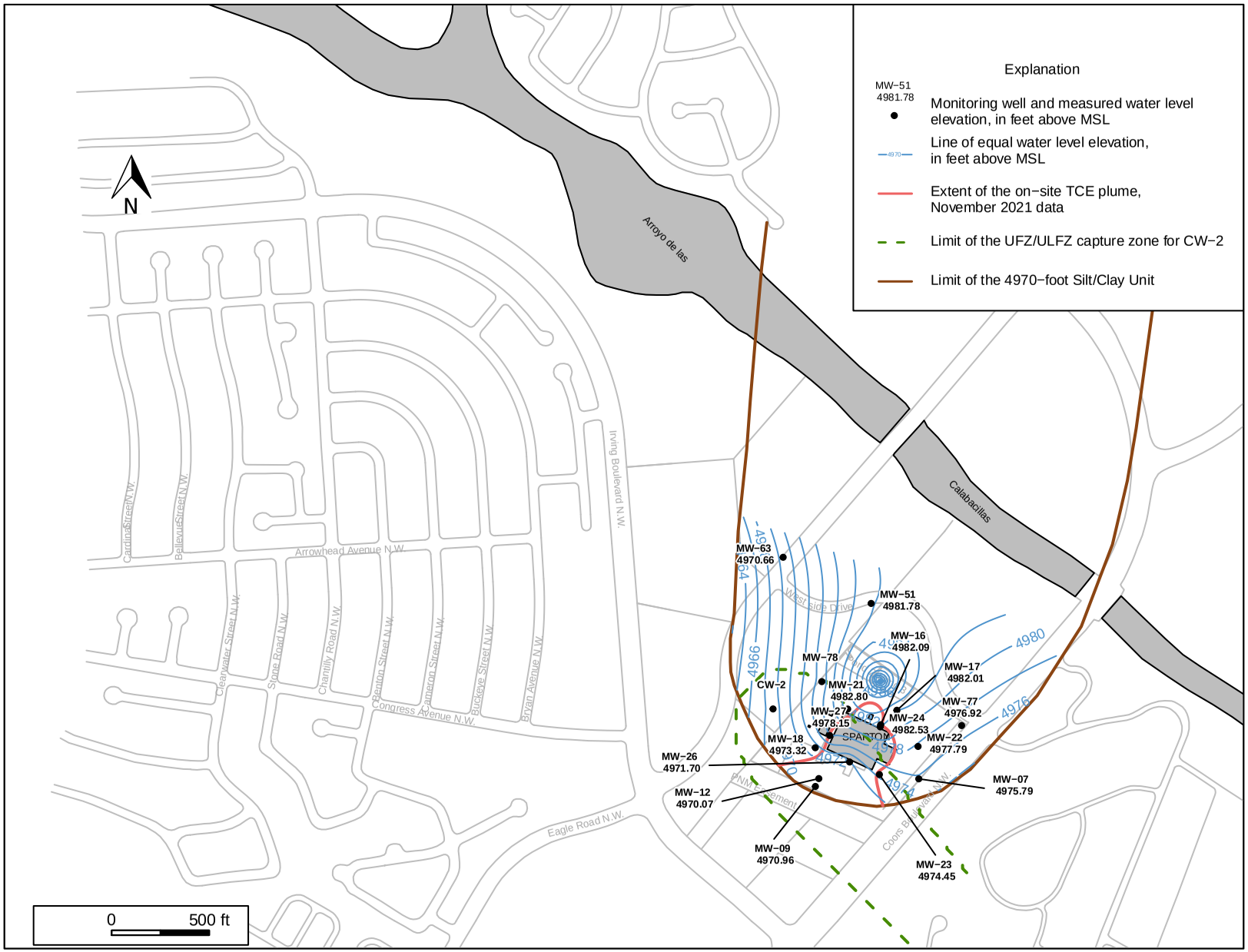


Figure 4.7: Elevation of the On-Site Water Table - August 2022

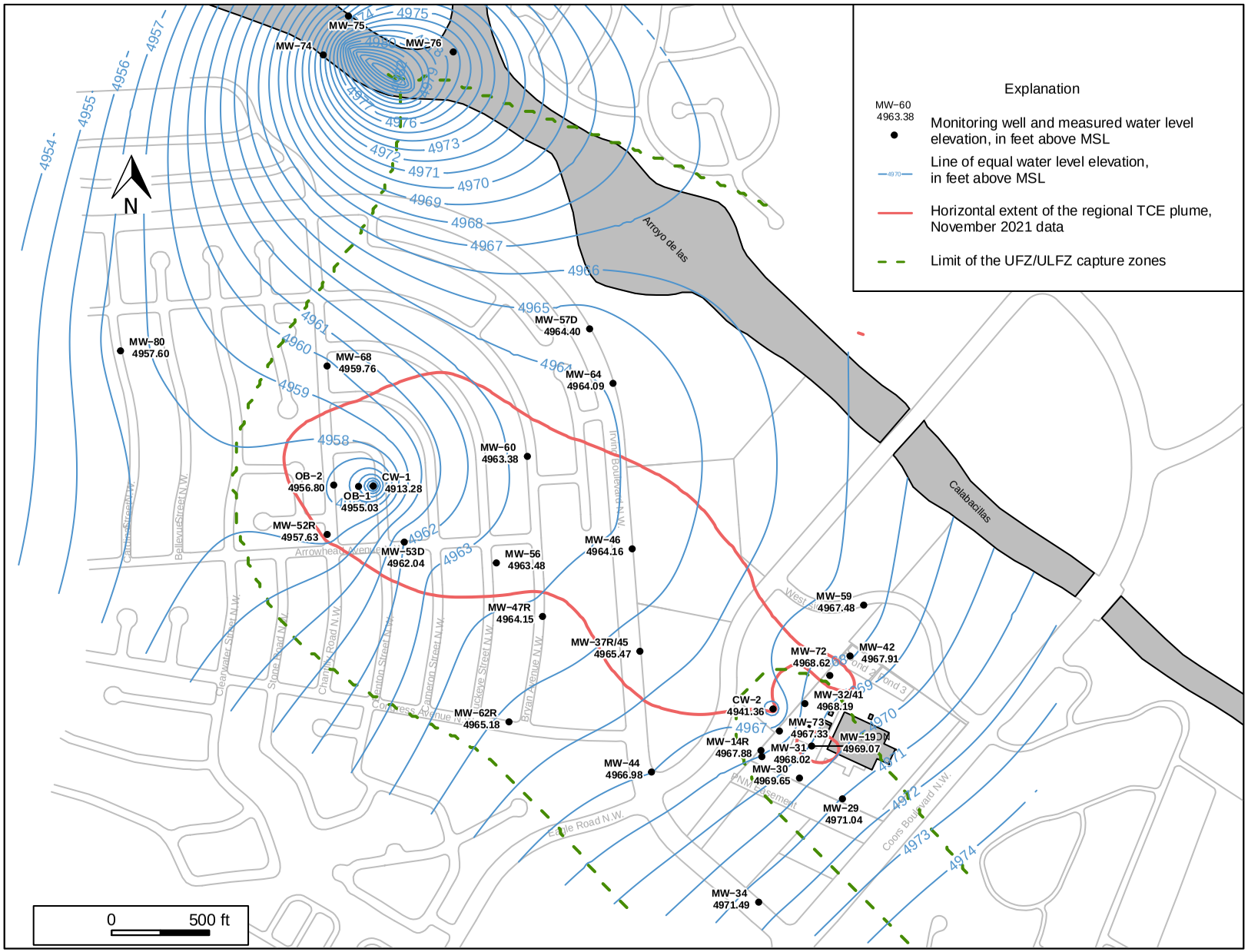


Figure 4.8: Elevation of Water Levels and Limits of Containment Well Capture Zones in the UFZ/ULFZ - August 2022

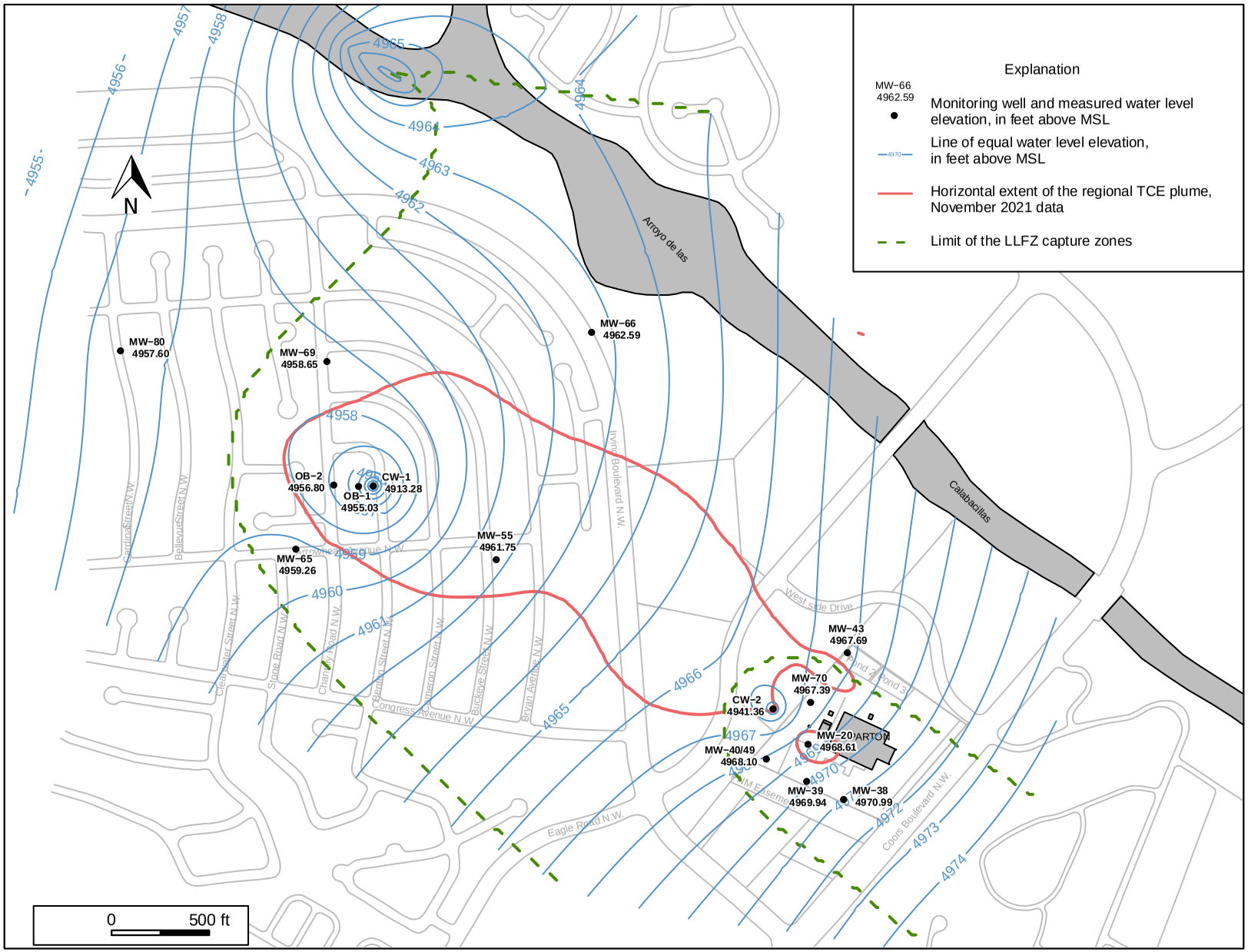


Figure 4.9: Elevation of Water Levels and Limits of Containment Well Capture Zones in the LLFZ - August 2022

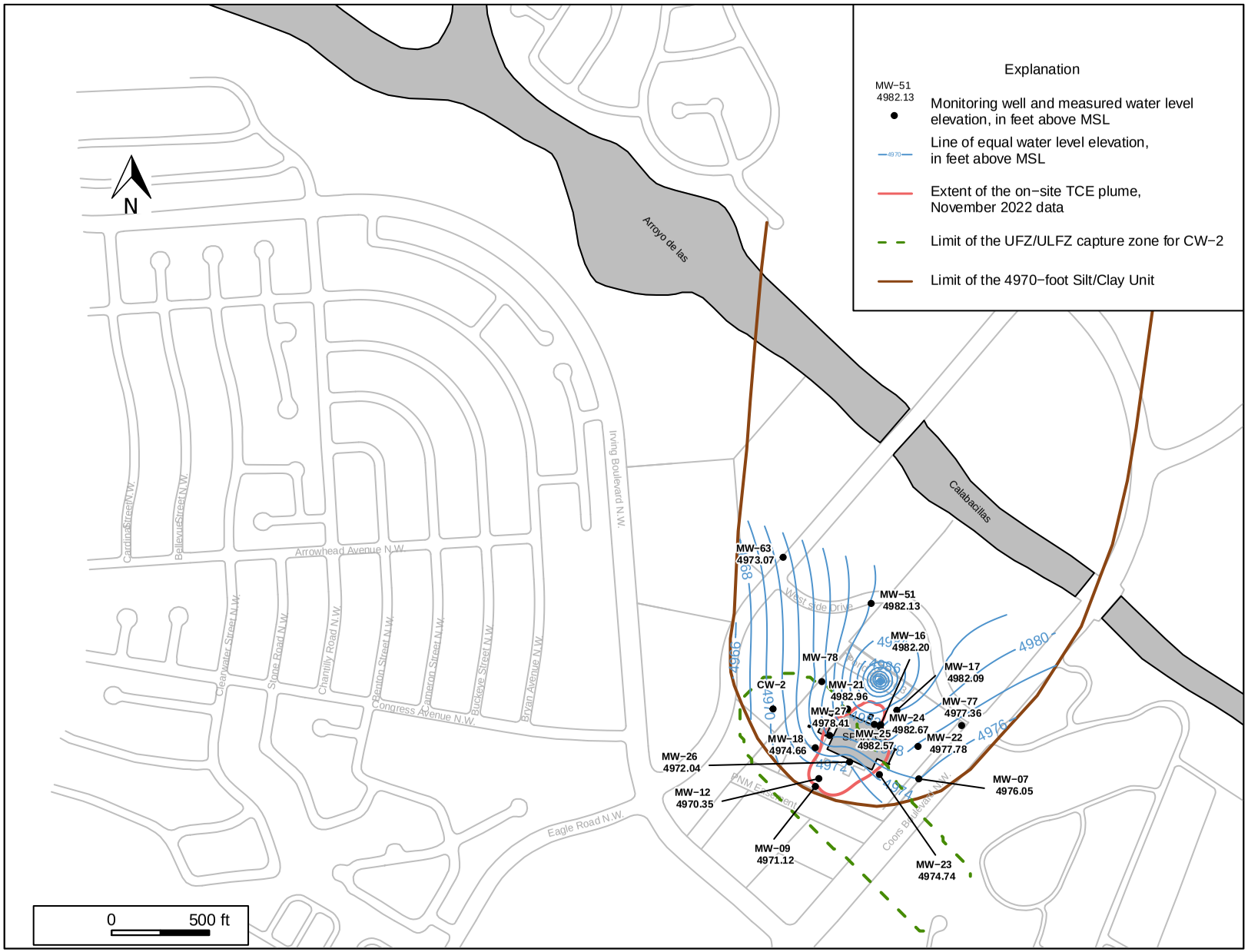


Figure 4.10: Elevation of the On-Site Water Table - November 2022

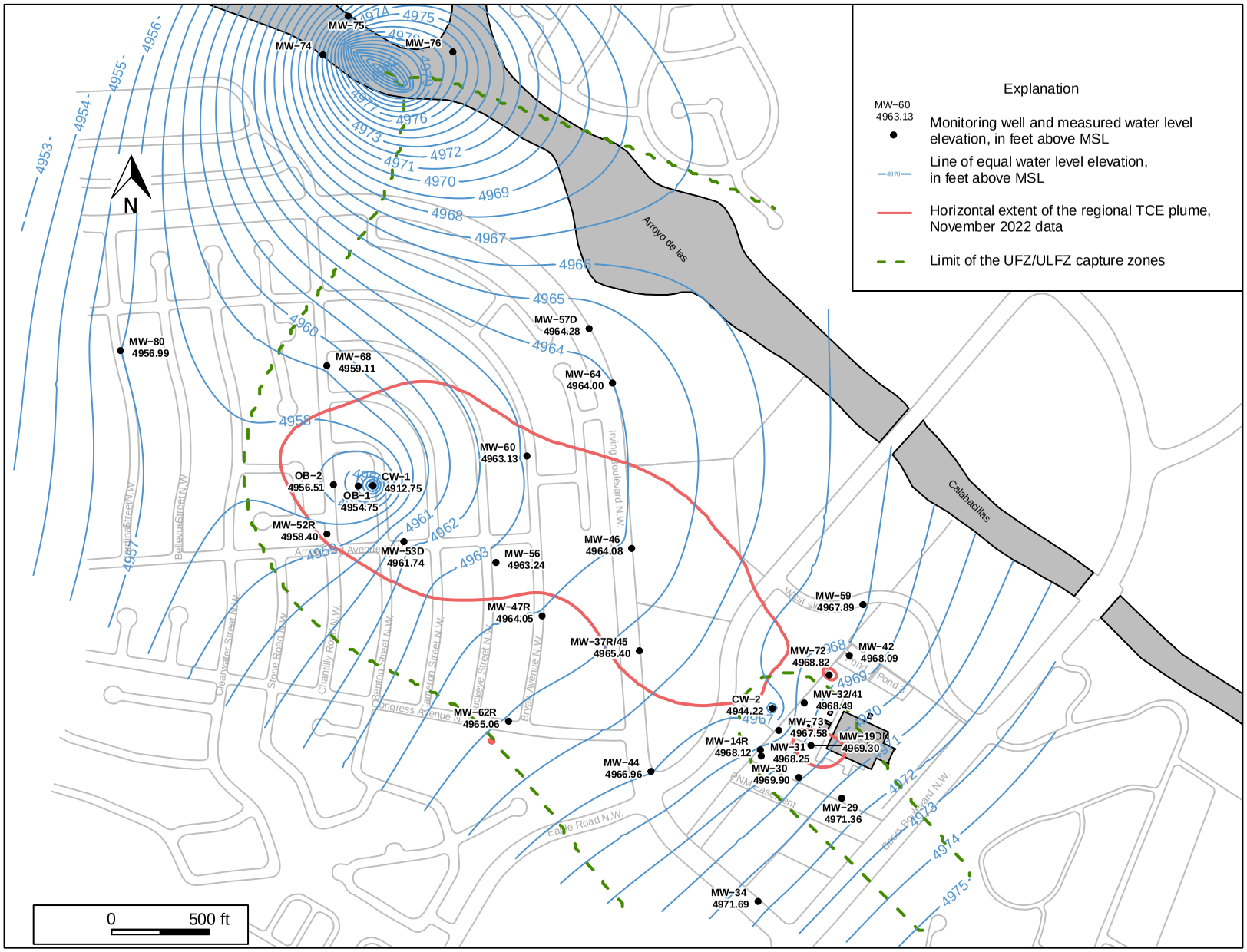


Figure 4.11: Elevation of Water Levels and Limits of Containment Well Capture Zones in the UFZ/ULFZ - November 2022

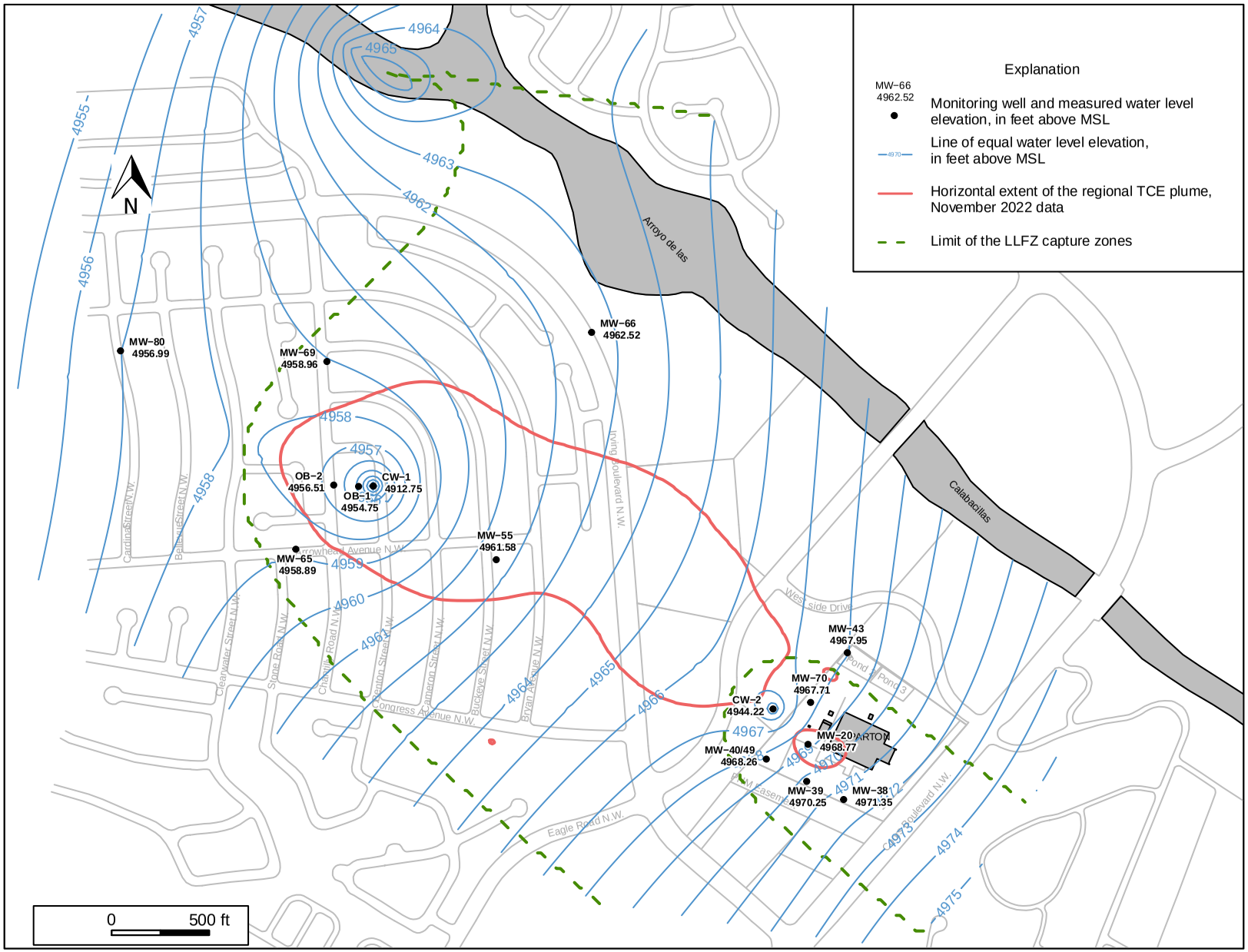


Figure 4.12: Elevation of Water Levels and Limits of Containment Well Capture Zones in the LLFZ - November 2022

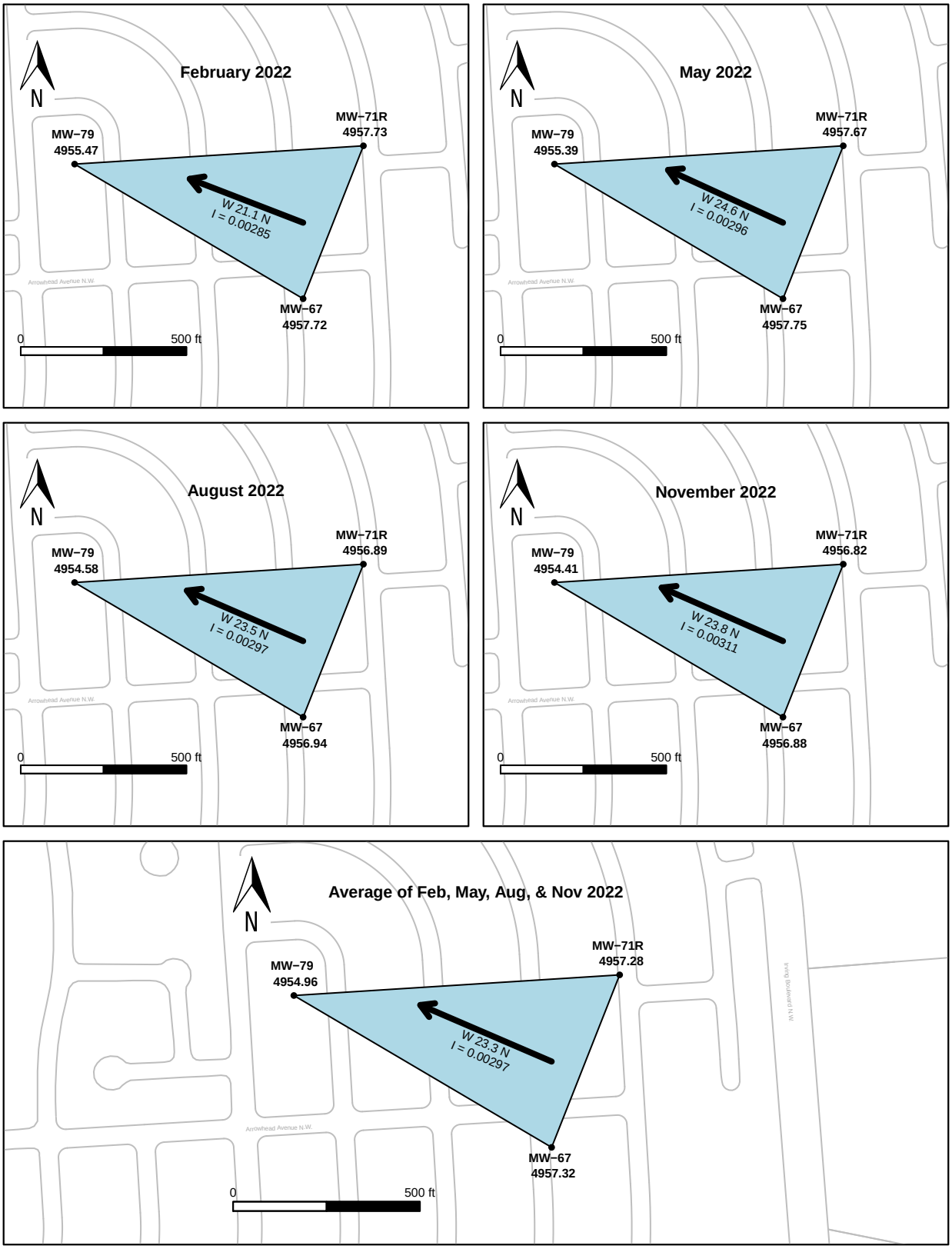
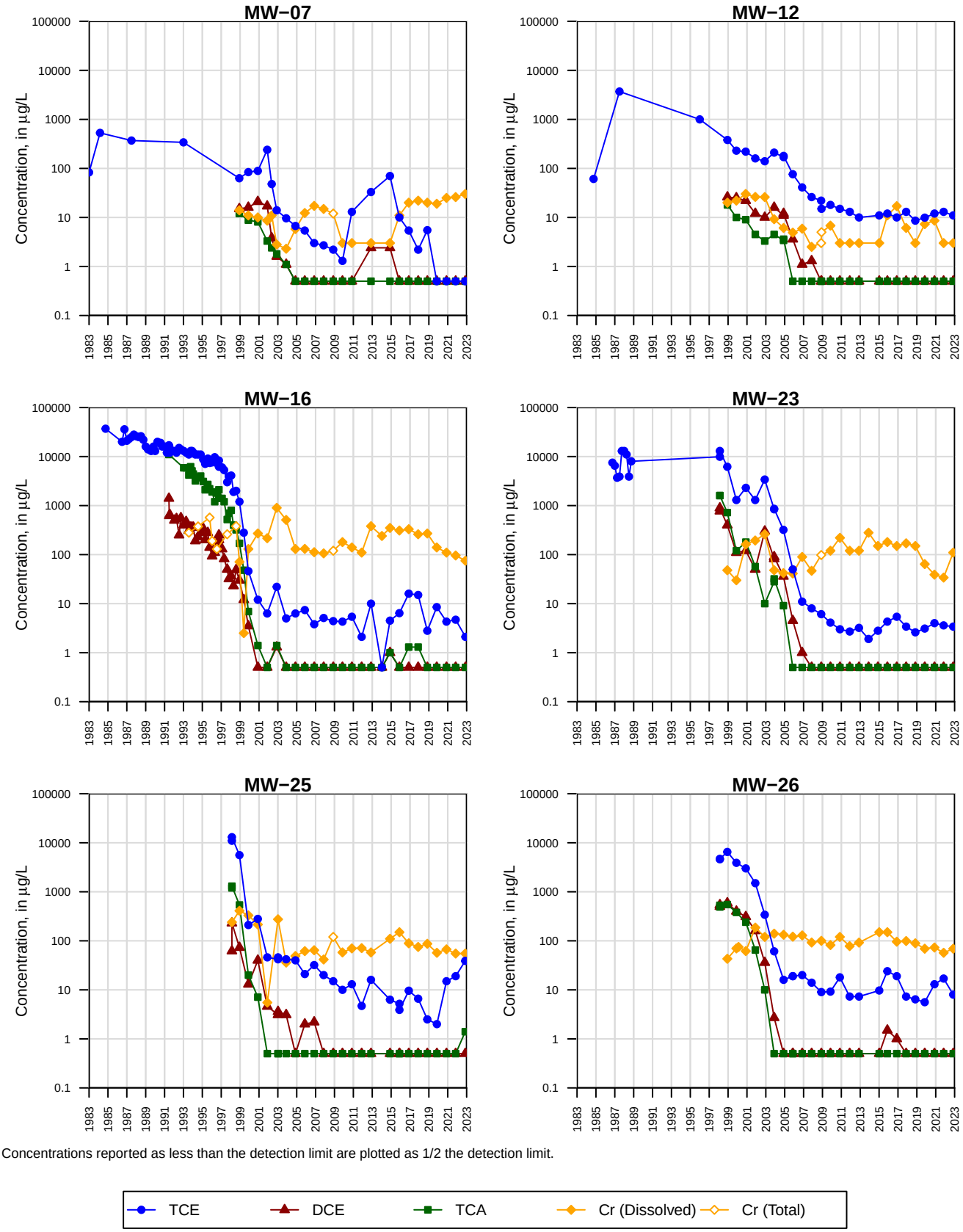


Figure 4.13: Groundwater Flow Direction and Hydraulic Gradient in the DFZ - 2022



Concentrations reported as less than the detection limit are plotted as 1/2 the detection limit.

Figure 4.14: Contaminant Concentration Trends in On-Site Wells Completed Above the 4970-ft Silt/Clay

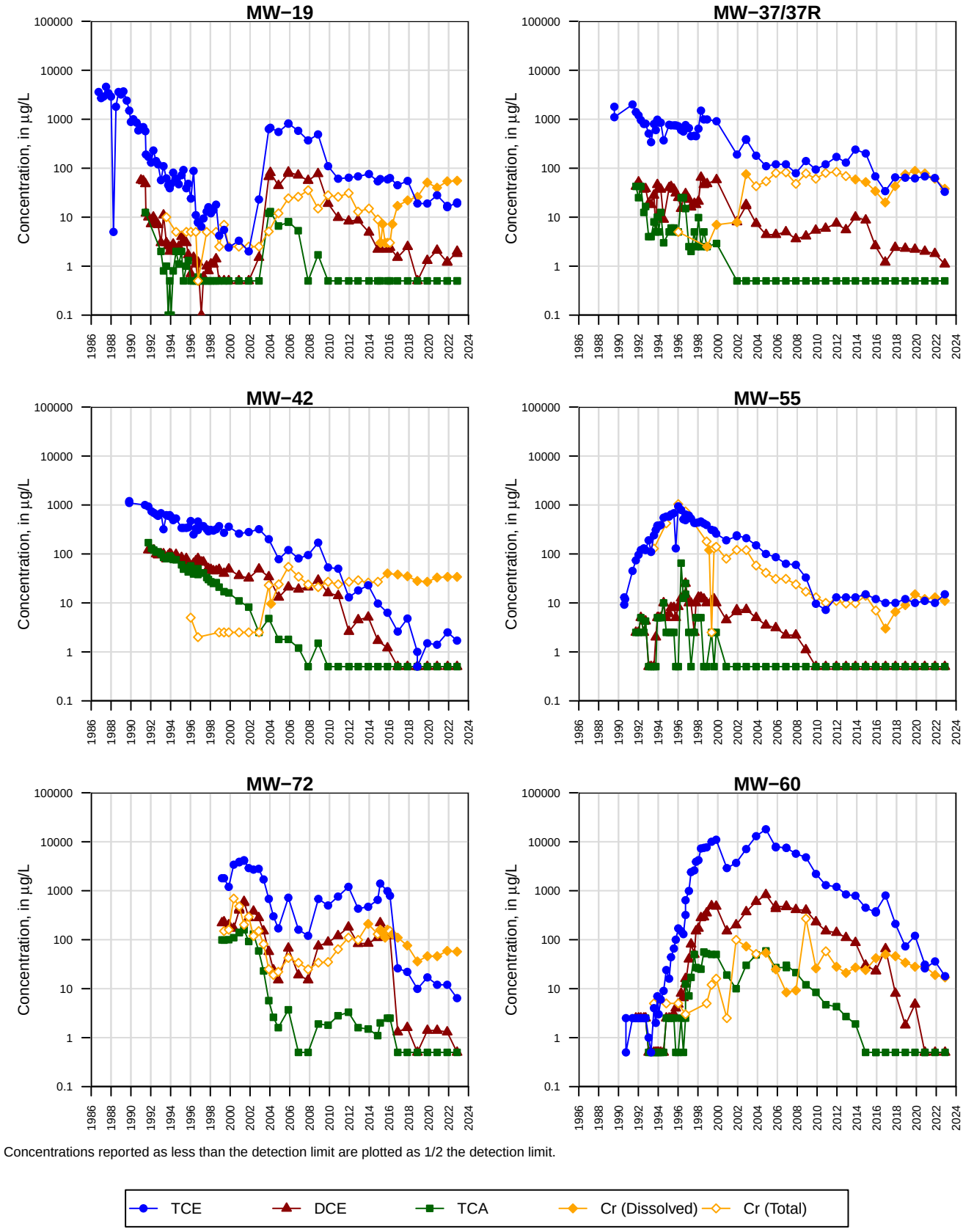


Figure 4.15: Contaminant Concentration Trends in On-Site Wells Completed Below the 4970-ft Silt/Clay and in Off-Site Wells

Figure 4.16: Horizontal Extent of the On-Site TCE Plume - November 2022

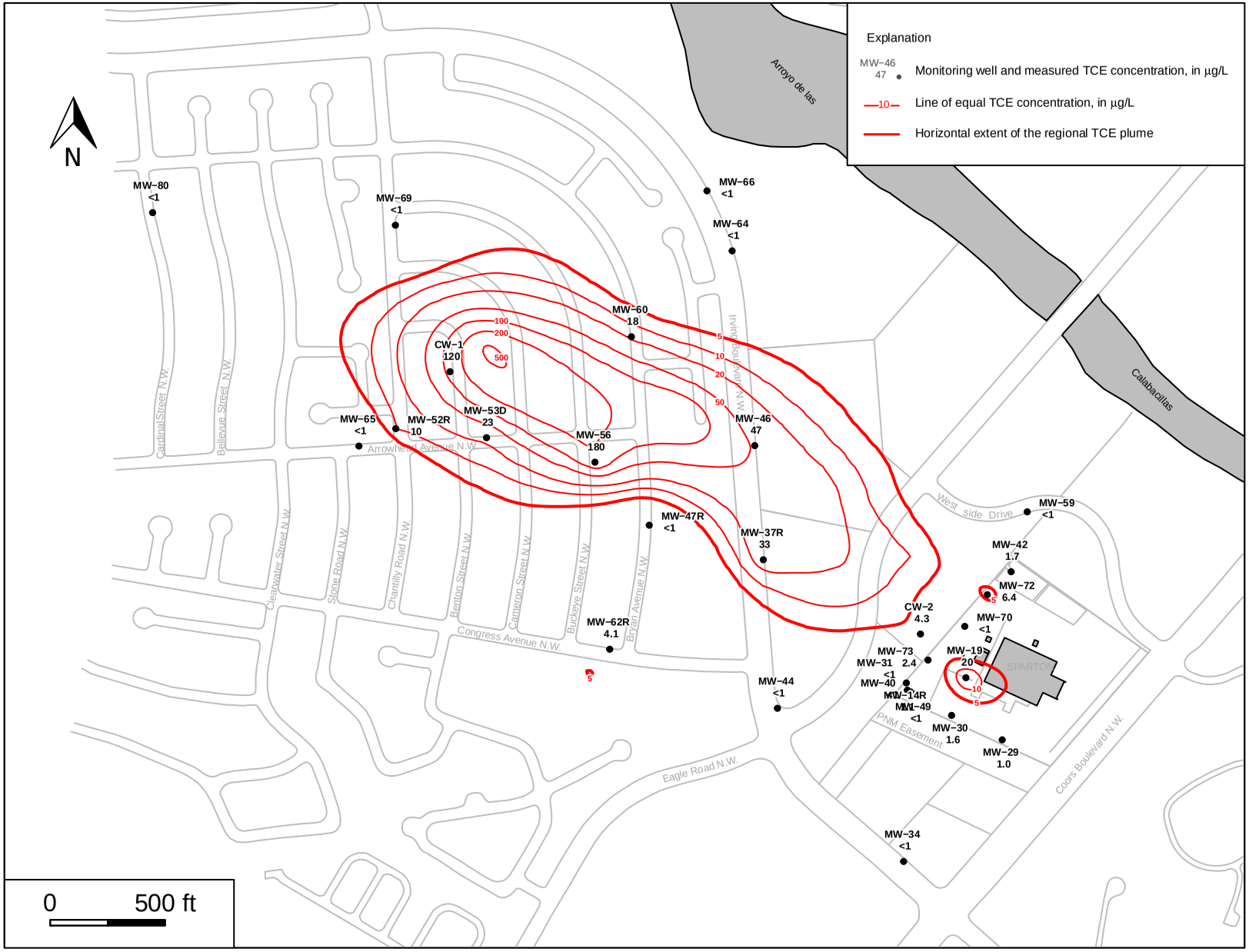


Figure 4.17: Horizontal Extent of the Regional TCE Plume - November 2022

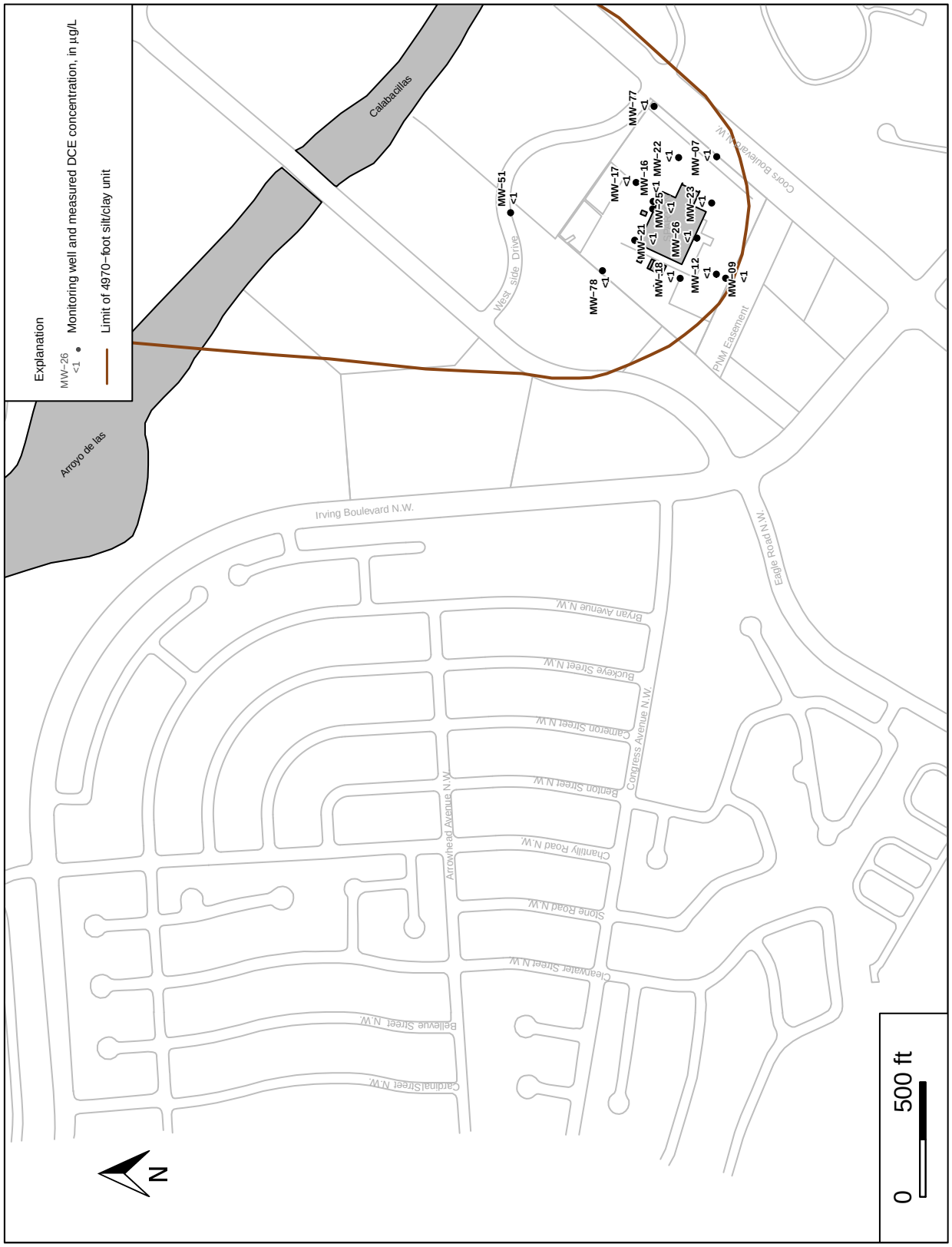


Figure 4.18: On-Site DCE Concentrations - November 2022

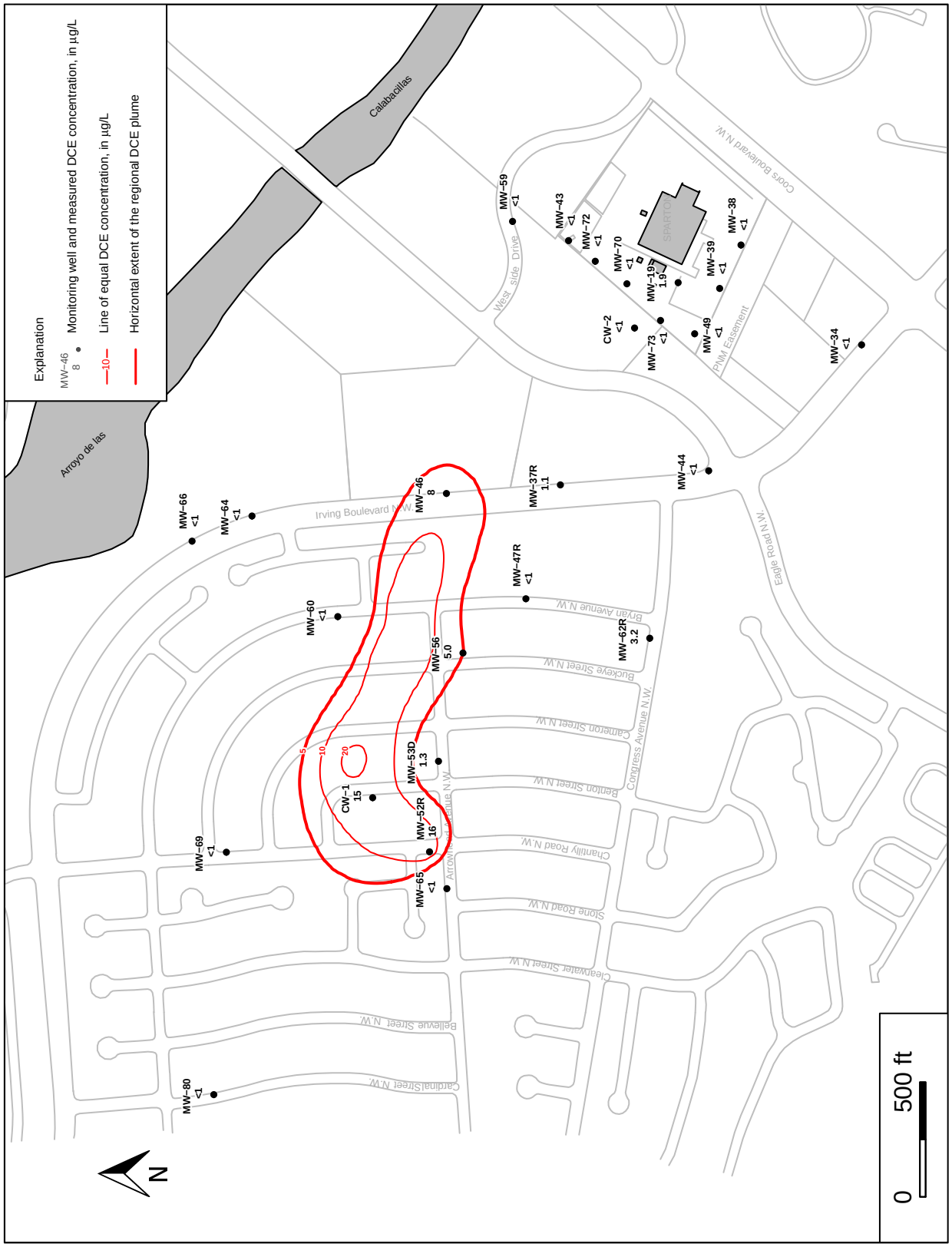


Figure 4.19: Horizontal Extent of the Regional DCE Plume - November 2022

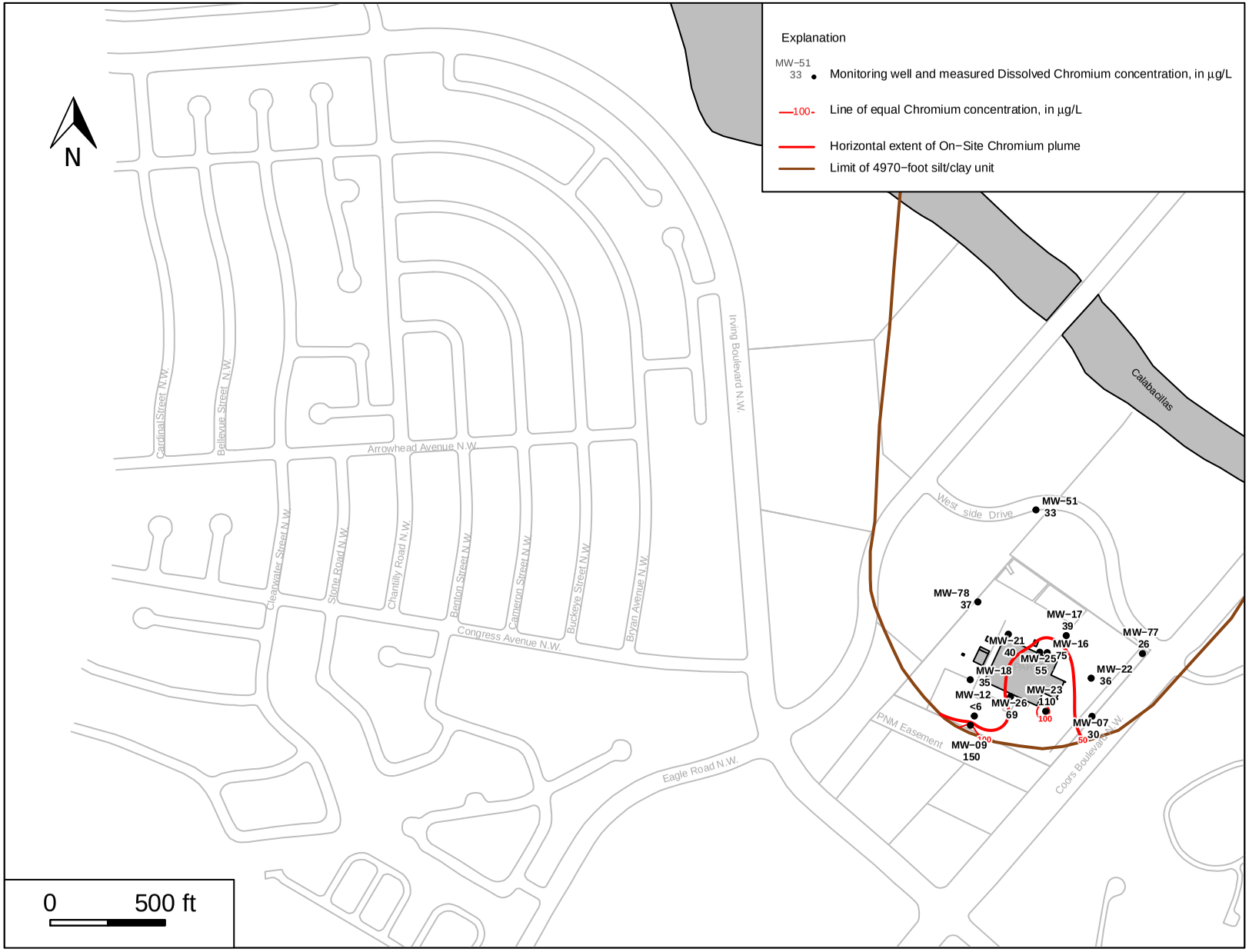


Figure 4.20: Horizontal Extent of the On-Site Chromium Plume - November 2022

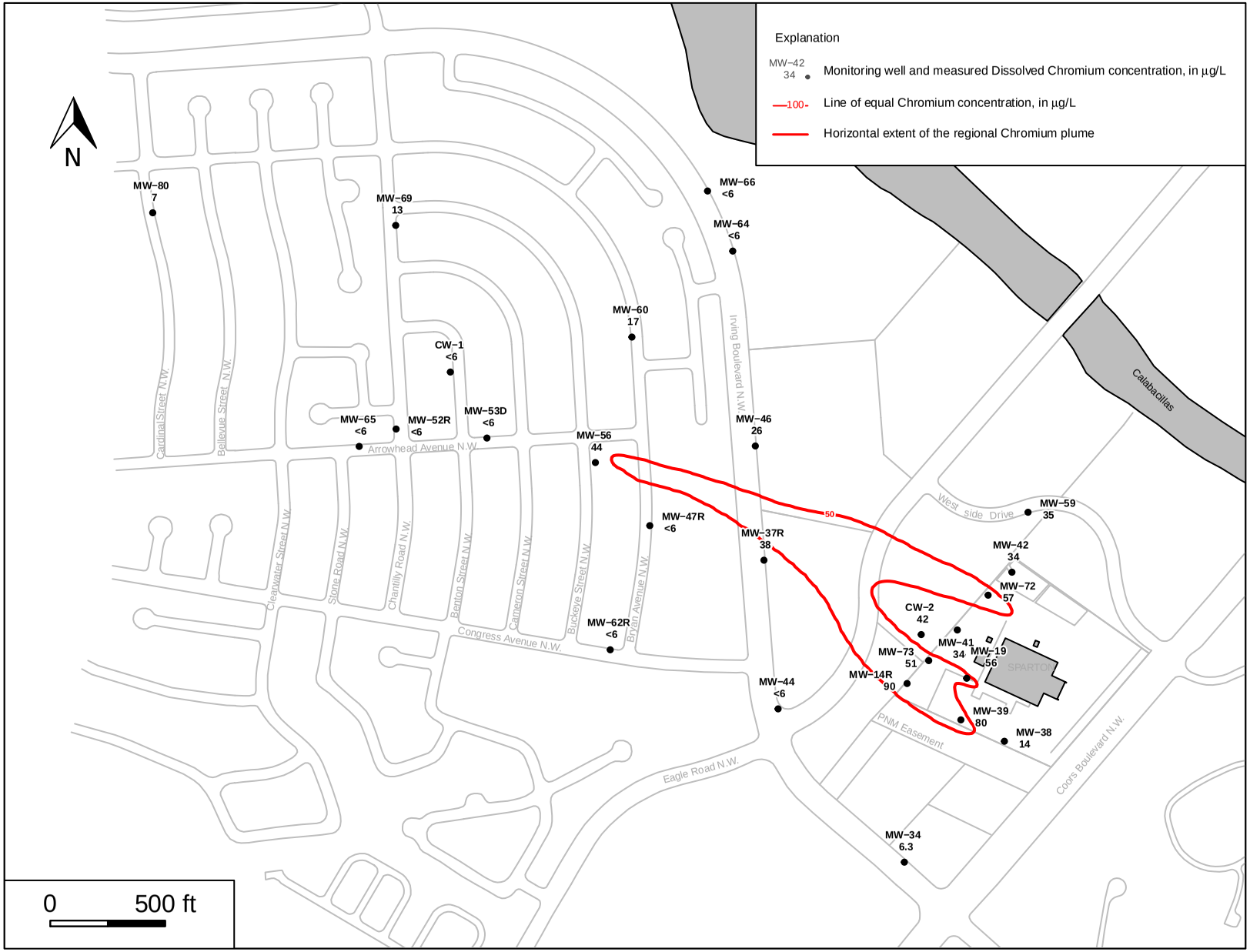


Figure 4.21: Horizontal Extent of the Regional Chromium Plume - November 2022

Figure 4.22: Comparison of the November 1998 and November 2022 extent of the on-site TCE plumes and changes in concentration in wells used to delineate these plumes

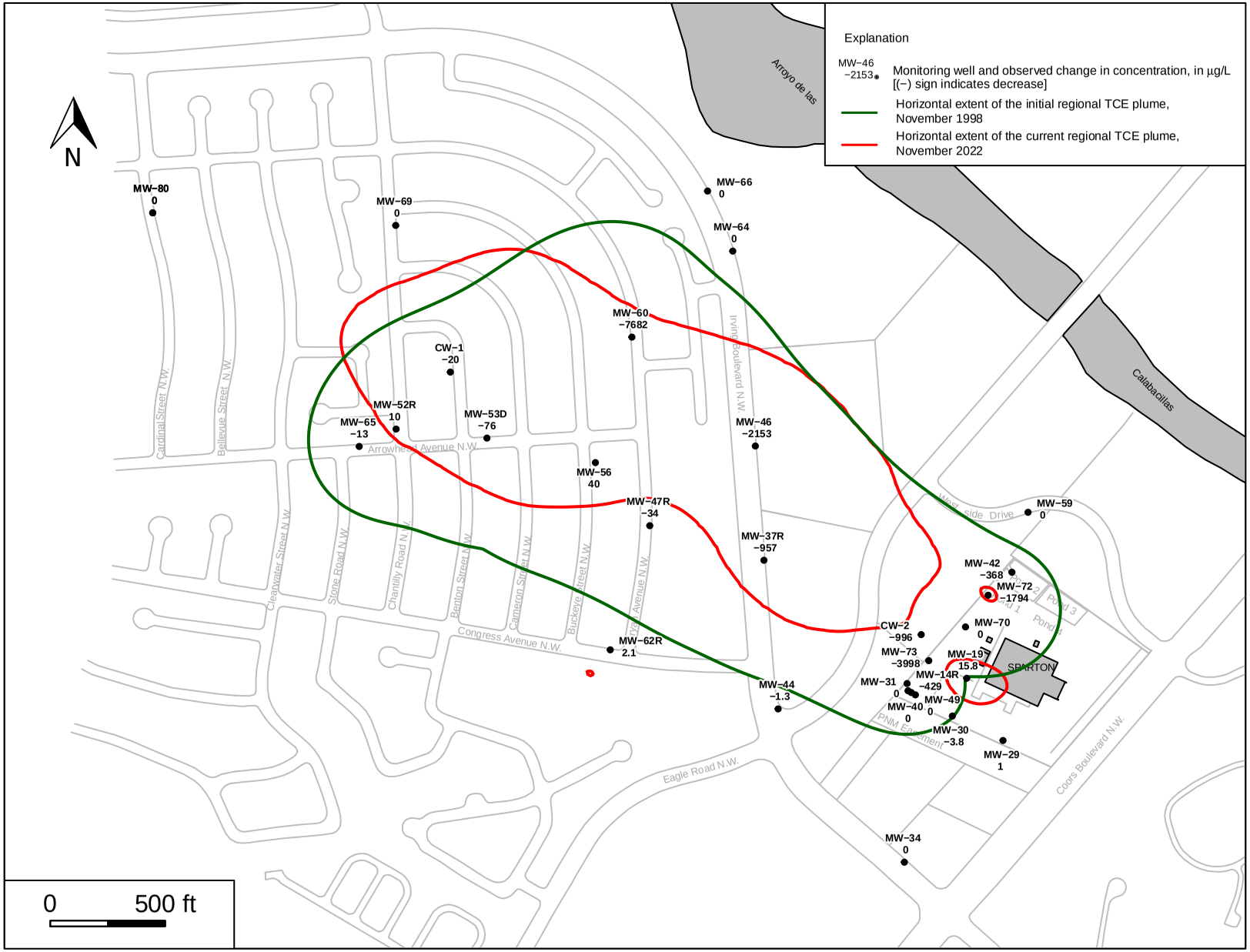


Figure 4.23: Comparison of the November 1998 and November 2022 extent of the regional TCE plumes and changes in concentration in wells used to delineate these plumes

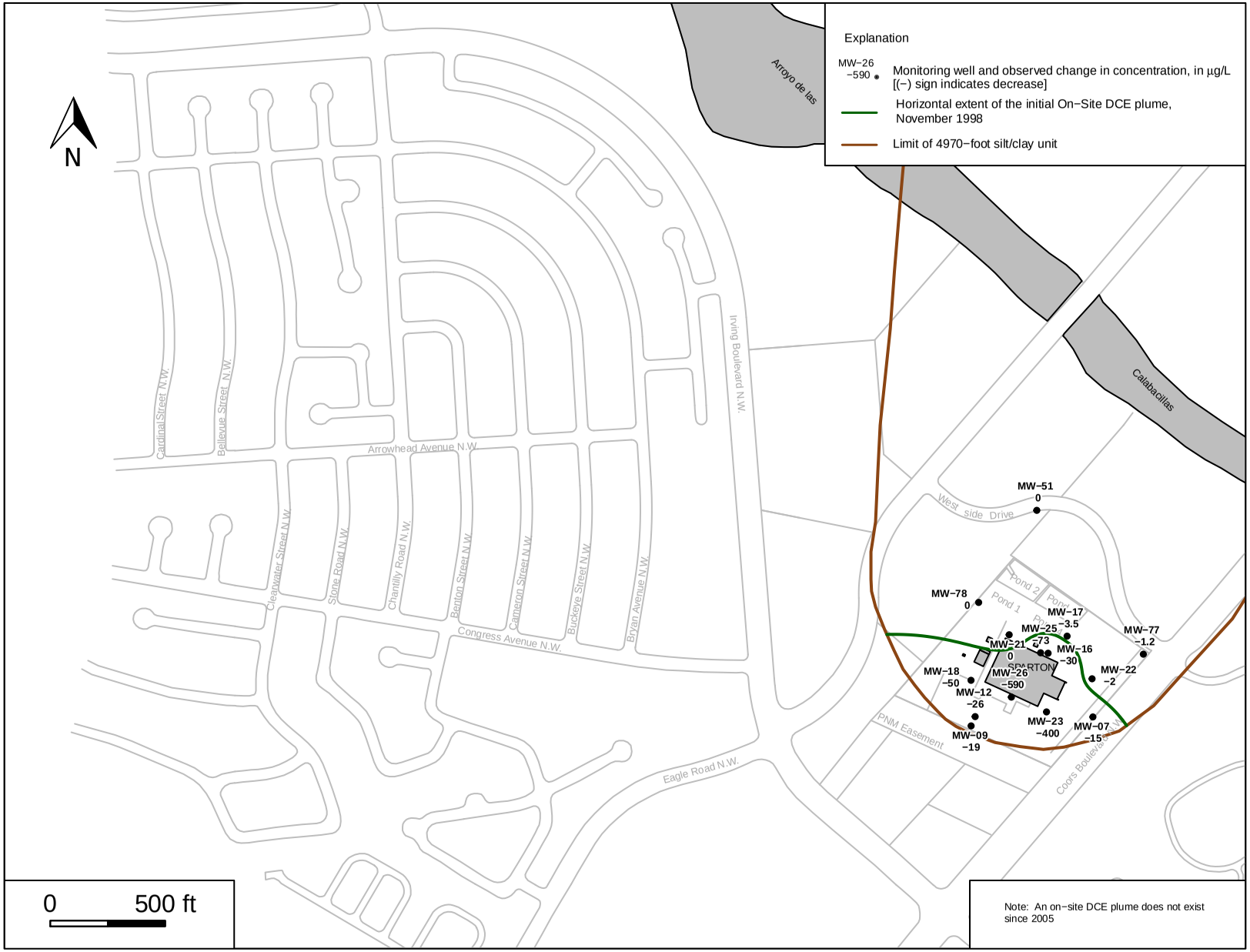


Figure 4.24: Comparison of the November 1998 and November 2022 extent of the on-site DCE plumes and changes in concentration in wells used to delineate these plumes

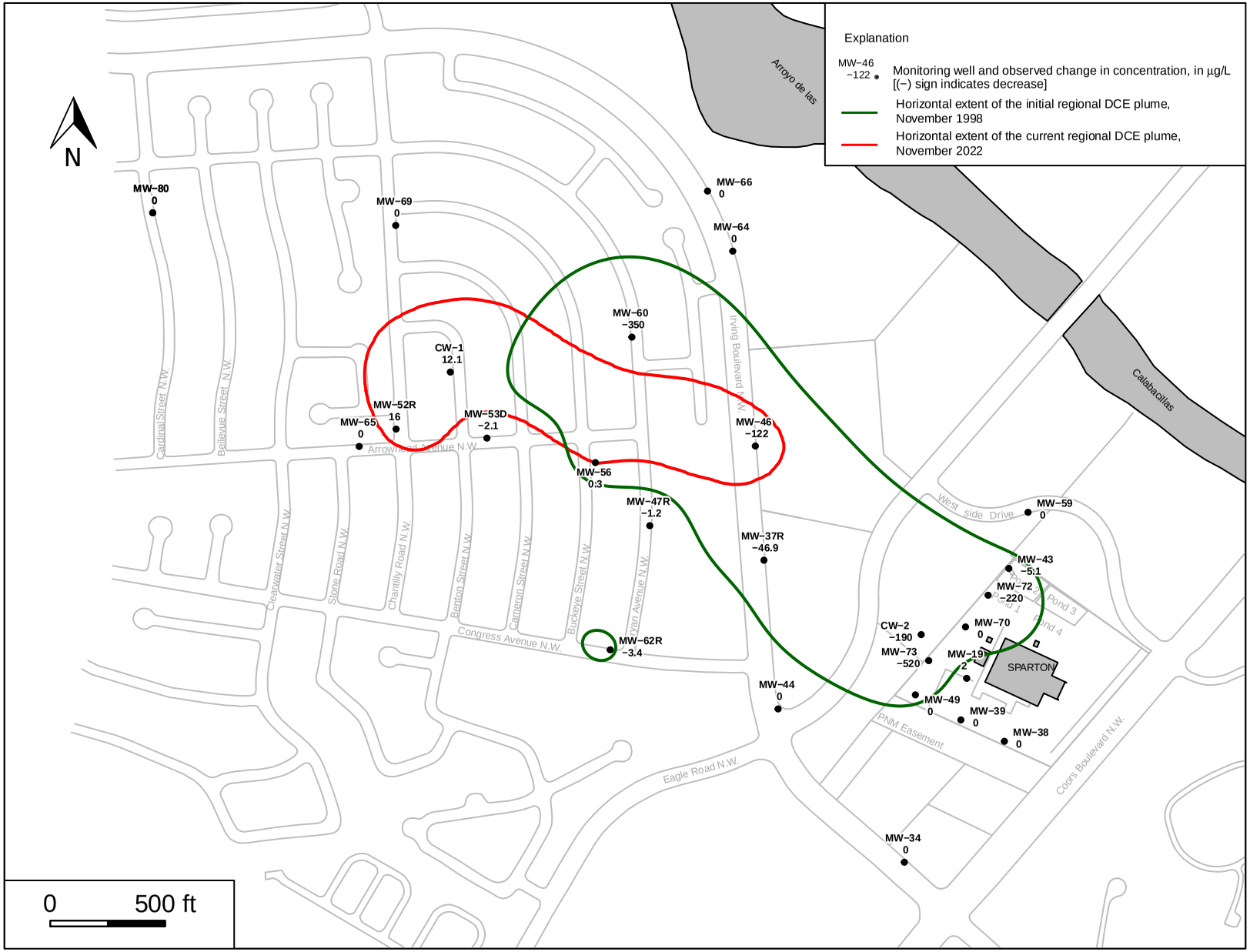


Figure 4.25: Comparison of the November 1998 and November 2022 extent of the regional DCE plumes and changes in concentration in wells used to delineate these plumes

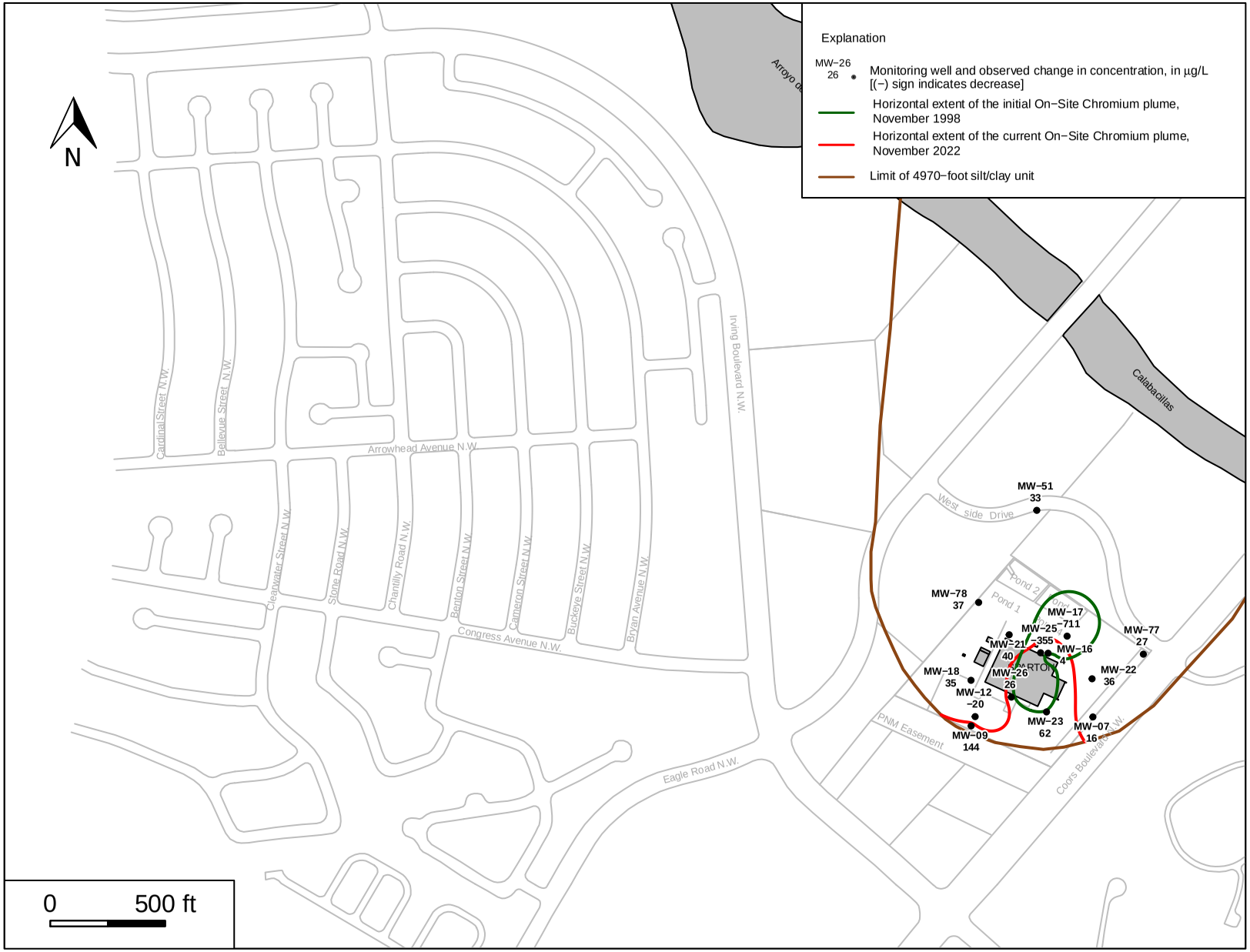


Figure 4.26: Comparison of the November 1998 and November 2022 extent of the on-site chromium plumes and changes in concentration in wells used to delineate these plumes

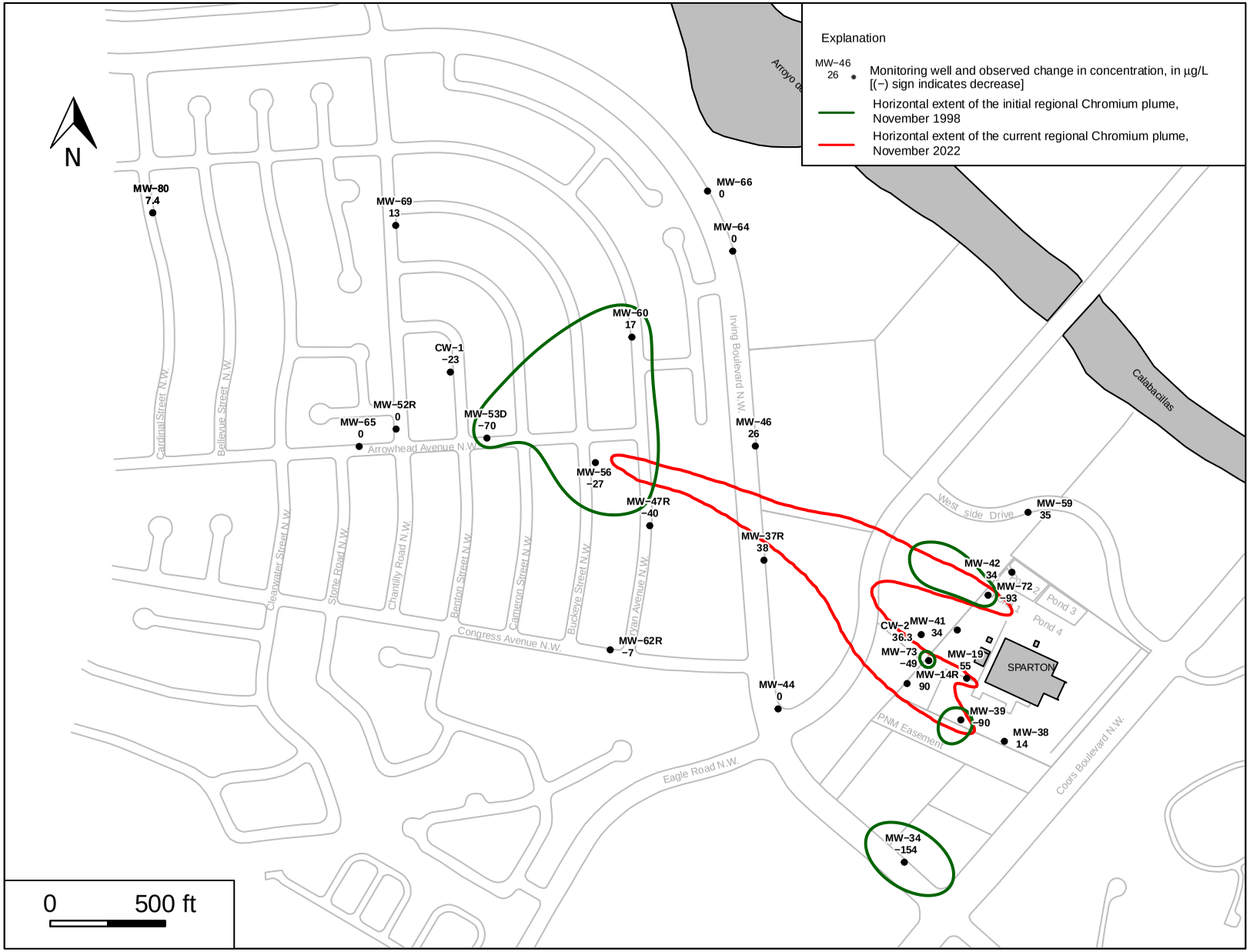


Figure 4.27: Comparison of the November 1998 and November 2022 extent of the regional chromium plumes and changes in concentration in wells used to delineate these plumes

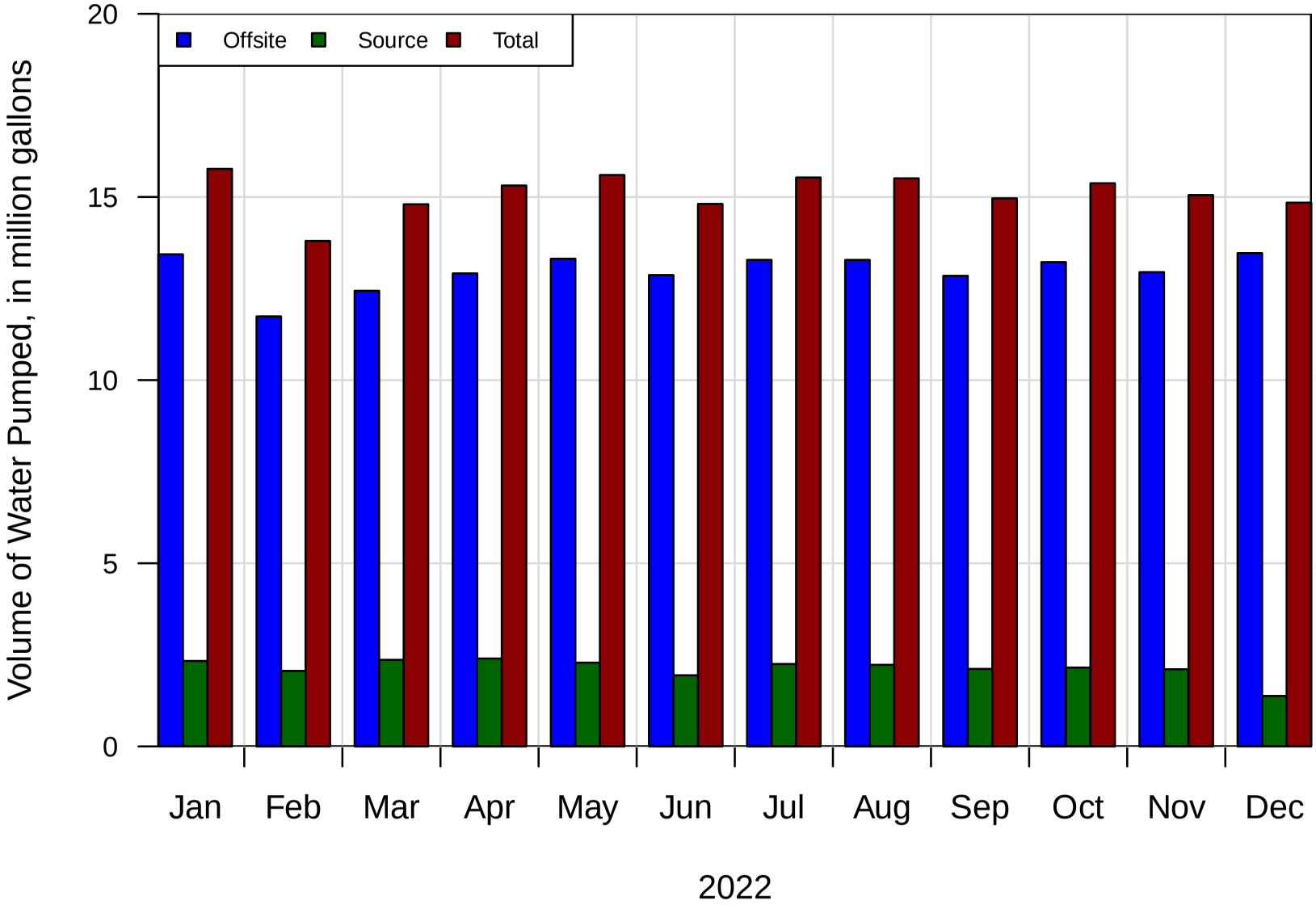
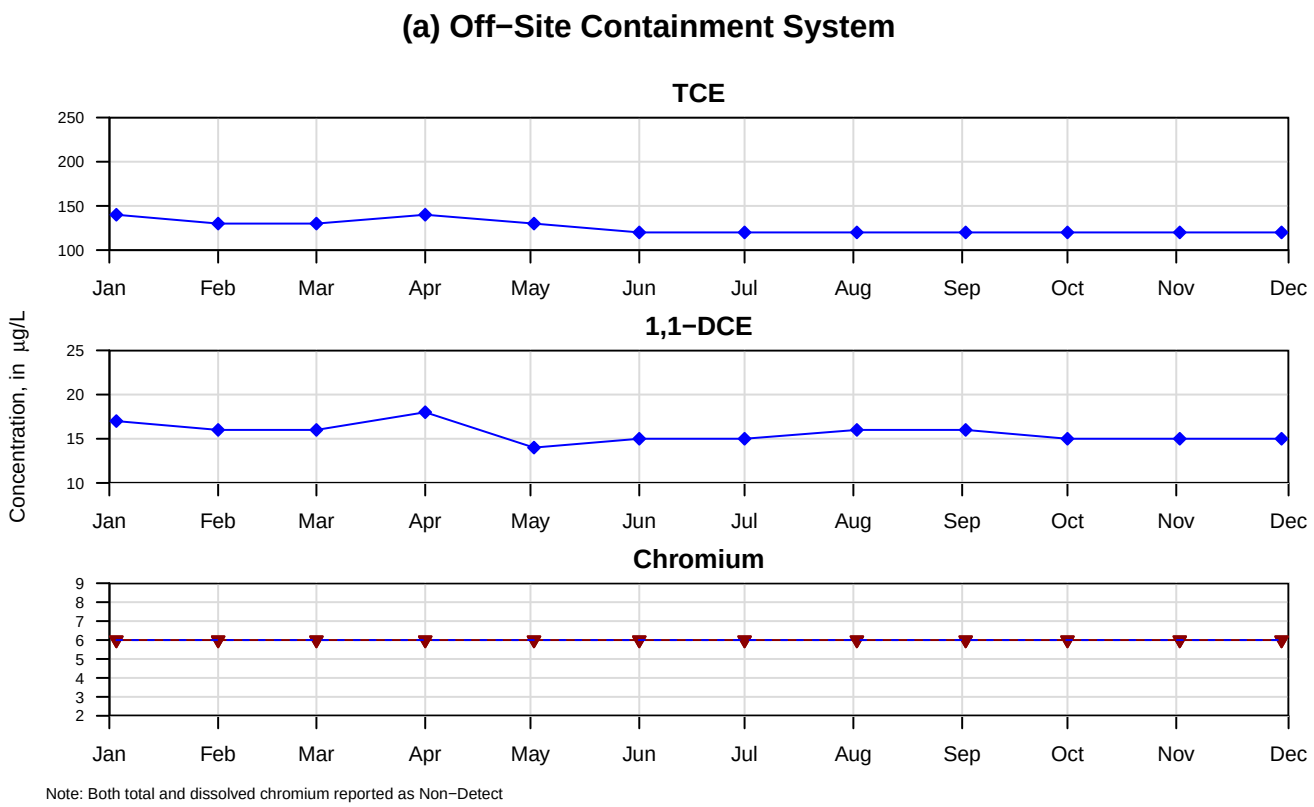


Figure 4.28: Monthly Volume of Water Pumped by the Containment Wells - 2022

Figure 4.29: Cumulative Volume of Water Pumped by the Containment Wells



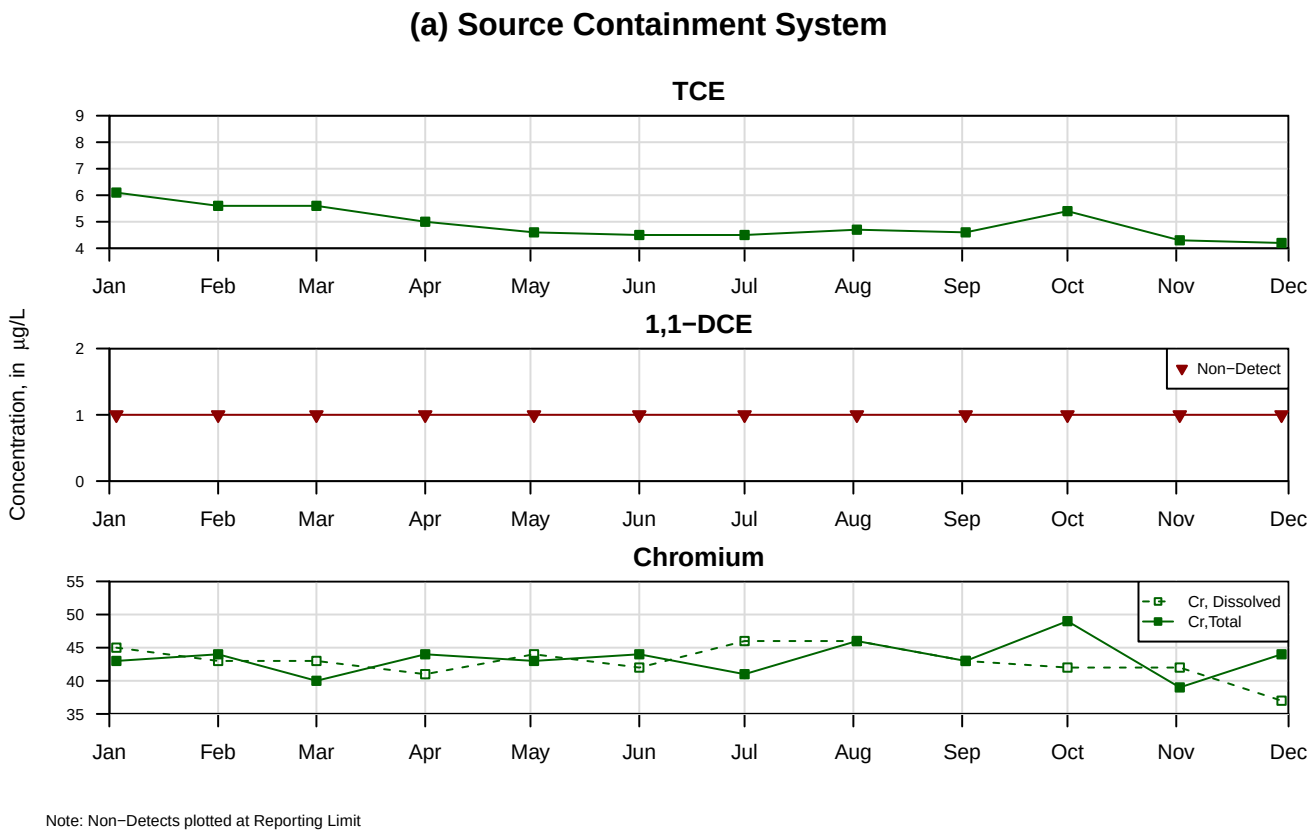


Figure 4.30: Off-Site and Source Containment Systems - TCE, DCE, and Chromium Concentrations in the Influent - 2022

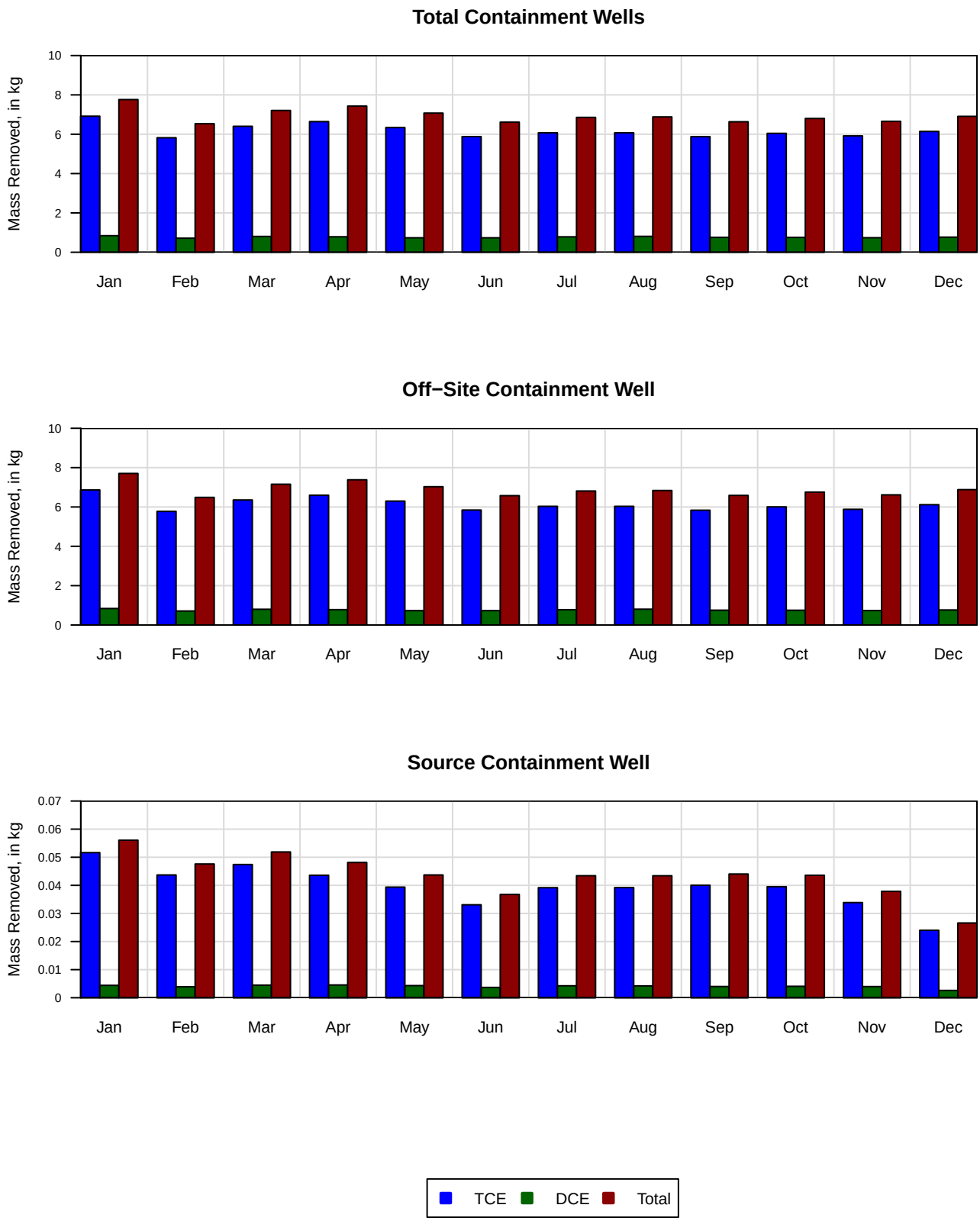


Figure 4.31: Monthly Contaminant Mass Removal by the Containment Wells - 2022

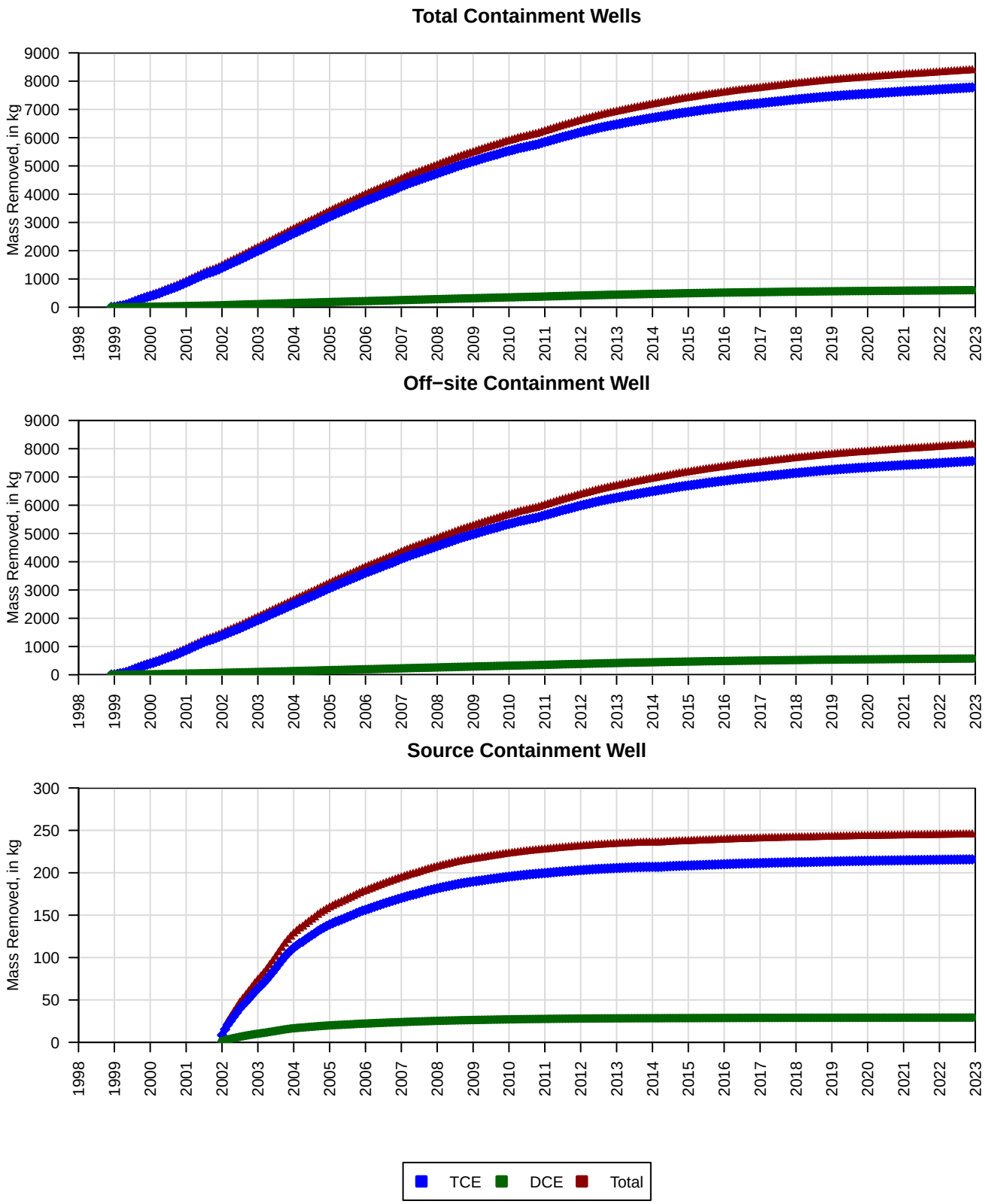


Figure 4.32: Cumulative Contaminant Mass Removal by the Containment Wells

TABLES

Table 2.1: Completion Flow Zone, Location Coordinates, and Measuring Point Elevation of Existing Wells

Well ID[a]	Flow Zone[b]	Easting[c]	Northing[c]	Elevation[d]
CW-1	UFZ/LFZ	374740.43	1525601.48	5168.02
CW-2	UFZ-LLFZ	376788.70	1524459.40	5045.68
MW-07	UFZ	377535.41	1524101.14	5043.48
MW-09	UFZ	377005.75	1524062.25	5042.46
MW-12	UFZ	377023.27	1524102.56	5042.41
MW-14R	UFZ/ULFZ	376727.10	1524246.40	5040.92
MW-16	UFZ	377340.57	1524378.38	5047.50
MW-17	UFZ	377423.18	1524452.68	5046.40
MW-18	UFZ	377005.22	1524260.58	5043.38
MW-19	ULFZ	376986.52	1524269.27	5043.30
MW-20	LLFZ	376967.98	1524277.98	5043.20
MW-21	UFZ	377171.22	1524458.71	5045.78
MW-22	UFZ	377531.77	1524267.24	5044.73
MW-23	UFZ	377333.63	1524123.03	5045.74
MW-24	UFZ	377338.05	1524367.39	5048.70
MW-25	UFZ	377307.91	1524380.40	5046.17
MW-26	UFZ	377180.89	1524187.40	5045.37
MW-27	UFZ	377078.91	1524323.46	5046.04
MW-29	ULFZ	377144.48	1523998.74	5041.88
MW-30	ULFZ	376924.12	1524105.15	5042.12
MW-31	ULFZ	376731.49	1524215.04	5041.38
MW-32	ULFZ	376958.37	1524494.18	5045.29
MW-34	UFZ	376715.25	1523469.17	5034.33
MW-37R	UFZ/ULFZ	376104.50	1524782.90	5093.15
MW-38	LLFZ	377150.52	1523995.17	5041.70
MW-39	LLFZ	376961.13	1524088.17	5042.30
MW-40	LLFZ	376745.33	1524207.40	5041.44
MW-41	ULFZ	376945.67	1524479.28	5044.56
MW-42	ULFZ	377183.28	1524730.69	5057.33
MW-43	LLFZ	377169.66	1524747.27	5057.74
MW-44	ULFZ	376166.14	1524136.09	5058.63
MW-45	ULFZ	376108.80	1524726.75	5089.50
MW-46	ULFZ	376067.09	1525279.84	5118.86
MW-47R	ULFZ	375607.91	1524933.31	5115.17
MW-49	LLFZ	376763.40	1524197.32	5041.44
MW-51	UFZ	377291.45	1525000.02	5060.34
MW-52R	UFZ/ULFZ	374504.50	1525353.60	5156.37
MW-53D	UFZ/ULFZ	374899.50	1525314.41	5148.62
MW-54	UFZ	375974.55	1526106.27	5097.69
MW-55	LLFZ	375370.70	1525224.15	5143.45
MW-56	ULFZ	375371.31	1525207.68	5141.45
MW-57D	UFZ/ULFZ	375849.02	1526406.98	5103.62
MW-59	ULFZ	377253.38	1524991.51	5060.65
MW-60	ULFZ	375530.19	1525753.61	5134.40
MW-62R	UFZ/ULFZ	375435.87	1524393.17	5073.35
MW-63	ULFZ	376840.50	1525236.52	5063.10
MW-64	ULFZ	375968.81	1526127.81	5097.84
MW-65	LLFZ	374343.87	1525277.92	5156.45
MW-66	LLFZ	375859.24	1526389.09	5103.19
MW-67	DFZ	375352.47	1525220.38	5142.21
MW-68	UFZ	374503.81	1526216.71	5168.54
MW-69	LLFZ	374502.80	1526239.55	5167.79
MW-70	LLFZ	376981.33	1524492.75	5046.74
MW-71R	DFZ	375534.49	1525681.93	5134.12
MW-72	ULFZ	377079.68	1524630.73	5056.25
MW-73	ULFZ	376821.45	1524346.08	5051.08
MW-74	UFZ/ULFZ	374484.30	1527810.76	5094.80
MW-75	UFZ/ULFZ	374613.33	1528009.97	5113.74
MW-76	UFZ/ULFZ	375150.41	1527826.10	5108.32
MW-77	UFZ/ULFZ	377754.90	1524374.20	5045.64
MW-78	UFZ/ULFZ	377038.50	1524599.30	5052.91
MW-79	DFZ	374662.64	1525626.72	5168.50
MW-80	ULFZ/LLFZ	373445.75	1526294.35	5203.31
OB-1	UFZ/LFZ	374665.16	1525599.52	5169.10
OB-2	UFZ/LFZ	374537.98	1525606.65	5165.22
PZ-1	UFZ	372283.60	1523143.31	5147.36
PZG-1	Infilt. Gall.	374871.44	1527608.15	5090.90

a The letter R after the number in the Well ID indicates that the well is a new and deeper replacement well installed near the original well location; the letter D after the number in the Well ID indicates that the well has been deepened.

b UFZ denotes the Upper Flow Zone; ULFZ and LLFZ denote the upper and lower, intervals of the Lower Flow Zone (LFZ); DFZ denotes a deeper flow zone separated from the Lower Flow Zone by a continuous clay layer that causes significant head differences between LFZ and DFZ.

c New Mexico "Modified State Plane" coordinates, in feet.

d In feet above Mean Sea Level (ft MSL).

Table 2.2: Well Screen Data

Well ID[a]	Flow Zone	Nominal Diameter (in)	Elevation (ft above MSL)			Depth below Ground Surface (ft)		Screen Length (ft)
			Ground Surface	Top of Screen	Bottom of Screen	Top of Screen	Bottom of Screen	
CW-1	UFZ/LFZ	8	5166.4	4957.5	4797.5	208.9	368.9	160.0
CW-2	UFZ-LLFZ	4	5048.5	4968.5	4918.5	80.0	130.0	50.0
MW-07	UFZ	2	5043.0	4979.7	4974.7	63.3	68.3	5.0
MW-09	UFZ	2	5042.4	4975.8	4970.8	66.6	71.6	5.0
MW-12	UFZ	4	5042.3	4978.2	4966.2	64.1	76.1	12.0
MW-14R	UFZ/ULFZ	2	5040.8	4980.5	4950.5	60.3	90.3	30.0
MW-16	UFZ	2	5046.2	4979.7	4974.7	66.5	71.5	5.0
MW-17	UFZ	2	5047.5	4982.3	4977.3	65.2	70.2	5.0
MW-18	UFZ	4	5042.9	4976.0	4966.0	66.9	76.9	10.0
MW-19	ULFZ	4	5042.8	4944.8	4934.8	98.0	108.0	10.0
MW-20	LLFZ	4	5042.8	4919.2	4906.8	123.6	135.9	12.4
MW-21	UFZ	2	5045.7	4982.8	4977.8	62.9	67.9	5.0
MW-22	UFZ	2	5044.6	4977.2	4972.2	67.4	72.4	5.0
MW-23	UFZ	4	5045.6	4973.8	4968.8	71.8	76.8	5.0
MW-24	UFZ	4	5046.2	4977.5	4972.5	68.7	73.7	5.0
MW-25	UFZ	4	5046.1	4977.9	4972.9	68.2	73.2	5.0
MW-26	UFZ	2	5045.4	4969.1	4964.1	76.3	81.3	5.0
MW-27	UFZ	2	5045.8	4975.4	4970.4	70.4	75.4	5.0
MW-29	ULFZ	4	5041.9	4938.3	4928.3	103.6	113.6	10.0
MW-30	ULFZ	4	5041.7	4944.8	4934.8	96.9	106.9	10.0
MW-31	ULFZ	4	5040.9	4945.2	4935.2	95.7	105.7	10.0
MW-32	ULFZ	4	5044.8	4937.3	4927.3	107.5	117.5	10.0
MW-34	UFZ	2	5034.4	4978.0	4968.0	56.4	66.4	10.0
MW-37R	UFZ/ULFZ	2	5093.0	4976.6	4946.6	116.4	146.4	30.0
MW-38	LLFZ	4	5041.6	4915.0	4905.0	126.6	136.6	10.0
MW-39	LLFZ	4	5042.2	4918.7	4908.7	123.5	133.5	10.0
MW-40	LLFZ	4	5040.0	4923.9	4913.9	116.1	126.1	10.0
MW-41	ULFZ	4	5044.1	4952.1	4942.1	92.0	102.0	10.0
MW-42	ULFZ	4	5054.8	4949.3	4939.3	105.5	115.5	10.0
MW-43	LLFZ	4	5055.2	4927.7	4917.7	127.5	137.5	10.0
MW-44	ULFZ	4	5058.8	4952.4	4942.4	106.4	116.4	10.0
MW-45	ULFZ	4	5090.1	4948.5	4938.5	141.6	151.6	10.0
MW-46	ULFZ	4	5118.5	4949.4	4939.4	169.1	179.1	10.0
MW-47R	ULFZ	4	5115.2	4955.2	4935.2	160.0	180.0	20.0
MW-49	LLFZ	4	5041.0	4903.2	4893.2	137.8	147.8	10.0
MW-51	UFZ	2	5059.9	4984.5	4974.5	75.4	85.4	10.0
MW-52R	UFZ/ULFZ	4	5156.2	4969.2	4939.2	187.0	217.0	30.0
MW-53D	UFZ/ULFZ	2	5148.6	4963.6	4943.6	185.0	205.0	20.0
MW-54	UFZ	4	5097.2	4976.8	4961.8	120.4	135.4	15.0
MW-55	LLFZ	4	5143.1	4913.1	4903.1	230.0	240.0	10.0
MW-56	ULFZ	4	5141.0	4942.9	4932.9	198.1	208.1	10.0
MW-57D	UFZ/ULFZ	4	5103.1	4958.1	4938.1	145.0	165.0	20.0
MW-59	ULFZ	4	5060.2	4954.9	4944.4	105.3	115.8	10.5
MW-60	ULFZ	4	5134.4	4949.5	4939.5	184.9	194.9	10.0
MW-62R	UFZ/ULFZ	2	5073.3	4967.3	4952.3	106.0	121.0	15.0
MW-63	ULFZ	2	5063.1	4983.1	4968.1	80.0	95.0	15.0
MW-64	ULFZ	4	5097.4	4959.3	4949.1	138.1	148.3	10.2

Table 2.2 (cont.): Well Screen Data

Well ID[a]	Flow Zone	Nominal Diameter (in)	Elevation (ft above MSL)			Depth below Ground Surface (ft)		Screen Length (ft)
			Ground Surface	Top of Screen	Bottom of Screen	Top of Screen	Bottom of Screen	
MW-65	LLFZ	4	5156.4	4896.4	4886.4	260.0	270.0	10.0
MW-66	LLFZ	4	5102.6	4903.3	4893.3	199.3	209.3	10.0
MW-67	DFZ	4	5142.2	4798.1	4788.1	344.1	354.1	10.0
MW-68	UFZ	4	5168.5	4970.5	4950.5	198.0	218.0	20.0
MW-69	LLFZ	4	5167.8	4904.7	4894.7	263.1	273.1	10.0
MW-70	LLFZ	2	5046.3	4912.1	4902.1	134.2	144.2	10.0
MW-71R	DFZ	4	5134.2	4761.5	4756.5	372.7	377.7	5.0
MW-72	ULFZ	2	5053.7	4955.0	4945.0	98.7	108.7	10.0
MW-73	ULFZ	2	5050.6	4945.5	4940.5	105.1	110.1	5.0
MW-74	UFZ/ULFZ	2	5092.4	4969.2	4939.2	123.2	153.2	30.0
MW-75	UFZ/ULFZ	2	5111.6	4971.2	4941.2	140.4	170.4	30.0
MW-76	UFZ/ULFZ	2	5105.5	4972.4	4942.4	133.1	163.1	30.0
MW-77	UFZ/ULFZ	2	5045.5	4985.8	4955.8	59.6	89.6	30.0
MW-78	UFZ/ULFZ	2	5050.5	4988.1	4958.1	62.4	92.4	30.0
MW-79	DFZ	6	5166.7	4767.7	4752.7	399.0	414.0	15.0
MW-79	DFZ	6	5166.7	4747.7	4732.7	419.0	434.0	15.0
MW-80	ULFZ/LLFZ	4	5203.3	4934.3	4894.3	269.0	309.0	40.0
OB-1	UFZ/LFZ	4	5166.2	4960.3	4789.8	205.9	376.4	170.0
OB-2	UFZ/LFZ	4	5164.8	4960.3	4789.7	204.5	375.1	171.0
PZ-1	UFZ	2	5141.3	4961.5	4951.3	179.8	190.0	10.2

a The letter R after the number in the Well ID indicates that the well is a new and deeper replacement well installed near the original well location; the letter D after the number in the Well ID indicates that the well has been deepened.

Table 2.3: Sampling Frequency and Method for Monitoring Wells

Well ID	Flow Zone	Sampling Method	Pump Intake	Sampling Frequency
MW-07	UFZ	Bailer		Annual
MW-09	UFZ	Bailer		Annual
MW-12	UFZ	Bailer		Annual
MW-14R	UFZ/ULFZ	Bladder Pump	1-ft from bottom of screen	Annual
MW-16	UFZ	Bailer		Annual
MW-17	UFZ	Bailer		Quarterly
MW-18	UFZ	Bailer		Annual
MW-19	ULFZ	Bladder (Sampling) Pneumatic Displacement Pump (Purging)	1-ft from bottom of screen	Annual
MW-20	LLFZ	Bladder (Sampling) Pneumatic Displacement Pump (Purging)	1-ft from bottom of screen	Annual
MW-21	UFZ	Bailer		Annual
MW-22	UFZ	Bladder Pump	1-ft from bottom of screen	Annual
MW-23	UFZ	Bailer		Annual
MW-25	UFZ	Bailer		Annual
MW-26	UFZ	Bailer		Annual
MW-29	ULFZ	Bladder Pump	1-ft from bottom of screen	Annual
MW-30	ULFZ	Bladder Pump	1-ft from bottom of screen	Annual
MW-31	ULFZ	Bladder Pump	1-ft from bottom of screen	Annual
MW-32	ULFZ	Bladder (Sampling) Pneumatic Displacement Pump (Purging)	1-ft from bottom of screen	Annual
MW-34	UFZ	Bailer		Annual
MW-37R	UFZ/ULFZ	Bladder Pump	1-ft from bottom of screen	Annual
MW-38	LLFZ	Bladder (Sampling) Pneumatic Displacement Pump (Purging)	1-ft from bottom of screen	Annual
MW-39	LLFZ	Bladder (Sampling) Pneumatic Displacement Pump (Purging)	1-ft from bottom of screen	Annual
MW-40	LLFZ	Bladder (Sampling) Pneumatic Displacement Pump (Purging)	1-ft from bottom of screen	Annual
MW-41	ULFZ	Bladder (Sampling) Pneumatic Displacement Pump (Purging)	1-ft from bottom of screen	Annual
MW-42	ULFZ	Bladder (Sampling) Pneumatic Displacement Pump (Purging)	1-ft from bottom of screen	Annual
MW-43	LLFZ	Bladder (Sampling) Pneumatic Displacement Pump (Purging)	1-ft from bottom of screen	Annual
MW-44	ULFZ	Bladder (Sampling) Pneumatic Displacement Pump (Purging)	1-ft from bottom of screen	Annual
MW-45	ULFZ	Bladder (Sampling) Pneumatic Displacement Pump (Purging)	1-ft from bottom of screen	Annual
MW-46	ULFZ	Bladder (Sampling) Pneumatic Displacement Pump (Purging)	1-ft from bottom of screen	Annual
MW-47R	ULFZ	Bladder Pump	1-ft from bottom of screen	Annual
MW-49	LLFZ	Bladder (Sampling) Pneumatic Displacement Pump (Purging)	1-ft from bottom of screen	Annual
MW-51	UFZ	Bladder Pump	1-ft from bottom of screen	Annual
MW-52R	UFZ/ULFZ	Bladder Pump	1-ft from bottom of screen	Quarterly
MW-53D	UFZ/ULFZ	Bladder Pump	1-ft from bottom of screen	Annual
MW-55	LLFZ	Packer/Bladder Pump[a]	Center of screen	Annual
MW-56	ULFZ	Packer/Bladder Pump[a]	Center of screen	Annual

Table 2.3 (cont.): Sampling Frequency and Method for Monitoring Wells

Well ID	Flow Zone	Sampling Method	Pump Intake	Sampling Frequency
MW-57D	UFZ/ULFZ	Bladder Pump	1-ft from bottom of screen	Quarterly
MW-59	ULFZ	Bladder (Sampling) Pneumatic Displacement Pump (Purging)	1-ft from bottom of screen	Annual
MW-60	ULFZ	Bladder (Sampling) Pneumatic Displacement Pump (Purging)	1-ft from bottom of screen	Annual
MW-62R	UFZ/ULFZ	Bladder Pump	1-ft from bottom of screen	Quarterly
MW-64	ULFZ	Bladder (Sampling) Pneumatic Displacement Pump (Purging)	1-ft from bottom of screen	Annual
MW-65	LLFZ	Packer/Bladder Pump[a]	Center of screen	Quarterly
MW-66	LLFZ	Packer/Bladder Pump[a]	Center of screen	Quarterly
MW-67	DFZ	Packer/Bladder Pump[a]	Center of screen	Semi-annual
MW-68	UFZ	Bladder Pump	Center of screen	Quarterly
MW-69	LLFZ	Packer/Bladder Pump[a]	Center of screen	Quarterly
MW-70	LLFZ	Packer/Bladder Pump[a]	Center of screen	Annual
MW-71R	DFZ	Packer/Bladder Pump[a]	Center of screen	Quarterly
MW-72	ULFZ	Bladder Pump	1-ft from bottom of screen	Annual
MW-73	ULFZ	Bladder Pump	1-ft from bottom of screen	Annual
MW-74	UFZ/ULFZ	Bladder Pump	1-ft from bottom of screen	Quarterly
MW-75	UFZ/ULFZ	Bladder Pump	1-ft from bottom of screen	Quarterly
MW-76	UFZ/ULFZ	Bladder Pump	1-ft from bottom of screen	Quarterly
MW-77	UFZ/ULFZ	Bladder Pump	1-ft from bottom of screen	Quarterly
MW-78	UFZ/ULFZ	Bladder Pump	1-ft from bottom of screen	Quarterly
MW-79	DFZ	Submersible Pump[b]	1-ft from bottom of screen	Semi-annual
MW-80	ULFZ/LLFZ	Submersible Pump[c]	1-ft from bottom of screen	Quarterly

a Screened interval isolated with packer above the top of the screen
b Hardwired to power from treatment building
c Powered by portable generator

Table 2.4: Operation and Downtime of the Off-Site Containment System - 2022

(a) Operation

Available Hours	8,760 hrs
Total Operating Hours	8,681 hrs
Percent of Operating to Available Hours	99.1%
Total Downtime Hours	79.02 hrs
Range of Downtime Hours	25.02 - 54 hrs

(b) Downtime

Date of Downtime		Duration	Cause
From	**To**		
02/16/2022	02/17/2022	25.02 hrs	Malfunctioning level sensor located on the air stripper
03/01/2022	03/03/2022	54.00 hrs	Clean and service air stripper

Table 2.5: Operation and Downtime of the Source Containment System - 2022

(a) Operation

Available Hours	8,760 hrs
Total Operating Hours	8,435 hrs
Percent of Operating to Available Hours	96.3%
Total Downtime Hours	325.02 hrs
Range of Downtime Hours	0.4 - 288 hrs

(b) Downtime

Date of Downtime		Duration	Cause
From	To		
03/28/2022	03/28/2022	1.45 hrs	Diagnose influent line pressure increase
04/12/2022	04/12/2022	1.58 hrs	Replace check valve on influent line
05/09/2022	05/09/2022	0.4 hr	Address broken fitting on filter cartridge
06/28/2022	06/29/2022	25.82 hrs	Clean well and inspect pumping system
07/29/2022	07/29/2022	7.77 hrs	Power failure
12/10/2022	12/22/2022	288.00 hrs	Failure of submersible pump

Table 3.1: Quarterly Water-Level Elevations - 2022

Well ID	Flow Zone	Elevation (feet above MSL)			
		Feb. 1, 2022	May. 4, 2022	Aug. 1, 2022	Nov. 1-2, 2022
CW-1	UFZ/LFZ	4913.60	4913.86	4913.28	4912.75
CW-2	UFZ-LLFZ	4975.49	4938.47	4941.36	4944.22
MW-07	UFZ	4976.28	4976.29	4975.79	4976.05
MW-09	UFZ	4971.46	4971.41	4970.96	4971.12
MW-12	UFZ	4970.72	4970.63	4970.07	4970.35
MW-14R	UFZ/ULFZ	4968.49	4968.30	4967.88	4968.12
MW-16	UFZ	4982.23	4982.39	4982.09	4982.20
MW-17	UFZ	4982.28	4982.38	4982.01	4982.09
MW-18	UFZ	4974.92	4975.27	4973.32	4974.66
MW-19	ULFZ	4969.73	4969.50	4969.07	4969.30
MW-20	LLFZ	4969.39	4969.06	4968.61	4968.77
MW-21	UFZ	4982.73	4983.07	4982.80	4982.96
MW-22	UFZ	4978.45	4978.49	4977.79	4977.78
MW-23	UFZ	4974.95	4974.96	4974.45	4974.74
MW-24	UFZ	4982.48	4982.87	4982.53	4982.67
MW-25	UFZ	4982.55	4982.75	NM	4982.57
MW-26	UFZ	4972.28	4972.23	4971.70	4972.04
MW-27	UFZ	4978.42	4978.51	4978.15	4978.41
MW-29	ULFZ	4971.70	4971.54	4971.04	4971.36
MW-30	ULFZ	4970.28	4970.09	4969.65	4969.90
MW-31	ULFZ	4968.62	4968.43	4968.02	4968.25
MW-32	ULFZ	4968.37	4968.36	4967.92	4968.26
MW-34	UFZ	4971.84	4971.98	4971.49	4971.69
MW-37R	UFZ/ULFZ	4965.74	4965.84	4965.45	4965.38
MW-38	LLFZ	4971.69	4971.51	4970.99	4971.35
MW-39	LLFZ	4970.59	4970.43	4969.94	4970.25
MW-40	LLFZ	4968.67	4968.50	4968.08	4968.24
MW-41	ULFZ	4969.21	4968.92	4968.46	4968.72
MW-42	ULFZ	4968.61	4968.33	4967.91	4968.09
MW-43	LLFZ	4968.44	4967.97	4967.69	4967.95
MW-44	ULFZ	4967.25	4967.39	4966.98	4966.96
MW-45	ULFZ	4965.75	4965.88	4965.49	4965.42
MW-46	ULFZ	4964.41	4964.56	4964.16	4964.08
MW-47R	ULFZ	4964.41	4964.49	4964.15	4964.05

Well ID	Flow Zone	Elevation (feet above MSL)			
		Feb. 1, 2022	May. 4, 2022	Aug. 1, 2022	Nov. 1-2, 2022
MW-49	LLFZ	4968.50	4968.60	4968.13	4968.27
MW-51	UFZ	4981.61	4981.78	4981.78	4982.13
MW-52R	UFZ/ULFZ	4958.72	4958.88	4957.63	4958.40
MW-53D	UFZ/ULFZ	4961.97	4962.21	4962.04	4961.74
MW-54	UFZ	4964.23	4964.42	4964.09	4964.00
MW-55	LLFZ	4961.91	4962.02	4961.75	4961.58
MW-56	ULFZ	4963.44	4963.67	4963.48	4963.24
MW-57D	UFZ/ULFZ	4964.62	4964.64	4964.40	4964.28
MW-59	ULFZ	4968.33	4968.02	4967.48	4967.89
MW-60	ULFZ	4963.44	4963.59	4963.38	4963.13
MW-62R	UFZ/ULFZ		4965.47	4965.18	4965.06
MW-63	ULFZ	4971.48	4971.02	4970.66	4973.07
MW-64	ULFZ	4964.35	4964.38	4964.09	4964.00
MW-65	LLFZ	4959.27	4959.43	4959.26	4958.89
MW-66	LLFZ	4962.95	4962.94	4962.59	4962.52
MW-67	DFZ	4957.72	4957.75	4956.94	4956.88
MW-68	UFZ	4959.48	4959.49	4959.76	4959.11
MW-69	LLFZ	4959.35	4959.34	4958.65	4958.96
MW-70	LLFZ	4968.17	4967.88	4967.39	4967.71
MW-71R	DFZ	4957.73	4957.67	4956.89	4956.82
MW-72	ULFZ	4969.31	4969.11	4968.62	4968.82
MW-73	ULFZ	4968.01	4967.76	4967.33	4967.58
MW-74	UFZ/ULFZ	4962.95	4963.14	4963.99	4962.55
MW-75	UFZ/ULFZ	4968.22	4968.48	4968.45	4968.08
MW-76	UFZ/ULFZ	4969.74	4969.75	4969.82	4969.50
MW-77	UFZ/ULFZ	4977.48	4977.43	4976.92	4977.36
MW-78	UFZ/ULFZ	4974.73	4974.72	4974.40	4974.54
MW-79	DFZ	4955.47	4955.39	4954.58	4954.41
MW-80	ULFZ/LLFZ	4957.70	4957.68	4957.60	4956.99
OB-1	UFZ/LFZ	4955.08	4955.25	4955.03	4954.75
OB-2	UFZ/LFZ	4956.84	4957.00	4956.80	4956.51
PZ-1	UFZ	4955.81	4956.12	4955.79	4955.14
PZG-1	Infilt. Gall.	5067.87	5067.94	5067.95	5067.96

Table 3.2: Water-Quality Data from Groundwater Monitoring Program Wells - 2022

Well ID	Sample Date	TCE µg/L	1,1-DCE µg/L	1,1,1-TCA µg/L	1,4-Dioxane µg/L	Chromium Total µg/L	Chromium Dissolved µg/L
MW-07	11/08/2022	<1	<1	<1	1.6	43	30
MW-09	11/09/2022	3.5	<1	<1	2.2	170	150
MW-12	11/08/2022	11	<1	<1	4.9	830[b]	<6
MW-14R	11/08/2022	1.1	<1	<1	<1	91	90
MW-16	11/17/2022	2.1	<1	<1	11.3[c]	89	75
MW-17[a]	02/09/2022	<1	<1	<1	2.1	45	41
MW-17[a]	05/12/2022	<1	<1	<1	1.9	45	42
MW-17[a]	05/12/2022-DUP	<1	<1	<1	1.7	46	42
MW-17[a]	08/09/2022	<1	<1	<1	1.4	52	39
MW-17[a]	11/08/2022	<1	<1	<1	1.9	48	39
MW-18	11/10/2022	<1	<1	<1	2.7	37	35
MW-19	11/11/2022	20	2	<1	3.1	60	55
MW-19	11/11/2022-DUP	19	1.8	<1	3.4	60	56
MW-20	11/10/2022	<1	<1	<1	<1	<6	<6
MW-21	11/08/2022	<1	<1	<1	1.7	55	40
MW-22	11/10/2022	<1	<1	<1	1.7	38	36
MW-23	11/08/2022	3.4	<1	<1	5.3	1200[b]	110
MW-25	11/10/2022	39	<1	1.4	1.7	64	55
MW-26	11/10/2022	8	<1	<1	1.9	800[b]	69
MW-29	11/15/2022	1	<1	<1	<1	<6	<6
MW-29	11/15/2022-DUP	<1	<1	<1	<1	<6	<6
MW-30	11/03/2022	1.6	<1	<1	<1	<6	<6
MW-31	11/08/2022	<1	<1	<1	<1	<6	<6
MW-32	11/04/2022	<1	<1	<1	1.8	14	22
MW-34	11/17/2022	<1	<1	<1	0.148[c]	170[b]	6.3
MW-37R	11/11/2022	33	1.1	<1	<1	38	38
MW-38	11/09/2022	<1	<1	<1	<1	16	14
MW-39	11/07/2022	<1	<1	<1	<1	70	80
MW-40	11/08/2022	<1	<1	<1	<1	<6	<6
MW-41	11/04/2022	<1	<1	<1	1.4	34	34

Table 3.2 (cont.): Water-Quality Data from Groundwater Monitoring Program Wells - 2022

Well ID	Sample Date	TCE µg/L	1,1-DCE µg/L	1,1,1-TCA µg/L	1,4-Dioxane µg/L	Chromium Total µg/L	Chromium Dissolved µg/L
MW-42	11/07/2022	1.7	<1	<1	1.8	39	34
MW-43	11/07/2022	<1	<1	<1	1.2	<6	<6
MW-44	11/11/2022	<1	<1	<1	<1	<6	<6
MW-45	11/11/2022	<1	<1	<1	<1	<6	<6
MW-46	11/17/2022	47	8	<1	11[c]	29	26
MW-47R	11/04/2022	<1	<1	<1	<1	<6	<6
MW-49	11/21/2022	<1	<1	<1	<1	<6	<6
MW-51	11/16/2022	<1	<1	<1	5.36[c]	39	33
MW-52R	02/04/2022	8.5	15	<1	<1	<6	NA
MW-52R	05/11/2022	8.3	17	<1	<1	<6	NA
MW-52R	08/11/2022	9.5	18	<1	<1	<6	NA
MW-52R	11/18/2022	10	16	<1	<1	<6	<6
MW-53D	11/10/2022	23	1.3	<1	<1	66[b]	<6
MW-55	11/14/2022	15	<1	<1	<1	16	11
MW-56	11/14/2022	180	4.8	<1	4.7	48	43
MW-56	11/14/2022-DUP	180	5.1	<1	5.6	46	45
MW-57D	02/10/2022	<1	<1	<1	<1	<6	NA
MW-57D	05/05/2022	<1	<1	<1	<1	<6	NA
MW-57D	08/03/2022	<1	<1	<1	<1	<6	NA
MW-57D	11/03/2022	<1	<1	<1	<1	<6	<6
MW-59	11/16/2022	<1	<1	<1	5.37[c]	40	35
MW-60	11/22/2022	18	<1	<1	4.2	68[b]	17
MW-62R	02/07/2022	4.3	5.3	<1	<1	<6	NA
MW-62R	05/11/2022	4	4.9	<1	<1	<6	NA
MW-62R	08/03/2022	4.3	4.7	<1	<1	<6	NA
MW-62R	11/15/2022	4.1	3.2	<1	<1	<6	<6
MW-64	11/03/2022	<1	<1	<1	<1	<6	<6
MW-65	02/11/2022	<1	<1	<1	<1	<6	NA
MW-65	05/12/2022	<1	<1	<1	<1	<6	NA
MW-65	08/10/2022	<1	<1	<1	<1	<6	NA

Table 3.2 (cont.): Water-Quality Data from Groundwater Monitoring Program Wells - 2022

Well ID	Sample Date	TCE µg/L	1,1-DCE µg/L	1,1,1-TCA µg/L	1,4-Dioxane µg/L	Chromium Total µg/L	Chromium Dissolved µg/L
MW-65	11/04/2022	<1	<1	<1	<1	<6	<6
MW-66	02/10/2022	<1	<1	<1	<1	<6	NA
MW-66	05/05/2022	<1	<1	<1	<1	<6	NA
MW-66	08/03/2022	<1	<1	<1	<1	<6	NA
MW-66	11/03/2022	<1	<1	<1	<1	<6	<6
MW-67	05/10/2022	<1	<1	<1	<1	<6	NA
MW-67	11/14/2022	<1	<1	<1	<1	<6	<6
MW-68	02/07/2022	<1	<1	<1	<1	<6	NA
MW-68	05/09/2022	<1	<1	<1	<1	<6	NA
MW-68	08/04/2022	<1	<1	<1	<1	<6	NA
MW-68	11/16/2022	<1	<1	<1	0.522[c]	<6	<6
MW-69	02/07/2022	<1	<1	<1	5.7	11	NA
MW-69	02/07/2022-DUP	<1	<1	<1	5.3	10	NA
MW-69	05/09/2022	<1	<1	<1	7.2	12	NA
MW-69	08/04/2022	<1	<1	<1	2.7	12	NA
MW-69	08/04/2022-DUP	<1	<1	<1	4.1	11	NA
MW-69	11/16/2022	<1	<1	<1	14.4[c]	11	13
MW-70	11/21/2022	<1	<1	<1	<1	<6	<6
MW-71R	02/10/2022	6.6	<1	<1	<1	<6	NA
MW-71R	05/11/2022	8	<1	<1	<1	<6	NA
MW-71R	08/09/2022	10	<1	<1	<1	<6	NA
MW-71R	11/02/2022	6.9	<1	<1	<1	<6	<6
MW-71R	11/02/2022-DUP	6	<1	<1	<1	<6	<6
MW-72	11/08/2022	6.4	<1	<1	8	62	57
MW-73	11/07/2022	2.4	<1	<1	2.2	48	51
MW-79	05/09/2022	<1	<1	<1	<1	<6	NA
MW-79	11/09/2022	<1	<1	<1	<1	<6	<6
MW-80	02/09/2022	<1	<1	<1	5.7	13	NA
MW-80	02/09/2022-DUP	<1	<1	<1	6.5	13	NA
MW-80	05/10/2022	<1	<1	<1	5	15	NA

Table 3.2 (cont.): Water-Quality Data from Groundwater Monitoring Program Wells - 2022

Well ID	Sample Date	TCE µg/L	1,1-DCE µg/L	1,1,1-TCA µg/L	1,4-Dioxane µg/L	Chromium Total µg/L	Chromium Dissolved µg/L
MW-80	08/08/2022	<1	<1	<1	2.7	15	NA
MW-80	08/08/2022-DUP	<1	<1	<1	3	14	NA
MW-80	11/10/2022	<1	<1	<1	3.9	11	7.4
MW-80	11/10/2022-DUP	<1	<1	<1	4.8	9.6	6.6

Concentration exceeds the more stringent of the MCL for drinking water or maximum allowable concentration in groundwater set by NMWQCC (5 µg/L for TCE and DCE, 60 µg/L for TCA and 50 µg/L for Chromium; for 1,4-dioxane, concentration exceeds the NMED Risk Assessment Guidance tap water screening level of 4.59 µg/L).

NA Not Analyzed

a Umder the requirements of DP-1184, samples from this well were also sampled for dissolved Fe and Mn (see Table 3.3)

b Given the dissolved chromium concentration in the well, it is most likely that the reported total concentration is due to the sample containing excessive amounts of chromium-bearing sediments or, possibly, to a laboratory error

c These samples were analyzed for 1,4-dioxane by a different laboratory.

Table 3.3: Water-Quality Data from Infiltration Gallery and Pond Monitoring Wells- 2022

Well ID	Sample Date	TCE µg/L	1,1-DCE µg/L	1,1,1-TCA µg/L	1,4-Dioxane µg/L	Cr (diss) µg/L	Fe (diss) µg/L	Mn (diss) µg/L
MW-17	02/09/2022	<1	<1	<1	2.1	41	66	9.4
MW-17	05/12/2022	<1	<1	<1	1.9	42	<20	<2
MW-17	05/12/2022-DUP	<1	<1	<1	1.7	42	<20	<2
MW-17	08/09/2022	<1	<1	<1	1.4	39	<20	<2
MW-17	11/08/2022	<1	<1	<1	1.9	39	<20	<2
MW-74	02/08/2022	<1	<1	<1	2	<6	<20	<2
MW-74	05/06/2022	<1	<1	<1	2.6	<6	<20	<2
MW-74	08/05/2022	<1	<1	<1	1.3	6	<20	<2
MW-74	11/09/2022	<1	<1	<1	1.9	<6	<20	<2
MW-75	02/08/2022	<1	<1	<1	1.9	<6	<20	<2
MW-75	05/06/2022	<1	<1	<1	1.9	<6	<20	<2
MW-75	08/05/2022	<1	<1	<1	2.1	<6	<20	<2
MW-75	11/09/2022	<1	<1	<1	1.5	<6	46	2.2
MW-76	02/08/2022	<1	<1	<1	1.6	<6	<20	<2
MW-76	05/06/2022	<1	<1	<1	2.7	<6	<20	<2
MW-76	08/05/2022	<1	<1	<1	1.5	<6	<20	<2
MW-76	11/09/2022	<1	<1	<1	2.1	<6	<20	<2
MW-77	02/02/2022	1.9	<1	<1	1.6	32	<20	<2
MW-77	05/05/2022	2.7	<1	<1	2.3	36	<20	<2
MW-77	08/09/2022	2.1	<1	<1	1.6	34	<20	<2
MW-77	11/09/2022	1.9	<1	<1	1.6	27	<20	<2
MW-77	11/09/2022-DUP	2.8	<1	<1	1.4	25	<20	<2
MW-78	02/02/2022	<1	<1	<1	1.7	38	<20	<2
MW-78	05/06/2022	<1	<1	<1	2.4	42	<20	<2
MW-78	05/06/2022-DUP	<1	<1	<1	2.7	43	<20	<2
MW-78	08/10/2022	<1	<1	<1	2.8	40	<20	<2
MW-78	11/03/2022	<1	<1	<1	2.2	37	<20	<2

Concentration exceeds the more stringent of the MCL for drinking water or maximum allowable concentration in groundwater set by NMWQCC (5 µg/L for TCE and DCE, 60 µg/L for TCA, 50 µg/L for Chromium, 1,000 µg/L for Iron, and 200 µg/L for Manganese; for 1,4-dioxane, concentration exceeds the NMED Risk Assessment Guidance tap water screening level of 4.59 µg/L).

Table 3.4: Containment System Flow Rates - 2022

Month	Off-Site Containment Well		Source Containment Well		Total	
	Volume Pumped (gal)	Average Rate (gpm)	Volume Pumped (gal)	Average Rate (gpm)	Volume Pumped (gal)	Average Rate (gpm)
Jan	13,434,432	301	2,332,192	52	15,766,624	353
Feb	11,738,988	291	2,061,369	51	13,800,357	342
Mar	12,437,338	279	2,363,249	53	14,800,587	332
Apr	12,912,937	299	2,399,425	56	15,312,362	354
May	13,313,604	298	2,285,903	51	15,599,507	349
Jun	12,868,177	298	1,942,137	45	14,810,314	343
Jul	13,282,232	298	2,249,229	50	15,531,461	348
Aug	13,281,388	298	2,226,824	50	15,508,212	347
Sep	12,846,671	297	2,115,025	49	14,961,696	346
Oct	13,220,977	296	2,152,267	48	15,373,244	344
Nov	12,947,745	300	2,105,317	49	15,053,062	348
Dec	13,465,894	302	1,378,263	31	14,844,157	333
Annual Total or Average	**155,750,383**	**296**	**25,611,200**	**49**	**181,361,583**	**345**

Table 3.5: Influent and Effluent Quality for the Off-Site Containment Well System - 2022

(a) Influent

Sampling Date	Concentration (μg/L)							
	TCE	DCE	TCA	1,4-Dioxane	Cr Total	Cr Dissolved	Fe Dissolved	Mn Dissolved
01/03/2022	140	17	<1	2.6	<6	<6	<20	<2
02/01/2022	130	16	<1	2.3	<6	<6	<20	<2
03/01/2022	130	16	<1	2.5	<6	<6	<20	<2
04/01/2022	140	18	<1	2.6	<6	<6	<20	<2
05/02/2022	130	14	<1	2.3	<6	<6	<20	<2
06/01/2022	120	15	<1	2.1	<6	<6	<20	<2
07/01/2022	120	15	<1	1.7	<6	<6	<20	<2
08/02/2022	120	16	<1	3	<6	<6	<20	<2
09/02/2022	120	16	<1	1.4	<6	<6	<20	<2
10/01/2022	120	15	<1	1.6	<6	<6	<20	<2
11/02/2022	120	15	<1	2.1	<6	<6	<20	<2
12/01/2022	120	15	<1	1.4	<6	<6	<20	<2
01/02/2023	120	15	<1	1.9	<6	<6	<20	<2

(b) Effluent

Sampling Date	Concentration (μg/L)							
	TCE	DCE	TCA	1,4-Dioxane	Cr Total	Cr Dissolved	Fe Dissolved	Mn Dissolved
01/03/2022	<1	<1	<1	2.4	<6	<6	<20	<2
01/03/2022 - Duplicate	NA	NA	NA	2.5	NA	NA	NA	NA
02/01/2022	<1	<1	<1	2.3	<6	<6	<20	<2
02/01/2022 - Duplicate	<1	<1	<1	2.4	<6	<6	<20	<2
03/01/2022	<1	<1	<1	2.6	<6	<6	<20	<2
03/01/2022 - Duplicate	NA	NA	NA	2.3	NA	NA	NA	NA
04/01/2022	<1	<1	<1	2.4	<6	<6	<20	<2
04/01/2022 - Duplicate	NA	NA	NA	2.6	NA	NA	NA	NA
05/02/2022	<1	<1	<1	2.5	<6	<6	<20	<2
05/02/2022 - Duplicate	<1	<1	<1	2.3	<6	<6	<20	<2
06/01/2022	<1	<1	<1	2.6	<6	<6	<20	<2
06/01/2022 - Duplicate	NA	NA	NA	2.6	NA	NA	NA	NA
07/01/2022	<1	<1	<1	1.4	<6	<6	<20	<2
07/01/2022 - Duplicate	NA	NA	NA	2.5	NA	NA	NA	NA
08/02/2022	<1	<1	<1	1	<6	<6	<20	<2
08/02/2022 - Duplicate	NA	NA	NA	1.6	NA	NA	NA	NA
09/02/2022	<1	<1	<1	1.3	<6	<6	<20	<2
09/02/2022 - Duplicate	NA	NA	NA	1.9	NA	NA	NA	NA
10/01/2022	<1	<1	<1	2.4	<6	<6	<20	<2
10/01/2022 - Duplicate	NA	NA	NA	1.8	NA	NA	NA	NA
11/02/2022	<1	<1	<1	1.6	<6	<6	<20	<2
11/02/2022 - Duplicate	NA	NA	NA	1.8	NA	NA	NA	NA
12/01/2022	<1	<1	<1	1.5	<6	<6	<20	<2
12/01/2022 - Duplicate	NA	NA	NA	2.1	NA	NA	NA	NA
01/02/2023	<1	<1	<1	1.8	<6	<6	<20	<2

Concentration exceeds the more stringent of the MCL for drinking water or maximum allowable concentration in groundwater set by NMWQCC (5 μg/L for TCE and DCE, 60 μg/L for TCA, 50 μg/L for Chromium, 1,000 μg/L for Iron, and 200 μg/L for Manganese; for 1,4-dioxane, concentration exceeds the NMED Risk Assessment Guidance tap water screening level of 4.59 μg/L).

NA Not Analyzed

Table 3.6: Influent and Effluent Quality for the Source Containment Well System - 2022

(a) Influent

Sampling Date	Concentration (μg/L)							
	TCE	DCE	TCA	1,4-Dioxane	Cr Total	Cr Dissolved	Fe Dissolved	Mn Dissolved
01/03/2022	6.1	<1	<1	2.7	43	45	<20	46
02/01/2022	5.6	<1	<1	2.2	44	43	<20	53
03/01/2022	5.6	<1	<1	2.8	40	43	<20	50
04/01/2022	5	<1	<1	2.2	44	41	<20	61
05/02/2022	4.6	<1	<1	2.1	43	44	<20	51
06/01/2022	4.5	<1	<1	2.8	44	42	<20	41
07/01/2022	4.5	<1	<1	1.7	41	46	<20	50
08/02/2022	4.7	<1	<1	2	46	46	<20	40
09/02/2022	4.6	<1	<1	1.4	43	43	<20	35
10/01/2022	5.4	<1	<1	1.9	49	42	<20	34
11/02/2022	4.3	<1	<1	1.7	39	42	<20	38
12/01/2022	4.2	<1	<1	1.7	44	37	<20	36
01/02/2023	5	<1	<1	2	45	47	<20	49

(b) Effluent

Sampling Date	Concentration (μg/L)							
	TCE	DCE	TCA	1,4-Dioxane	Cr Total	Cr Dissolved	Fe Dissolved	Mn Dissolved
01/03/2022	<1	<1	<1	2.5	44	44	<20	30
01/03/2022 - Duplicate	NA	NA	NA	2.1	NA	NA	NA	NA
02/01/2022	<1	<1	<1	2.3	47	43	<20	39
02/01/2022 - Duplicate	<1	<1	<1	2.2	44	41	<20	37
03/01/2022	<1	<1	<1	2.4	40	43	<20	37
03/01/2022 - Duplicate	NA	NA	NA	2.8	NA	NA	NA	NA
04/01/2022	<1	<1	<1	2.2	43	42	<20	37
04/01/2022 - Duplicate	NA	NA	NA	2.5	NA	NA	NA	NA
05/02/2022	<1	<1	<1	2.4	43	44	<20	38
05/02/2022 - Duplicate	<1	<1	<1	2.1	43	44	<20	38
06/01/2022	<1	<1	<1	2.3	42	41	<20	33
06/01/2022 - Duplicate	NA	NA	NA	2.8	NA	NA	NA	NA
07/01/2022	<1	<1	<1	2.9	44	47	<20	41
07/01/2022 - Duplicate	NA	NA	NA	2	NA	NA	NA	NA
08/02/2022	<1	<1	<1	2.9	45	45	<20	36
08/02/2022 - Duplicate	NA	NA	NA	2.9	NA	NA	NA	NA
09/02/2022	<1	<1	<1	1.3	43	44	<20	29
09/02/2022 - Duplicate	NA	NA	NA	1.9	NA	NA	NA	NA
10/01/2022	<1	<1	<1	2.4	50	39	<20	27
10/01/2022 - Duplicate	NA	NA	NA	1.9	NA	NA	NA	NA
11/02/2022	<1	<1	<1	2.8	38	45	<20	30
11/02/2022 - Duplicate	NA	NA	NA	1.6	NA	NA	NA	NA
12/01/2022	<1	<1	<1	2.2	44	36	<20	31
12/01/2022 - Duplicate	NA	NA	NA	2.1	NA	NA	NA	NA
01/02/2023	<1	<1	<1	2.1	47	45	<100	44

Concentration exceeds the more stringent of the MCL for drinking water or maximum allowable concentration in groundwater set by NMWQCC (5 μg/L for TCE and DCE, 60 μg/L for TCA, 50 μg/L for Chromium, 1,000 μg/L for Iron, and 200 μg/L for Manganese; for 1,4-dioxane, concentration exceeds the NMED Risk Assessment Guidance tap water screening level of 4.59 μg/L).

NA Not Analyzed

Table 4.1: Concentration Changes in Containment and Monitoring Wells - 1998 to 2022

Well ID	Change in Concentration (μg/L)		
	TCE	DCE	Cr
CW-1	-20	12.1	-23 [c]
CW-2[a]	-996	-190	36.3
MW-07	-63	-15	16
MW-09	-286	-19	144
MW-12	-369	-26	-20
MW-14R[b]	-429	-24	90
MW-16	-1198	-30	4
MW-17	-68	-3.5	-711
MW-18	-600	-50	35
MW-19	15.8	2	55 [c]
MW-20	0	0	0
MW-21	-7.5	0	40
MW-22	-13	-2	36 [c]
MW-23	-6197	-400	62
MW-25	-5561	-73	-355
MW-26	-6492	-590	26
MW-29	1	0	0
MW-30	-3.8	0	-25 [c]
MW-31	0	0	-14 [c]
MW-32	-550	-96	22 [c]
MW-34	0	0	-154[c]
MW-37R[b]	-957	-46.9	38
MW-38	0	0	14 [c]
MW-39	0	0	-90 [c]
MW-40	0	0	-11 [c]
MW-41	-170	-26	34 [c]
MW-42	-368	-48	34 [c]
MW-43	-25	-5.1	0
MW-44	-1.3	0	0
MW-45	-40	-1.7	-40 [c]

Well ID	Change in Concentration (μg/L)		
	TCE	DCE	Cr
MW-46	-2153	-122	26 [c]
MW-47R[b]	-34	-1.2	-40 [c]
MW-49	0	0	0
MW-51	0	0	33 [c]
MW-52R[b]	10	16	0
MW-53D[b]	-76	-2.1	-70 [c]
MW-55	-375	-10	-169[c]
MW-56	40	0.3	-27 [c]
MW-57D[b]	0	0	0
MW-59	0	0	35 [c]
MW-60	-7682	-350	17 [c]
MW-62R[b]	2.1	-3.4	-7
MW-64	0	0	0
MW-65	-13	0	0
MW-66	0	0	0
MW-67	0	0	-40 [c]
MW-68	0	0	0
MW-69	0	0	13 [c]
MW-70	0	0	0
MW-71R[b]	-49.1	-1.6	0
MW-72[a]	-1794	-220	-93 [c]
MW-73[a]	-3998	-520	-49 [c]
MW-74	0	0	-21 [c]
MW-75	0	0	0
MW-76	0	0	0
MW-77[a]	-14.1	-1.2	27
MW-78[a]	-6	0	37
MW-79[a]	0	0	0
MW-80[a]	0	0	7.4 [c]

a Change in concentration from first available sample
b Change in concentration from original well
c Change in concentration based on initial Total and current Dissolved Chromium
0 "0" indicates concentration below detection limits during both sampling events
Well used in both the initial and the current plume definition for TCE, DCE and Chromium
Well used in the initial and the current plume definition for only one or two of the three constituents
Well used either in the initial or the current plume definition

Table 4.2: Summary Containment System Flow Rates - 1998 to 2022

Month	Off-Site Containment Well		Source Containment Well		Total	
	Volume Pumped (gal)	Average Rate (gpm)	Volume Pumped (gal)	Average Rate (gpm)	Volume Pumped (gal)	Average Rate (gpm)
1998[a]	1,694,830		NA		1,694,830	
1999	114,928,700	219	NA		114,928,700	219
2000	114,094,054	217	NA		114,094,054	216
2001	113,654,183	216	NA		113,654,183	216
2002	116,359,389	221	25,403,490	48	141,762,879	270
2003	118,030,036	225	27,292,970	52	145,323,006	276
2004	113,574,939	216	26,105,202	50	139,680,141	265
2005	118,018,628	225	25,488,817	48	143,507,445	273
2006	112,213,088	213	24,133,213	46	136,346,301	259
2007	117,098,422	223	23,983,802	46	141,082,224	268
2008	114,692,635	218	25,432,013	48	140,124,648	266
2009	114,752,782	218	24,524,740	47	139,277,522	265
2010	114,720,233	218	22,062,857	42	136,783,090	260
2011	149,171,757	284	26,989,781	51	176,161,538	335
2012	151,260,826	288	22,133,042	42	173,393,868	329
2013	147,736,408	281	16,484,367	31	164,220,775	312
2014	152,775,148	291	16,293,181	31	169,068,329	322
2015	152,187,068	290	25,906,559	49	178,093,627	339
2016	145,904,897	278	26,361,513	50	172,266,410	327
2017	157,208,682	299	23,913,302	45	181,121,984	345
2018	153,801,952	293	28,775,355	55	182,577,307	347
2019	157,981,349	301	30,076,093	57	188,057,442	358
2020	158,032,496	300	29,112,135	55	187,144,631	355
2021	146,200,154	278	27,448,593	52	173,648,747	330
2022	155,750,383	296	25,611,200	49	181,361,583	345
Total or Average	**3,211,843,038**	**254**	**523,532,226**	**41**	**3,735,375,264**	**296**

a Volume pumped during the testing of the well in early December, and during the first day of operation on December 31, 1998

Table 4.3: VOC Mass Removal - 2022

(a) Total

Year	Mass Removed	kg	lbs
2022	TCE	74.12	163.41
	DCE	9.23	20.35
	Total	**83.35**	**183.76**

(b) Off-Site Containment System

Month	Mass Removed				Total	
	TCE		DCE			
	kg	lbs	kg	lbs	kg	lbs
Jan	6.9	15.1	0.84	1.85	7.7	17.0
Feb	5.8	12.7	0.71	1.57	6.5	14.3
Mar	6.4	14.0	0.80	1.76	7.2	15.8
Apr	6.6	14.5	0.78	1.72	7.4	16.3
May	6.3	13.9	0.73	1.61	7.0	15.5
Jun	5.8	12.9	0.73	1.61	6.6	14.5
Jul	6.0	13.3	0.78	1.72	6.8	15.0
Aug	6.0	13.3	0.80	1.77	6.8	15.1
Sep	5.8	12.9	0.75	1.66	6.6	14.5
Oct	6.0	13.2	0.75	1.66	6.8	14.9
Nov	5.9	13.0	0.74	1.62	6.6	14.6
Dec	6.1	13.5	0.76	1.69	6.9	15.2
Total	**73.6**	**162.4**	**9.18**	**20.24**	**82.8**	**182.6**

(c) Source Containment System

Month	Mass Removed				Total	
	TCE		DCE			
	kg	lbs	kg	lbs	kg	lbs
Jan	0.052	0.114	0.004	0.010	0.056	0.124
Feb	0.044	0.096	0.004	0.009	0.048	0.105
Mar	0.047	0.105	0.004	0.010	0.052	0.114
Apr	0.044	0.096	0.005	0.010	0.048	0.106
May	0.039	0.087	0.004	0.010	0.044	0.096
Jun	0.033	0.073	0.004	0.008	0.037	0.081
Jul	0.039	0.086	0.004	0.009	0.043	0.096
Aug	0.039	0.086	0.004	0.009	0.043	0.096
Sep	0.040	0.088	0.004	0.009	0.044	0.097
Oct	0.040	0.087	0.004	0.009	0.044	0.096
Nov	0.034	0.075	0.004	0.009	0.038	0.083
Dec	0.024	0.053	0.003	0.006	0.027	0.059
Total	**0.475**	**1.046**	**0.048**	**0.107**	**0.523**	**1.153**

Mass removal calculated assuming DCE concentrations at half the detection limit

Table 4.4: Summary of VOC Mass Removal - 1998 to 2022

(a) Total

Year	Mass Removed							
	TCE		DCE		TCA		Total	
	kg	lbs	kg	lbs	kg	lbs	kg	lbs
1998[a]	1.31	2.88	0.0300	0.0661	0	0	1.34	2.95
1999	358	788	16.2	35.7	0	0	374	824
2000	463	1,020	23.3	51.4	0	0	486	1,070
2001	519	1,140	26.6	58.7	0	0	546	1,200
2002	603	1,330	40.6	89.5	3.66	8.08	647	1,430
2003	617	1,360	38.2	84.1	3.05	6.73	658	1,450
2004	595	1,310	35.2	77.7	2.43	5.37	633	1,400
2005	558	1,230	34.6	76.4	2.01	4.43	594	1,310
2006	512	1,130	34.3	75.7	1.67	3.68	548	1,210
2007	468	1,030	32.9	72.6	1.04	2.29	502	1,110
2008	434	956	32.5	71.7	1.08	2.39	467	1,030
2009	378	833	31.9	70.4	1.23	2.71	411	906
2010	309	682	29.2	64.3	0.967	2.13	339	748
2011	351	774	34.8	76.7	1.16	2.56	387	854
2012	285	629	31.8	70.2	0.975	2.15	318	701
2013	233	513	27.0	59.6	0.736	1.62	260	574
2014	209	460	25.1	55.3	0.338	0.745	234	516
2015	173	380	21.3	47.1	NC	NC	194	427
2016	141	310	17.1	37.6	NC	NC	158	348
2017	138	304	16.6	36.6	NC	NC	155	341
2018	115	253	14.1	31.2	NC	NC	129	284
2019	90.5	199	10.8	23.9	NC	NC	101	223
2020	82.1	181	11.0	24.2	NC	NC	93.1	205
2021	72.7	160	9.39	20.7	NC	NC	82.1	181
2022	74.1	163	9.23	20.3	NC	NC	83.4	184
Total	**7,780**	**17,100**	**604**	**1,330**	**20.4**	**44.9**	**8,400**	**18,500**

Table 4.4 (cont.): Summary of VOC Mass Removal - 1998 to 2022

(b) Off-Site Containment System

Year	Mass Removed							
	TCE		DCE		TCA		Total	
	kg	lbs	kg	lbs	kg	lbs	kg	lbs
1998[a]	1.31	2.88	0.0300	0.0661	0	0	1.34	2.95
1999	358	788	16.2	35.7	0	0	374	824
2000	463	1,020	23.3	51.4	0	0	486	1,070
2001	519	1,140	26.6	58.7	0	0	546	1,200
2002	543	1,200	30.9	68.2	2.05	4.52	576	1,270
2003	568	1,250	31.6	69.7	2.06	4.55	602	1,330
2004	567	1,250	31.7	69.8	1.97	4.34	600	1,320
2005	540	1,190	32.4	71.3	1.79	3.95	574	1,270
2006	499	1,100	32.6	71.8	1.58	3.47	533	1,170
2007	456	1,010	31.5	69.4	1.04	2.29	489	1,080
2008	425	937	31.5	69.4	1.08	2.39	458	1,010
2009	372	820	31.2	68.7	1.23	2.71	404	892
2010	305	673	28.6	63.1	0.967	2.13	335	738
2011	348	766	34.4	75.8	1.16	2.56	383	845
2012	283	623	31.6	69.6	0.975	2.15	315	695
2013	231	509	26.8	59.2	0.736	1.62	259	570
2014	207	457	25.0	55.1	0.338	0.745	232	512
2015	171	377	21.2	46.7	NC	NC	192	424
2016	139	307	16.9	37.3	NC	NC	156	344
2017	137	302	16.5	36.4	NC	NC	153	338
2018	114	251	14.1	31.0	NC	NC	128	282
2019	89.7	198	10.8	23.8	NC	NC	101	222
2020	81.5	180	10.9	24.1	NC	NC	92.7	204
2021	72.2	159	9.34	20.6	NC	NC	81.9	181
2022	73.6	162	9.18	20.2	NC	NC	83.1	183
Total	**7,560**	**16,700**	**575**	**1,270**	**18.6**	**41.0**	**8,150**	**18,000**

Table 4.4 (cont.): Summary of VOC Mass Removal - 1998 to 2022

(c) Source Containment System

Year	Mass Removed							
	TCE		DCE		TCA		Total	
	kg	lbs	kg	lbs	kg	lbs	kg	lbs
2002	59.6	131	9.66	21.3	1.61	3.56	70.9	156
2003	48.7	107	6.53	14.4	0.989	2.18	56.2	124
2004	28.9	63.7	3.56	7.85	0.464	1.02	32.9	72.5
2005	18.1	39.9	2.28	5.03	0.218	0.481	20.6	45.4
2006	13.8	30.5	1.74	3.84	0.0933	0.206	15.7	34.6
2007	11.6	25.6	1.45	3.19	0.00368	0.00812	13.0	28.8
2008	8.42	18.6	1.04	2.29	NC	NC	9.46	20.9
2009	5.91	13.0	0.763	1.68	NC	NC	6.68	14.7
2010	4.30	9.48	0.573	1.26	NC	NC	4.87	10.7
2011	3.52	7.75	0.413	0.911	NC	NC	3.93	8.66
2012	2.53	5.58	0.289	0.638	NC	NC	2.82	6.22
2013	1.54	3.40	0.170	0.375	NC	NC	1.71	3.77
2014	1.52	3.35	0.105	0.231	NC	NC	1.63	3.58
2015	1.52	3.35	0.144	0.317	NC	NC	1.66	3.66
2016	1.38	3.05	0.123	0.271	NC	NC	1.51	3.32
2017	1.02	2.26	0.0760	0.168	NC	NC	1.10	2.43
2018	0.896	1.98	0.0576	0.127	NC	NC	0.954	2.10
2019	0.811	1.79	0.0569	0.125	NC	NC	0.868	1.91
2020	0.644	1.42	0.0551	0.121	NC	NC	0.700	1.54
2021	0.563	1.24	0.0518	0.114	NC	NC	0.615	1.36
2022	0.475	1.05	0.0485	0.107	NC	NC	0.523	1.15
Total	**216**	**476**	**29.2**	**64.4**	**3.38**	**7.46**	**248**	**548**

a Volume pumped during the testing of the well in early December, and during the first day of operation on December 31, 1998

NC Not Calculated; concentration reported as being below detection limits

Table 4.5: Summary of Chromium Mass Removal - 2000 to 2020

(a) Total

Year	Mass Removed	
	kg	lbs
2000	0.028	0.062
2001	1.829	4.032
-	-	-
-	-	-
2014	3.481	7.674
2015	6.068	13.378
2016	7.195	15.862
2017	5.050	11.133
2018	2.358	5.199
2019	1.642	3.620
2020	0.224	0.493
Total	**27.875**	**61.453**

(b) Off-Site Containment System

Year	Mass Removed	
	kg	lbs
2000	0.028	0.062
2001	1.829	4.032
Total	**1.857**	**4.094**

(c) Source Containment System

Year	Mass Removed	
	kg	lbs
2014	3.481	7.674
2015	6.068	13.378
2016	7.195	15.862
2017	5.050	11.133
2018	2.358	5.199
2019	1.642	3.620
2020	0.224	0.493
Total	**26.018**	**57.359**

Attachment

Laboratory Reports - 2022

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

January 17, 2022

Bob Marley
EA Engineering
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL:
FAX:

RE: Sparton OrderNo.: 2201023

Dear Bob Marley:

Hall Environmental Analysis Laboratory received 7 sample(s) on 1/3/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2201023**
Date Reported: **1/17/2022**

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2201023-001 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Influent
Collection Date: 1/3/2022 12:25:00 PM
Received Date: 1/3/2022 1:54:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**ELS**
Chromium	ND	0.0060		mg/L	1	1/5/2022 2:58:02 PM	A84974
Iron	ND	0.020		mg/L	1	1/5/2022 2:58:02 PM	A84974
Manganese	ND	0.0020		mg/L	1	1/5/2022 2:58:02 PM	A84974
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	ND	0.0060		mg/L	1	1/10/2022 10:49:53 AM	64922
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.6	1.0		µg/L	1	1/12/2022 2:39:00 PM	64915
Surr: 2-Fluorobiphenyl	79.0	15-84.5		%Rec	1	1/12/2022 2:39:00 PM	64915
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
Toluene	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
Ethylbenzene	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
Naphthalene	ND	2.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
1-Methylnaphthalene	ND	4.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
2-Methylnaphthalene	ND	4.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
Acetone	ND	10		µg/L	1	1/5/2022 7:37:00 PM	R84966
Bromobenzene	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
Bromodichloromethane	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
Bromoform	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
Bromomethane	ND	3.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
2-Butanone	ND	10		µg/L	1	1/5/2022 7:37:00 PM	R84966
Carbon disulfide	ND	10		µg/L	1	1/5/2022 7:37:00 PM	R84966
Carbon Tetrachloride	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
Chlorobenzene	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
Chloroethane	ND	2.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
Chloroform	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
Chloromethane	ND	3.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
2-Chlorotoluene	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
4-Chlorotoluene	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
cis-1,2-DCE	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
Dibromochloromethane	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2201023-001 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Influent
Collection Date: 1/3/2022 12:25:00 PM
Received Date: 1/3/2022 1:54:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dibromomethane	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
1,1-Dichloroethane	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
1,1-Dichloroethene	17	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
1,2-Dichloropropane	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
1,3-Dichloropropane	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
2,2-Dichloropropane	ND	2.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
1,1-Dichloropropene	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
Hexachlorobutadiene	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
2-Hexanone	ND	10		µg/L	1	1/5/2022 7:37:00 PM	R84966
Isopropylbenzene	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
4-Isopropyltoluene	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
4-Methyl-2-pentanone	ND	10		µg/L	1	1/5/2022 7:37:00 PM	R84966
Methylene Chloride	ND	3.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
n-Butylbenzene	ND	3.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
n-Propylbenzene	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
sec-Butylbenzene	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
Styrene	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
tert-Butylbenzene	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
Tetrachloroethene (PCE)	1.0	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
trans-1,2-DCE	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
Trichloroethene (TCE)	140	10		µg/L	10	1/5/2022 7:13:00 PM	R84966
Trichlorofluoromethane	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
Vinyl chloride	ND	1.0		µg/L	1	1/5/2022 7:37:00 PM	R84966
Xylenes, Total	ND	1.5		µg/L	1	1/5/2022 7:37:00 PM	R84966
Surr: 1,2-Dichloroethane-d4	108	70-130		%Rec	1	1/5/2022 7:37:00 PM	R84966
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	1/5/2022 7:37:00 PM	R84966
Surr: Dibromofluoromethane	110	70-130		%Rec	1	1/5/2022 7:37:00 PM	R84966

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2201023-001
Matrix: AQUEOUS
Client Sample ID: CW-1 Influent
Collection Date: 1/3/2022 12:25:00 PM
Received Date: 1/3/2022 1:54:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Surr: Toluene-d8	99.4	70-130		%Rec	1	1/5/2022 7:37:00 PM	R84966

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2201023-002 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Effluent
Collection Date: 1/3/2022 12:35:00 PM
Received Date: 1/3/2022 1:54:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**ELS**
Chromium	ND	0.0060		mg/L	1	1/5/2022 2:59:41 PM	A84974
Iron	ND	0.020		mg/L	1	1/5/2022 2:59:41 PM	A84974
Manganese	ND	0.0020		mg/L	1	1/5/2022 2:59:41 PM	A84974
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	ND	0.0060		mg/L	1	1/10/2022 10:51:30 AM	64922
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.4	1.0		µg/L	1	1/12/2022 3:25:00 PM	64915
Surr: 2-Fluorobiphenyl	73.0	15-84.5		%Rec	1	1/12/2022 3:25:00 PM	64915
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
Toluene	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
Ethylbenzene	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
Naphthalene	ND	2.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
1-Methylnaphthalene	ND	4.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
2-Methylnaphthalene	ND	4.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
Acetone	ND	10		µg/L	1	1/5/2022 8:00:00 PM	R84966
Bromobenzene	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
Bromodichloromethane	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
Bromoform	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
Bromomethane	ND	3.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
2-Butanone	ND	10		µg/L	1	1/5/2022 8:00:00 PM	R84966
Carbon disulfide	ND	10		µg/L	1	1/5/2022 8:00:00 PM	R84966
Carbon Tetrachloride	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
Chlorobenzene	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
Chloroethane	ND	2.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
Chloroform	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
Chloromethane	ND	3.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
2-Chlorotoluene	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
4-Chlorotoluene	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
cis-1,2-DCE	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
Dibromochloromethane	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2201023-002 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Effluent
Collection Date: 1/3/2022 12:35:00 PM
Received Date: 1/3/2022 1:54:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dibromomethane	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
1,1-Dichloroethane	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
1,1-Dichloroethene	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
1,2-Dichloropropane	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
1,3-Dichloropropane	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
2,2-Dichloropropane	ND	2.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
1,1-Dichloropropene	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
Hexachlorobutadiene	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
2-Hexanone	ND	10		µg/L	1	1/5/2022 8:00:00 PM	R84966
Isopropylbenzene	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
4-Isopropyltoluene	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
4-Methyl-2-pentanone	ND	10		µg/L	1	1/5/2022 8:00:00 PM	R84966
Methylene Chloride	ND	3.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
n-Butylbenzene	ND	3.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
n-Propylbenzene	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
sec-Butylbenzene	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
Styrene	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
tert-Butylbenzene	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
trans-1,2-DCE	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
Trichlorofluoromethane	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
Vinyl chloride	ND	1.0		µg/L	1	1/5/2022 8:00:00 PM	R84966
Xylenes, Total	ND	1.5		µg/L	1	1/5/2022 8:00:00 PM	R84966
Surr: 1,2-Dichloroethane-d4	109	70-130		%Rec	1	1/5/2022 8:00:00 PM	R84966
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	1/5/2022 8:00:00 PM	R84966
Surr: Dibromofluoromethane	111	70-130		%Rec	1	1/5/2022 8:00:00 PM	R84966

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2201023-002
Matrix: AQUEOUS
Client Sample ID: CW-1 Effluent
Collection Date: 1/3/2022 12:35:00 PM
Received Date: 1/3/2022 1:54:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Surr: Toluene-d8	98.1	70-130		%Rec	1	1/5/2022 8:00:00 PM	R84966

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2201023-003
Matrix: AQUEOUS
Client Sample ID: CW-1 Effluent Duplicate
Collection Date: 1/3/2022 12:35:00 PM
Received Date: 1/3/2022 1:54:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst: **DAM**	
1,4-Dioxane	2.5	1.0		µg/L	1	1/12/2022 4:10:00 PM	64915
Surr: 2-Fluorobiphenyl	58.5	15-84.5		%Rec	1	1/12/2022 4:10:00 PM	64915

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2201023-004 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Influent
Collection Date: 1/3/2022 11:15:00 AM
Received Date: 1/3/2022 1:54:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**ELS**
Chromium	0.045	0.0060		mg/L	1	1/5/2022 3:01:21 PM	A84974
Iron	ND	0.020		mg/L	1	1/5/2022 3:01:21 PM	A84974
Manganese	0.046	0.0020		mg/L	1	1/5/2022 3:01:21 PM	A84974
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	0.043	0.0060		mg/L	1	1/10/2022 10:58:09 AM	64922
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.7	1.0		µg/L	1	1/12/2022 4:56:00 PM	64915
Surr: 2-Fluorobiphenyl	37.0	15-84.5		%Rec	1	1/12/2022 4:56:00 PM	64915
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
Toluene	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
Ethylbenzene	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
Naphthalene	ND	2.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
1-Methylnaphthalene	ND	4.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
2-Methylnaphthalene	ND	4.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
Acetone	ND	10		µg/L	1	1/5/2022 8:24:00 PM	R84966
Bromobenzene	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
Bromodichloromethane	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
Bromoform	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
Bromomethane	ND	3.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
2-Butanone	ND	10		µg/L	1	1/5/2022 8:24:00 PM	R84966
Carbon disulfide	ND	10		µg/L	1	1/5/2022 8:24:00 PM	R84966
Carbon Tetrachloride	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
Chlorobenzene	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
Chloroethane	ND	2.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
Chloroform	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
Chloromethane	ND	3.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
2-Chlorotoluene	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
4-Chlorotoluene	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
cis-1,2-DCE	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
Dibromochloromethane	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2201023-004 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Influent
Collection Date: 1/3/2022 11:15:00 AM
Received Date: 1/3/2022 1:54:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dibromomethane	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
1,1-Dichloroethane	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
1,1-Dichloroethene	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
1,2-Dichloropropane	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
1,3-Dichloropropane	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
2,2-Dichloropropane	ND	2.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
1,1-Dichloropropene	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
Hexachlorobutadiene	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
2-Hexanone	ND	10		µg/L	1	1/5/2022 8:24:00 PM	R84966
Isopropylbenzene	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
4-Isopropyltoluene	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
4-Methyl-2-pentanone	ND	10		µg/L	1	1/5/2022 8:24:00 PM	R84966
Methylene Chloride	ND	3.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
n-Butylbenzene	ND	3.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
n-Propylbenzene	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
sec-Butylbenzene	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
Styrene	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
tert-Butylbenzene	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
trans-1,2-DCE	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
Trichloroethene (TCE)	6.1	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
Trichlorofluoromethane	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
Vinyl chloride	ND	1.0		µg/L	1	1/5/2022 8:24:00 PM	R84966
Xylenes, Total	ND	1.5		µg/L	1	1/5/2022 8:24:00 PM	R84966
Surr: 1,2-Dichloroethane-d4	109	70-130		%Rec	1	1/5/2022 8:24:00 PM	R84966
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	1/5/2022 8:24:00 PM	R84966
Surr: Dibromofluoromethane	112	70-130		%Rec	1	1/5/2022 8:24:00 PM	R84966

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2201023-004 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Influent
Collection Date: 1/3/2022 11:15:00 AM
Received Date: 1/3/2022 1:54:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Surr: Toluene-d8	97.0	70-130		%Rec	1	1/5/2022 8:24:00 PM	R84966

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2201023-005 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent
Collection Date: 1/3/2022 11:25:00 AM
Received Date: 1/3/2022 1:54:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**ELS**
Chromium	0.044	0.0060		mg/L	1	1/5/2022 3:09:15 PM	A84974
Iron	ND	0.020		mg/L	1	1/5/2022 3:09:15 PM	A84974
Manganese	0.030	0.0020		mg/L	1	1/5/2022 3:09:15 PM	A84974
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	0.044	0.0060		mg/L	1	1/10/2022 10:59:50 AM	64922
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.5	1.0		µg/L	1	1/12/2022 5:41:00 PM	64915
Surr: 2-Fluorobiphenyl	30.0	15-84.5		%Rec	1	1/12/2022 5:41:00 PM	64915
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
Toluene	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
Ethylbenzene	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
Naphthalene	ND	2.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
1-Methylnaphthalene	ND	4.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
2-Methylnaphthalene	ND	4.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
Acetone	ND	10		µg/L	1	1/5/2022 8:47:00 PM	R84966
Bromobenzene	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
Bromodichloromethane	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
Bromoform	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
Bromomethane	ND	3.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
2-Butanone	ND	10		µg/L	1	1/5/2022 8:47:00 PM	R84966
Carbon disulfide	ND	10		µg/L	1	1/5/2022 8:47:00 PM	R84966
Carbon Tetrachloride	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
Chlorobenzene	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
Chloroethane	ND	2.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
Chloroform	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
Chloromethane	ND	3.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
2-Chlorotoluene	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
4-Chlorotoluene	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
cis-1,2-DCE	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
Dibromochloromethane	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2201023-005 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent
Collection Date: 1/3/2022 11:25:00 AM
Received Date: 1/3/2022 1:54:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dibromomethane	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
1,1-Dichloroethane	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
1,1-Dichloroethene	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
1,2-Dichloropropane	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
1,3-Dichloropropane	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
2,2-Dichloropropane	ND	2.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
1,1-Dichloropropene	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
Hexachlorobutadiene	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
2-Hexanone	ND	10		µg/L	1	1/5/2022 8:47:00 PM	R84966
Isopropylbenzene	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
4-Isopropyltoluene	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
4-Methyl-2-pentanone	ND	10		µg/L	1	1/5/2022 8:47:00 PM	R84966
Methylene Chloride	ND	3.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
n-Butylbenzene	ND	3.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
n-Propylbenzene	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
sec-Butylbenzene	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
Styrene	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
tert-Butylbenzene	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
trans-1,2-DCE	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
Trichlorofluoromethane	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
Vinyl chloride	ND	1.0		µg/L	1	1/5/2022 8:47:00 PM	R84966
Xylenes, Total	ND	1.5		µg/L	1	1/5/2022 8:47:00 PM	R84966
Surr: 1,2-Dichloroethane-d4	108	70-130		%Rec	1	1/5/2022 8:47:00 PM	R84966
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	1/5/2022 8:47:00 PM	R84966
Surr: Dibromofluoromethane	110	70-130		%Rec	1	1/5/2022 8:47:00 PM	R84966

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2201023-005
Matrix: AQUEOUS
Client Sample ID: CW-2 Effluent
Collection Date: 1/3/2022 11:25:00 AM
Received Date: 1/3/2022 1:54:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Surr: Toluene-d8	97.1	70-130		%Rec	1	1/5/2022 8:47:00 PM	R84966

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2201023-006
Matrix: AQUEOUS
Client Sample ID: CW-2 Effluent Duplicate
Collection Date: 1/3/2022 11:25:00 AM
Received Date: 1/3/2022 1:54:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst: **DAM**	
1,4-Dioxane	2.1	1.0		µg/L	1	1/12/2022 6:25:00 PM	64915
Surr: 2-Fluorobiphenyl	45.0	15-84.5		%Rec	1	1/12/2022 6:25:00 PM	64915

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton
Collection Date:
Lab ID: 2201023-007
Matrix: TRIP BLANK
Received Date: 1/3/2022 1:54:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
Toluene	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
Ethylbenzene	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
Naphthalene	ND	2.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
1-Methylnaphthalene	ND	4.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
2-Methylnaphthalene	ND	4.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
Acetone	ND	10		µg/L	1	1/5/2022 9:10:00 PM	R84966
Bromobenzene	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
Bromodichloromethane	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
Bromoform	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
Bromomethane	ND	3.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
2-Butanone	ND	10		µg/L	1	1/5/2022 9:10:00 PM	R84966
Carbon disulfide	ND	10		µg/L	1	1/5/2022 9:10:00 PM	R84966
Carbon Tetrachloride	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
Chlorobenzene	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
Chloroethane	ND	2.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
Chloroform	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
Chloromethane	ND	3.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
2-Chlorotoluene	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
4-Chlorotoluene	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
cis-1,2-DCE	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
Dibromochloromethane	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
Dibromomethane	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
1,1-Dichloroethane	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
1,1-Dichloroethene	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
1,2-Dichloropropane	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
1,3-Dichloropropane	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
2,2-Dichloropropane	ND	2.0		µg/L	1	1/5/2022 9:10:00 PM	R84966

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton
Collection Date:
Lab ID: 2201023-007
Matrix: TRIP BLANK
Received Date: 1/3/2022 1:54:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,1-Dichloropropene	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
Hexachlorobutadiene	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
2-Hexanone	ND	10		µg/L	1	1/5/2022 9:10:00 PM	R84966
Isopropylbenzene	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
4-Isopropyltoluene	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
4-Methyl-2-pentanone	ND	10		µg/L	1	1/5/2022 9:10:00 PM	R84966
Methylene Chloride	ND	3.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
n-Butylbenzene	ND	3.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
n-Propylbenzene	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
sec-Butylbenzene	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
Styrene	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
tert-Butylbenzene	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
trans-1,2-DCE	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
Trichlorofluoromethane	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
Vinyl chloride	ND	1.0		µg/L	1	1/5/2022 9:10:00 PM	R84966
Xylenes, Total	ND	1.5		µg/L	1	1/5/2022 9:10:00 PM	R84966
Surr: 1,2-Dichloroethane-d4	107	70-130		%Rec	1	1/5/2022 9:10:00 PM	R84966
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	1/5/2022 9:10:00 PM	R84966
Surr: Dibromofluoromethane	110	70-130		%Rec	1	1/5/2022 9:10:00 PM	R84966
Surr: Toluene-d8	97.4	70-130		%Rec	1	1/5/2022 9:10:00 PM	R84966

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2201023**
17-Jan-22

Client: EA Engineering
Project: Sparton

Sample ID: **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **A84974** RunNo: **84974**
Prep Date: Analysis Date: **1/5/2022** SeqNo: **2989620** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID: **LLLCS** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **A84974** RunNo: **84974**
Prep Date: Analysis Date: **1/5/2022** SeqNo: **2989622** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.0066	0.0060	0.006000	0	110	50	150			
Iron	0.023	0.020	0.02000	0	113	50	150			
Manganese	0.0020	0.0020	0.002000	0	102	50	150			

Sample ID: **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **A84974** RunNo: **84974**
Prep Date: Analysis Date: **1/5/2022** SeqNo: **2989624** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.49	0.0060	0.5000	0	99.0	85	115			
Iron	0.50	0.020	0.5000	0	100	85	115			
Manganese	0.48	0.0020	0.5000	0	96.6	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2201023**
17-Jan-22

Client: EA Engineering
Project: Sparton

Sample ID: **MB-64922** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **64922** RunNo: **85044**
Prep Date: **1/7/2022** Analysis Date: **1/10/2022** SeqNo: **2992169** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LLLCS-64922** SampType: **LCSLL** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC** Batch ID: **64922** RunNo: **85044**
Prep Date: **1/7/2022** Analysis Date: **1/10/2022** SeqNo: **2992170** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060	0.006000	0	99.9	50	150			

Sample ID: **LCS-64922** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **64922** RunNo: **85044**
Prep Date: **1/7/2022** Analysis Date: **1/10/2022** SeqNo: **2992171** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.49	0.0060	0.5000	0	98.3	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2201023**
17-Jan-22

Client: EA Engineering
Project: Sparton

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R84966** RunNo: **84966**
Prep Date: Analysis Date: **1/5/2022** SeqNo: **2989808** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	111	70	130			
Toluene	20	1.0	20.00	0	101	70	130			
Chlorobenzene	20	1.0	20.00	0	102	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	101	70	130			
Trichloroethene (TCE)	22	1.0	20.00	0	108	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		108	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	11		10.00		111	70	130			
Surr: Toluene-d8	9.7		10.00		96.7	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R84966** RunNo: **84966**
Prep Date: Analysis Date: **1/5/2022** SeqNo: **2989809** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2201023**
17-Jan-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R84966**	RunNo: **84966**	
Prep Date:	Analysis Date: **1/5/2022**	SeqNo: **2989809**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2201023**
17-Jan-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R84966** RunNo: **84966**
Prep Date: Analysis Date: **1/5/2022** SeqNo: **2989809** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	11		10.00		110	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	11		10.00		111	70	130			
Surr: Toluene-d8	9.8		10.00		97.8	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2201023**
17-Jan-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb-64915** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **64915** RunNo: **85114**
Prep Date: **1/7/2022** Analysis Date: **1/12/2022** SeqNo: **2994706** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	2.9		4.000		71.5	21.9	89.8			
Surr: 2,4,6-Tribromophenol	5.4		8.000		67.0	23.4	71.6			
Surr: 2-Fluorobiphenyl	2.2		4.000		54.0	15	84.5			
Surr: 4-Terphenyl-d14	4.4		4.000		109	73.1	152			

Sample ID: **lcs-64915** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **64915** RunNo: **85114**
Prep Date: **1/7/2022** Analysis Date: **1/12/2022** SeqNo: **2994707** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.84	0.10	2.000	0	42.0	15	79.8			
Surr: Nitrobenzene-d5	4.8		5.000		96.8	21.9	89.8			S
Surr: 2,4,6-Tribromophenol	8.0		10.00		79.6	23.4	71.6			S
Surr: 2-Fluorobiphenyl	3.9		5.000		78.0	15	84.5			
Surr: 4-Terphenyl-d14	6.9		5.000		138	73.1	152			

Sample ID: **lcsd-64915** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **64915** RunNo: **85114**
Prep Date: **1/7/2022** Analysis Date: **1/12/2022** SeqNo: **2994708** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.68	0.10	2.000	0	34.0	15	79.8	21.1	34.2	
Surr: Nitrobenzene-d5	3.8		5.000		76.0	21.9	89.8	0	0	
Surr: 2,4,6-Tribromophenol	7.7		10.00		77.4	23.4	71.6	0	0	S
Surr: 2-Fluorobiphenyl	3.3		5.000		66.8	15	84.5	0	0	
Surr: 4-Terphenyl-d14	6.4		5.000		128	73.1	152	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: EA Engineering Work Order Number: 2201023 RcptNo: 1

Received By: **Cheyenne Cason** 1/3/2022 1:54:00 PM Check In-Out

Completed By: **Isaiah Ortiz** 1/3/2022 2:00:13 PM

Reviewed By: CM 1/3/22

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 8
(<2 or >12 unless noted)
Adjusted? NO
Checked by: KPG 1/03/22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	12.4	Good	Not Present			

Chain-of-Custody Record

Client: Sparton Technologies Inc

EA Engineering, Science, and Technology, Inc., PBC

Mailing Address: 320 Gold Av SW #1300
Albuquerque, NM 87102

Phone #: 505-715-4154

email or Fax#: rmarley@eaest.com

QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)

Accreditation:
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ **Rush** 72 Hours

Project Name:
Sparton

Project #: 1569302

Project Manager:
Bob Marley, EA Engineering

Sampler: Aaron Kupper

On Ice: ☑ Yes ☐ No

Sample Temperature: 12.4 - 0 = 12.4

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2201023	VOCs, 8260B	1,4-Dioxane, 8270SIM	Total Chromium	Dissolved Metals (Cr, Fe, Mn)	Air Bubbles (Y or N)
1/3/22	1225		CW-1 Influent	VOA(3), Glass (1), Poly (1)		001	X	X	X	X	
1/3/22	1235		CW-1 Effluent	VOA(3), Glass (1), Poly (1)		002	X	X	X	X	
1/3/22	1235		CW-1 Effluent Duplicate	Glass(1)		003		X			
1/3/22	1125		CW-2 Influent	VOA(3), Glass (1), Poly (1)		004	X	X	X	X	
1/3/22	1125		CW-2 Effluent	VOA(3), Glass (1), Poly (1)		005	X	X	X	X	
1/3/22	1125		CW-2 Effluent Duplicate	Glass(1)		006		X			
1/3/22	1125		Trip Blank	VOA(3)		007	X				

Date	Time	Relinquished by:	Received by:	Date	Time
1/3/22	1353	[signature]	[signature] CPO	1/3/22	1354
Date:	Time:	Relinquished by:	Received by:	Date	Time

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

February 18, 2022

Bob Marley
EA Engineering
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL:
FAX

RE: Sparton OrderNo.: 2202029

Dear Bob Marley:

Hall Environmental Analysis Laboratory received 7 sample(s) on 2/1/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2202029**
Date Reported: **2/18/2022**

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202029-001 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Influent
Collection Date: 2/1/2022 10:35:00 AM
Received Date: 2/1/2022 11:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**bcv**
Chromium	ND	0.0060		mg/L	1	2/3/2022 4:55:46 PM	B85655
Iron	ND	0.020		mg/L	1	2/3/2022 4:55:46 PM	B85655
Manganese	ND	0.0020		mg/L	1	2/3/2022 4:55:46 PM	B85655
EPA METHOD 200.7: TOTAL METALS						Analyst:	**bcv**
Chromium	ND	0.0060		mg/L	1	2/8/2022 5:51:44 PM	65412
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.3	1.0		µg/L	1	2/15/2022 12:42:00 PM	65348
Surr: 2-Fluorobiphenyl	61.5	15-84.5		%Rec	1	2/15/2022 12:42:00 PM	65348
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
Toluene	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
Ethylbenzene	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
Naphthalene	ND	2.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
1-Methylnaphthalene	ND	4.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
2-Methylnaphthalene	ND	4.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
Acetone	ND	10		µg/L	1	2/4/2022 3:31:00 AM	B85594
Bromobenzene	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
Bromodichloromethane	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
Bromoform	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
Bromomethane	ND	3.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
2-Butanone	ND	10		µg/L	1	2/4/2022 3:31:00 AM	B85594
Carbon disulfide	ND	10		µg/L	1	2/4/2022 3:31:00 AM	B85594
Carbon Tetrachloride	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
Chlorobenzene	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
Chloroethane	ND	2.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
Chloroform	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
Chloromethane	ND	3.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
2-Chlorotoluene	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
4-Chlorotoluene	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
cis-1,2-DCE	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
Dibromochloromethane	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202029-001 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Influent
Collection Date: 2/1/2022 10:35:00 AM
Received Date: 2/1/2022 11:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dibromomethane	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
1,1-Dichloroethane	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
1,1-Dichloroethene	16	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
1,2-Dichloropropane	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
1,3-Dichloropropane	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
2,2-Dichloropropane	ND	2.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
1,1-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
Hexachlorobutadiene	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
2-Hexanone	ND	10		µg/L	1	2/4/2022 3:31:00 AM	B85594
Isopropylbenzene	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
4-Isopropyltoluene	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
4-Methyl-2-pentanone	ND	10		µg/L	1	2/4/2022 3:31:00 AM	B85594
Methylene Chloride	ND	3.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
n-Butylbenzene	ND	3.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
n-Propylbenzene	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
sec-Butylbenzene	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
Styrene	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
tert-Butylbenzene	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
trans-1,2-DCE	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
Trichloroethene (TCE)	130	5.0		µg/L	5	2/4/2022 3:16:00 PM	R85617
Trichlorofluoromethane	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
Vinyl chloride	ND	1.0		µg/L	1	2/4/2022 3:31:00 AM	B85594
Xylenes, Total	ND	1.5		µg/L	1	2/4/2022 3:31:00 AM	B85594
Surr: 1,2-Dichloroethane-d4	113	70-130		%Rec	1	2/4/2022 3:31:00 AM	B85594
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	1	2/4/2022 3:31:00 AM	B85594
Surr: Dibromofluoromethane	107	70-130		%Rec	1	2/4/2022 3:31:00 AM	B85594

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202029-001
Matrix: AQUEOUS
Client Sample ID: CW-1 Influent
Collection Date: 2/1/2022 10:35:00 AM
Received Date: 2/1/2022 11:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Surr: Toluene-d8	95.0	70-130		%Rec	1	2/4/2022 3:31:00 AM	B85594

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202029-002 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Effluent
Collection Date: 2/1/2022 10:50:00 AM
Received Date: 2/1/2022 11:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**bcv**
Chromium	ND	0.0060		mg/L	1	2/3/2022 4:59:03 PM	B85655
Iron	ND	0.020		mg/L	1	2/3/2022 4:59:03 PM	B85655
Manganese	ND	0.0020		mg/L	1	2/3/2022 4:59:03 PM	B85655
EPA METHOD 200.7: TOTAL METALS						Analyst:	**bcv**
Chromium	ND	0.0060		mg/L	1	2/8/2022 5:53:22 PM	65412
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.3	1.0		µg/L	1	2/15/2022 1:29:00 PM	65348
Surr: 2-Fluorobiphenyl	67.0	15-84.5		%Rec	1	2/15/2022 1:29:00 PM	65348
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
Toluene	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
Ethylbenzene	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
Naphthalene	ND	2.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
1-Methylnaphthalene	ND	4.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
2-Methylnaphthalene	ND	4.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
Acetone	ND	10		µg/L	1	2/4/2022 3:55:00 AM	B85594
Bromobenzene	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
Bromodichloromethane	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
Bromoform	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
Bromomethane	ND	3.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
2-Butanone	ND	10		µg/L	1	2/4/2022 3:55:00 AM	B85594
Carbon disulfide	ND	10		µg/L	1	2/4/2022 3:55:00 AM	B85594
Carbon Tetrachloride	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
Chlorobenzene	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
Chloroethane	ND	2.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
Chloroform	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
Chloromethane	ND	3.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
2-Chlorotoluene	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
4-Chlorotoluene	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
cis-1,2-DCE	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
Dibromochloromethane	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202029-002 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Effluent
Collection Date: 2/1/2022 10:50:00 AM
Received Date: 2/1/2022 11:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dibromomethane	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
1,1-Dichloroethane	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
1,1-Dichloroethene	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
1,2-Dichloropropane	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
1,3-Dichloropropane	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
2,2-Dichloropropane	ND	2.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
1,1-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
Hexachlorobutadiene	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
2-Hexanone	ND	10		µg/L	1	2/4/2022 3:55:00 AM	B85594
Isopropylbenzene	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
4-Isopropyltoluene	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
4-Methyl-2-pentanone	ND	10		µg/L	1	2/4/2022 3:55:00 AM	B85594
Methylene Chloride	ND	3.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
n-Butylbenzene	ND	3.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
n-Propylbenzene	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
sec-Butylbenzene	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
Styrene	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
tert-Butylbenzene	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
trans-1,2-DCE	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
Trichlorofluoromethane	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
Vinyl chloride	ND	1.0		µg/L	1	2/4/2022 3:55:00 AM	B85594
Xylenes, Total	ND	1.5		µg/L	1	2/4/2022 3:55:00 AM	B85594
Surr: 1,2-Dichloroethane-d4	113	70-130		%Rec	1	2/4/2022 3:55:00 AM	B85594
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	1	2/4/2022 3:55:00 AM	B85594
Surr: Dibromofluoromethane	106	70-130		%Rec	1	2/4/2022 3:55:00 AM	B85594

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202029-002
Matrix: AQUEOUS
Client Sample ID: CW-1 Effluent
Collection Date: 2/1/2022 10:50:00 AM
Received Date: 2/1/2022 11:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Surr: Toluene-d8	93.4	70-130		%Rec	1	2/4/2022 3:55:00 AM	B85594

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202029-003 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Effluent Duplicate
Collection Date: 2/1/2022 10:50:00 AM
Received Date: 2/1/2022 11:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**bcv**
Chromium	ND	0.0060		mg/L	1	2/3/2022 5:02:20 PM	B85655
Iron	ND	0.020		mg/L	1	2/3/2022 5:02:20 PM	B85655
Manganese	ND	0.0020		mg/L	1	2/3/2022 5:02:20 PM	B85655
EPA METHOD 200.7: TOTAL METALS						Analyst:	**bcv**
Chromium	ND	0.0060		mg/L	1	2/8/2022 5:55:01 PM	65412
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.4	1.0		µg/L	1	2/15/2022 2:15:00 PM	65348
Surr: 2-Fluorobiphenyl	66.5	15-84.5		%Rec	1	2/15/2022 2:15:00 PM	65348
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
Toluene	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
Ethylbenzene	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
Naphthalene	ND	2.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
1-Methylnaphthalene	ND	4.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
2-Methylnaphthalene	ND	4.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
Acetone	ND	10		µg/L	1	2/4/2022 4:18:00 AM	B85594
Bromobenzene	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
Bromodichloromethane	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
Bromoform	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
Bromomethane	ND	3.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
2-Butanone	ND	10		µg/L	1	2/4/2022 4:18:00 AM	B85594
Carbon disulfide	ND	10		µg/L	1	2/4/2022 4:18:00 AM	B85594
Carbon Tetrachloride	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
Chlorobenzene	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
Chloroethane	ND	2.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
Chloroform	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
Chloromethane	ND	3.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
2-Chlorotoluene	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
4-Chlorotoluene	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
cis-1,2-DCE	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
Dibromochloromethane	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202029-003 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Effluent Duplicate
Collection Date: 2/1/2022 10:50:00 AM
Received Date: 2/1/2022 11:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dibromomethane	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
1,1-Dichloroethane	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
1,1-Dichloroethene	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
1,2-Dichloropropane	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
1,3-Dichloropropane	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
2,2-Dichloropropane	ND	2.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
1,1-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
Hexachlorobutadiene	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
2-Hexanone	ND	10		µg/L	1	2/4/2022 4:18:00 AM	B85594
Isopropylbenzene	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
4-Isopropyltoluene	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
4-Methyl-2-pentanone	ND	10		µg/L	1	2/4/2022 4:18:00 AM	B85594
Methylene Chloride	ND	3.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
n-Butylbenzene	ND	3.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
n-Propylbenzene	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
sec-Butylbenzene	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
Styrene	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
tert-Butylbenzene	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
trans-1,2-DCE	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
Trichlorofluoromethane	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
Vinyl chloride	ND	1.0		µg/L	1	2/4/2022 4:18:00 AM	B85594
Xylenes, Total	ND	1.5		µg/L	1	2/4/2022 4:18:00 AM	B85594
Surr: 1,2-Dichloroethane-d4	111	70-130		%Rec	1	2/4/2022 4:18:00 AM	B85594
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	2/4/2022 4:18:00 AM	B85594
Surr: Dibromofluoromethane	104	70-130		%Rec	1	2/4/2022 4:18:00 AM	B85594

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202029-003 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Effluent Duplicate
Collection Date: 2/1/2022 10:50:00 AM
Received Date: 2/1/2022 11:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Surr: Toluene-d8	95.3	70-130		%Rec	1	2/4/2022 4:18:00 AM	B85594

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202029-004 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Influent
Collection Date: 2/1/2022 9:35:00 AM
Received Date: 2/1/2022 11:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**bcv**
Chromium	0.043	0.0060		mg/L	1	2/3/2022 5:05:35 PM	B85655
Iron	ND	0.020		mg/L	1	2/3/2022 5:05:35 PM	B85655
Manganese	0.053	0.0020	*	mg/L	1	2/3/2022 5:05:35 PM	B85655
EPA METHOD 200.7: TOTAL METALS						Analyst:	**bcv**
Chromium	0.044	0.0060		mg/L	1	2/8/2022 5:59:33 PM	65412
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.2	1.0		µg/L	1	2/15/2022 3:03:00 PM	65348
Surr: 2-Fluorobiphenyl	61.0	15-84.5		%Rec	1	2/15/2022 3:03:00 PM	65348
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
Toluene	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
Ethylbenzene	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
Naphthalene	ND	2.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
1-Methylnaphthalene	ND	4.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
2-Methylnaphthalene	ND	4.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
Acetone	ND	10		µg/L	1	2/4/2022 4:41:00 AM	B85594
Bromobenzene	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
Bromodichloromethane	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
Bromoform	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
Bromomethane	ND	3.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
2-Butanone	ND	10		µg/L	1	2/4/2022 4:41:00 AM	B85594
Carbon disulfide	ND	10		µg/L	1	2/4/2022 4:41:00 AM	B85594
Carbon Tetrachloride	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
Chlorobenzene	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
Chloroethane	ND	2.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
Chloroform	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
Chloromethane	ND	3.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
2-Chlorotoluene	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
4-Chlorotoluene	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
cis-1,2-DCE	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
Dibromochloromethane	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202029-004 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Influent
Collection Date: 2/1/2022 9:35:00 AM
Received Date: 2/1/2022 11:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dibromomethane	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
1,1-Dichloroethane	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
1,1-Dichloroethene	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
1,2-Dichloropropane	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
1,3-Dichloropropane	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
2,2-Dichloropropane	ND	2.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
1,1-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
Hexachlorobutadiene	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
2-Hexanone	ND	10		µg/L	1	2/4/2022 4:41:00 AM	B85594
Isopropylbenzene	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
4-Isopropyltoluene	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
4-Methyl-2-pentanone	ND	10		µg/L	1	2/4/2022 4:41:00 AM	B85594
Methylene Chloride	ND	3.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
n-Butylbenzene	ND	3.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
n-Propylbenzene	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
sec-Butylbenzene	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
Styrene	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
tert-Butylbenzene	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
trans-1,2-DCE	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
Trichloroethene (TCE)	5.6	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
Trichlorofluoromethane	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
Vinyl chloride	ND	1.0		µg/L	1	2/4/2022 4:41:00 AM	B85594
Xylenes, Total	ND	1.5		µg/L	1	2/4/2022 4:41:00 AM	B85594
Surr: 1,2-Dichloroethane-d4	113	70-130		%Rec	1	2/4/2022 4:41:00 AM	B85594
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	2/4/2022 4:41:00 AM	B85594
Surr: Dibromofluoromethane	107	70-130		%Rec	1	2/4/2022 4:41:00 AM	B85594

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202029-004 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Influent
Collection Date: 2/1/2022 9:35:00 AM
Received Date: 2/1/2022 11:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Surr: Toluene-d8	94.1	70-130		%Rec	1	2/4/2022 4:41:00 AM	B85594

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202029-005 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent
Collection Date: 2/1/2022 9:45:00 AM
Received Date: 2/1/2022 11:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**bcv**
Chromium	0.043	0.0060		mg/L	1	2/3/2022 5:08:49 PM	B85655
Iron	ND	0.020		mg/L	1	2/3/2022 5:08:49 PM	B85655
Manganese	0.039	0.0020		mg/L	1	2/3/2022 5:08:49 PM	B85655
EPA METHOD 200.7: TOTAL METALS						Analyst:	**bcv**
Chromium	0.047	0.0060		mg/L	1	2/8/2022 6:01:14 PM	65412
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.3	1.0		µg/L	1	2/15/2022 3:50:00 PM	65348
Surr: 2-Fluorobiphenyl	67.0	15-84.5		%Rec	1	2/15/2022 3:50:00 PM	65348
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
Toluene	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
Ethylbenzene	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
Naphthalene	ND	2.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
1-Methylnaphthalene	ND	4.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
2-Methylnaphthalene	ND	4.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
Acetone	ND	10		µg/L	1	2/4/2022 5:05:00 AM	B85594
Bromobenzene	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
Bromodichloromethane	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
Bromoform	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
Bromomethane	ND	3.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
2-Butanone	ND	10		µg/L	1	2/4/2022 5:05:00 AM	B85594
Carbon disulfide	ND	10		µg/L	1	2/4/2022 5:05:00 AM	B85594
Carbon Tetrachloride	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
Chlorobenzene	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
Chloroethane	ND	2.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
Chloroform	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
Chloromethane	ND	3.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
2-Chlorotoluene	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
4-Chlorotoluene	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
cis-1,2-DCE	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
Dibromochloromethane	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202029-005 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent
Collection Date: 2/1/2022 9:45:00 AM
Received Date: 2/1/2022 11:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dibromomethane	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
1,1-Dichloroethane	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
1,1-Dichloroethene	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
1,2-Dichloropropane	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
1,3-Dichloropropane	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
2,2-Dichloropropane	ND	2.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
1,1-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
Hexachlorobutadiene	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
2-Hexanone	ND	10		µg/L	1	2/4/2022 5:05:00 AM	B85594
Isopropylbenzene	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
4-Isopropyltoluene	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
4-Methyl-2-pentanone	ND	10		µg/L	1	2/4/2022 5:05:00 AM	B85594
Methylene Chloride	ND	3.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
n-Butylbenzene	ND	3.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
n-Propylbenzene	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
sec-Butylbenzene	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
Styrene	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
tert-Butylbenzene	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
trans-1,2-DCE	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
Trichlorofluoromethane	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
Vinyl chloride	ND	1.0		µg/L	1	2/4/2022 5:05:00 AM	B85594
Xylenes, Total	ND	1.5		µg/L	1	2/4/2022 5:05:00 AM	B85594
Surr: 1,2-Dichloroethane-d4	111	70-130		%Rec	1	2/4/2022 5:05:00 AM	B85594
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	2/4/2022 5:05:00 AM	B85594
Surr: Dibromofluoromethane	106	70-130		%Rec	1	2/4/2022 5:05:00 AM	B85594

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202029-005 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent
Collection Date: 2/1/2022 9:45:00 AM
Received Date: 2/1/2022 11:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Surr: Toluene-d8	95.1	70-130		%Rec	1	2/4/2022 5:05:00 AM	B85594

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202029-006 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent Duplicate
Collection Date: 2/1/2022 9:45:00 AM
Received Date: 2/1/2022 11:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**bcv**
Chromium	0.041	0.0060		mg/L	1	2/3/2022 5:17:00 PM	B85655
Iron	ND	0.020		mg/L	1	2/3/2022 5:17:00 PM	B85655
Manganese	0.037	0.0020		mg/L	1	2/3/2022 5:17:00 PM	B85655
EPA METHOD 200.7: TOTAL METALS						Analyst:	**bcv**
Chromium	0.044	0.0060		mg/L	1	2/8/2022 6:02:55 PM	65412
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.2	1.0		µg/L	1	2/15/2022 4:37:00 PM	65348
Surr: 2-Fluorobiphenyl	62.0	15-84.5		%Rec	1	2/15/2022 4:37:00 PM	65348
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
Toluene	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
Ethylbenzene	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
Naphthalene	ND	2.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
1-Methylnaphthalene	ND	4.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
2-Methylnaphthalene	ND	4.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
Acetone	ND	10		µg/L	1	2/4/2022 5:28:00 AM	B85594
Bromobenzene	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
Bromodichloromethane	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
Bromoform	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
Bromomethane	ND	3.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
2-Butanone	ND	10		µg/L	1	2/4/2022 5:28:00 AM	B85594
Carbon disulfide	ND	10		µg/L	1	2/4/2022 5:28:00 AM	B85594
Carbon Tetrachloride	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
Chlorobenzene	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
Chloroethane	ND	2.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
Chloroform	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
Chloromethane	ND	3.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
2-Chlorotoluene	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
4-Chlorotoluene	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
cis-1,2-DCE	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
Dibromochloromethane	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202029-006 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent Duplicate
Collection Date: 2/1/2022 9:45:00 AM
Received Date: 2/1/2022 11:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dibromomethane	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
1,1-Dichloroethane	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
1,1-Dichloroethene	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
1,2-Dichloropropane	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
1,3-Dichloropropane	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
2,2-Dichloropropane	ND	2.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
1,1-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
Hexachlorobutadiene	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
2-Hexanone	ND	10		µg/L	1	2/4/2022 5:28:00 AM	B85594
Isopropylbenzene	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
4-Isopropyltoluene	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
4-Methyl-2-pentanone	ND	10		µg/L	1	2/4/2022 5:28:00 AM	B85594
Methylene Chloride	ND	3.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
n-Butylbenzene	ND	3.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
n-Propylbenzene	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
sec-Butylbenzene	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
Styrene	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
tert-Butylbenzene	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
trans-1,2-DCE	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
Trichlorofluoromethane	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
Vinyl chloride	ND	1.0		µg/L	1	2/4/2022 5:28:00 AM	B85594
Xylenes, Total	ND	1.5		µg/L	1	2/4/2022 5:28:00 AM	B85594
Surr: 1,2-Dichloroethane-d4	111	70-130		%Rec	1	2/4/2022 5:28:00 AM	B85594
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	2/4/2022 5:28:00 AM	B85594
Surr: Dibromofluoromethane	104	70-130		%Rec	1	2/4/2022 5:28:00 AM	B85594

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202029-006 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent Duplicate
Collection Date: 2/1/2022 9:45:00 AM
Received Date: 2/1/2022 11:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Surr: Toluene-d8	94.4	70-130		%Rec	1	2/4/2022 5:28:00 AM	B85594

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton
Collection Date:
Lab ID: 2202029-007
Matrix: TRIP BLANK
Received Date: 2/1/2022 11:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
Toluene	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
Ethylbenzene	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
Naphthalene	ND	2.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
1-Methylnaphthalene	ND	4.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
2-Methylnaphthalene	ND	4.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
Acetone	ND	10		µg/L	1	2/4/2022 5:51:00 AM	B85594
Bromobenzene	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
Bromodichloromethane	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
Bromoform	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
Bromomethane	ND	3.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
2-Butanone	ND	10		µg/L	1	2/4/2022 5:51:00 AM	B85594
Carbon disulfide	ND	10		µg/L	1	2/4/2022 5:51:00 AM	B85594
Carbon Tetrachloride	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
Chlorobenzene	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
Chloroethane	ND	2.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
Chloroform	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
Chloromethane	ND	3.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
2-Chlorotoluene	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
4-Chlorotoluene	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
cis-1,2-DCE	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
Dibromochloromethane	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
Dibromomethane	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
1,1-Dichloroethane	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
1,1-Dichloroethene	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
1,2-Dichloropropane	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
1,3-Dichloropropane	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
2,2-Dichloropropane	ND	2.0		µg/L	1	2/4/2022 5:51:00 AM	B85594

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton
Collection Date:
Lab ID: 2202029-007
Matrix: TRIP BLANK
Received Date: 2/1/2022 11:25:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,1-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
Hexachlorobutadiene	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
2-Hexanone	ND	10		µg/L	1	2/4/2022 5:51:00 AM	B85594
Isopropylbenzene	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
4-Isopropyltoluene	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
4-Methyl-2-pentanone	ND	10		µg/L	1	2/4/2022 5:51:00 AM	B85594
Methylene Chloride	ND	3.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
n-Butylbenzene	ND	3.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
n-Propylbenzene	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
sec-Butylbenzene	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
Styrene	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
tert-Butylbenzene	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
trans-1,2-DCE	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
Trichlorofluoromethane	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
Vinyl chloride	ND	1.0		µg/L	1	2/4/2022 5:51:00 AM	B85594
Xylenes, Total	ND	1.5		µg/L	1	2/4/2022 5:51:00 AM	B85594
Surr: 1,2-Dichloroethane-d4	110	70-130		%Rec	1	2/4/2022 5:51:00 AM	B85594
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	2/4/2022 5:51:00 AM	B85594
Surr: Dibromofluoromethane	105	70-130		%Rec	1	2/4/2022 5:51:00 AM	B85594
Surr: Toluene-d8	94.2	70-130		%Rec	1	2/4/2022 5:51:00 AM	B85594

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202029**
18-Feb-22

Client: EA Engineering
Project: Sparton

Sample ID: **MB-B** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **B85655** RunNo: **85655**
Prep Date: Analysis Date: **2/3/2022** SeqNo: **3016080** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID: **LLLCS-B** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **B85655** RunNo: **85655**
Prep Date: Analysis Date: **2/3/2022** SeqNo: **3016081** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.0063	0.0060	0.006000	0	105	50	150			
Iron	0.020	0.020	0.02000	0	100	50	150			
Manganese	0.0022	0.0020	0.002000	0	109	50	150			

Sample ID: **LCS-B** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **B85655** RunNo: **85655**
Prep Date: Analysis Date: **2/3/2022** SeqNo: **3016082** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.52	0.0060	0.5000	0	103	85	115			
Iron	0.48	0.020	0.5000	0	96.6	85	115			
Manganese	0.50	0.0020	0.5000	0	99.6	85	115			

Sample ID: **2202029-006DMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **CW-2 Effluent Dupli** Batch ID: **B85655** RunNo: **85655**
Prep Date: Analysis Date: **2/3/2022** SeqNo: **3016128** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.55	0.0060	0.5000	0.04138	102	70	130			
Iron	0.48	0.020	0.5000	0	96.2	70	130			
Manganese	0.53	0.0020	0.5000	0.03681	98.4	70	130			

Sample ID: **2202029-006DMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **CW-2 Effluent Dupli** Batch ID: **B85655** RunNo: **85655**
Prep Date: Analysis Date: **2/3/2022** SeqNo: **3016129** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.55	0.0060	0.5000	0.04138	102	70	130	0.382	20	
Iron	0.51	0.020	0.5000	0	101	70	130	5.15	20	
Manganese	0.53	0.0020	0.5000	0.03681	98.4	70	130	0.0522	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202029**
18-Feb-22

Client: EA Engineering
Project: Sparton

Sample ID: **MB-65412** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **65412** RunNo: **85674**
Prep Date: **2/7/2022** Analysis Date: **2/8/2022** SeqNo: **3018086** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LCSLL-65412** SampType: **LCSLL** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC** Batch ID: **65412** RunNo: **85674**
Prep Date: **2/7/2022** Analysis Date: **2/8/2022** SeqNo: **3018087** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.0069	0.0060	0.006000	0	115	50	150			

Sample ID: **LCS-65412** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **65412** RunNo: **85674**
Prep Date: **2/7/2022** Analysis Date: **2/8/2022** SeqNo: **3018098** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.51	0.0060	0.5000	0	103	85	115			

Sample ID: **2202029-003CMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **CW-1 Effluent Dupli** Batch ID: **65412** RunNo: **85674**
Prep Date: **2/7/2022** Analysis Date: **2/8/2022** SeqNo: **3018173** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.51	0.0060	0.5000	0.005237	102	70	130			

Sample ID: **2202029-003CMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **CW-1 Effluent Dupli** Batch ID: **65412** RunNo: **85674**
Prep Date: **2/7/2022** Analysis Date: **2/8/2022** SeqNo: **3018174** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.52	0.0060	0.5000	0.005237	103	70	130	1.26	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202029**
18-Feb-22

Client: EA Engineering
Project: Sparton

Sample ID: **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **B85594** RunNo: **85594**
Prep Date: Analysis Date: **2/4/2022** SeqNo: **3013749** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	103	70	130			
Toluene	18	1.0	20.00	0	91.3	70	130			
Chlorobenzene	18	1.0	20.00	0	90.6	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	92.3	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	96.5	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		110	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		105	70	130			
Surr: Dibromofluoromethane	11		10.00		106	70	130			
Surr: Toluene-d8	9.5		10.00		95.1	70	130			

Sample ID: **mb 2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **B85594** RunNo: **85594**
Prep Date: Analysis Date: **2/4/2022** SeqNo: **3013750** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202029**
18-Feb-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb 2**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **B85594**	RunNo: **85594**	
Prep Date:	Analysis Date: **2/4/2022**	SeqNo: **3013750**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202029**
18-Feb-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb 2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **B85594** RunNo: **85594**
Prep Date: Analysis Date: **2/4/2022** SeqNo: **3013750** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	11		10.00		112	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	11		10.00		107	70	130			
Surr: Toluene-d8	9.6		10.00		95.5	70	130			

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R85617** RunNo: **85617**
Prep Date: Analysis Date: **2/4/2022** SeqNo: **3014058** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	19	1.0	20.00	0	96.6	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		108	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.7		10.00		96.6	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R85617** RunNo: **85617**
Prep Date: Analysis Date: **2/4/2022** SeqNo: **3014632** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	ND	1.0								
Surr: 1,2-Dichloroethane-d4	11		10.00		110	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.6		10.00		96.1	70	130			

Sample ID: **2202029-001ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **CW-1 Influent** Batch ID: **R85617** RunNo: **85617**
Prep Date: Analysis Date: **2/4/2022** SeqNo: **3014634** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	160	1.0	20.00	143.0	71.0	70	130			E
Surr: 1,2-Dichloroethane-d4	11		10.00		112	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	11		10.00		106	70	130			
Surr: Toluene-d8	9.6		10.00		95.6	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202029**
18-Feb-22

Client: EA Engineering
Project: Sparton

Sample ID: **2202029-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **CW-1 Influent** Batch ID: **R85617** RunNo: **85617**
Prep Date: Analysis Date: **2/4/2022** SeqNo: **3014635** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	150	1.0	20.00	143.0	44.1	70	130	3.49	20	ES
Surr: 1,2-Dichloroethane-d4	11		10.00		110	70	130	0	0	
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130	0	0	
Surr: Dibromofluoromethane	10		10.00		104	70	130	0	0	
Surr: Toluene-d8	9.5		10.00		94.8	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202029**
18-Feb-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb-65348** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **65348** RunNo: **85852**
Prep Date: **2/3/2022** Analysis Date: **2/15/2022** SeqNo: **3023174** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	2.9		4.000		72.5	21.9	89.8			
Surr: 2,4,6-Tribromophenol	6.4		8.000		79.5	23.4	71.6			S
Surr: 2-Fluorobiphenyl	2.3		4.000		57.0	15	84.5			
Surr: 4-Terphenyl-d14	3.8		4.000		96.0	73.1	152			

Sample ID: **lcs-65348** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **65348** RunNo: **85852**
Prep Date: **2/3/2022** Analysis Date: **2/15/2022** SeqNo: **3023175** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.68	0.10	2.000	0	34.0	15	79.8			
Surr: Nitrobenzene-d5	4.2		5.000		83.2	21.9	89.8			
Surr: 2,4,6-Tribromophenol	7.8		10.00		78.4	23.4	71.6			S
Surr: 2-Fluorobiphenyl	2.9		5.000		58.4	15	84.5			
Surr: 4-Terphenyl-d14	5.2		5.000		104	73.1	152			

Sample ID: **lcsd-65348** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **65348** RunNo: **85852**
Prep Date: **2/3/2022** Analysis Date: **2/15/2022** SeqNo: **3023176** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.70	0.10	2.000	0	35.0	15	79.8	2.90	34.2	
Surr: Nitrobenzene-d5	4.4		5.000		88.4	21.9	89.8	0	0	
Surr: 2,4,6-Tribromophenol	8.6		10.00		86.4	23.4	71.6	0	0	S
Surr: 2-Fluorobiphenyl	3.2		5.000		64.4	15	84.5	0	0	
Surr: 4-Terphenyl-d14	5.8		5.000		117	73.1	152	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: EA Engineering Work Order Number: 2202029 RcptNo: 1

Received By: **Kasandra Payan** 2/1/2022 11:25:00 AM

Completed By: **Kasandra Payan** 2/1/2022 11:35:32 AM

Reviewed By: JN 2/1/22

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☑ NA ☐
   Samples were collected the same day and chilled.
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 12
(<2 or >12 unless noted)
Adjusted? NO
Checked by: KRG 2/1/22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	14.2	Good				

Chain-of-Custody Record

Client: Sparton Technologies Inc
EA Engineering, Science, + Technology Inc, PBC
Mailing Address: 320 Gold Av SW #1300
Albuquerque NM 87102
Phone #: 505-715-4114 ext 54
email or Fax#: rmarlox@eaest

QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name: Sparton

Project #: 1S69302

Project Manager: BOB Marlay

Sampler: Aaron Kupper
On Ice: ☑ Yes ☐ No
# of Coolers: 1
Cooler Temp (including CF): 14.2-0=14.2 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2202029	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	1,4-Dioxane, 8270 SIM	Total Chromium	Dissolved Metals (Cr, Fe, Mn)			
2-1-22	1035		CW-1 Influent	VOA(3), Glass(1) Poly(2)		001								✓			✓	✓	✓			
2-1-22	1050		CW-1 Effluent	VOA(3) Glass(1) poly(2)		002								✓			✓	✓	✓			
2-1-22	1050		CW-1 Effluent Duplicate	VOA(3) Glass(1) poly(2)		003								✓			✓	✓	✓			
2-1-22	0935		CW-2 Influent	VOA(3), Glass(1) poly(2)		004								✓			✓	✓	✓			
2-1-22	0945		CW-2 Effluent	VOA(3), Glass(1) poly(2)		005								✓			✓	✓	✓			
2-1-22	0945		CW-2 Effluent Duplicate	VOA (3), Glass(1) poly(2)		006								✓			✓	✓	✓			
2-1-22	0935		Trip Blank	VOA (2)		007								✓								

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
2-1-22	1124			CDO	2/1/22	11:25
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

February 18, 2022

Bob Marley
EA Engineering
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL:
FAX

RE: Sparton OrderNo.: 2202146

Dear Bob Marley:

Hall Environmental Analysis Laboratory received 3 sample(s) on 2/2/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2202146**
Date Reported: **2/18/2022**

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202146-001 **Matrix:** AQUEOUS

Client Sample ID: MW-77
Collection Date: 2/2/2022 12:51:00 PM
Received Date: 2/2/2022 3:35:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**bcv**
Chromium	0.032	0.0060		mg/L	1	2/3/2022 5:26:00 PM	B85655
Iron	ND	0.020		mg/L	1	2/3/2022 5:26:00 PM	B85655
Manganese	ND	0.0020		mg/L	1	2/3/2022 5:26:00 PM	B85655
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	1.6	1.0		µg/L	1	2/15/2022 5:25:00 PM	65348
Surr: 2-Fluorobiphenyl	43.5	15-84.5		%Rec	1	2/15/2022 5:25:00 PM	65348
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
Toluene	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
Ethylbenzene	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
Naphthalene	ND	2.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
1-Methylnaphthalene	ND	4.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
2-Methylnaphthalene	ND	4.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
Acetone	ND	10		µg/L	1	2/4/2022 7:32:00 PM	R85617
Bromobenzene	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
Bromodichloromethane	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
Bromoform	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
Bromomethane	ND	3.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
2-Butanone	ND	10		µg/L	1	2/4/2022 7:32:00 PM	R85617
Carbon disulfide	ND	10		µg/L	1	2/4/2022 7:32:00 PM	R85617
Carbon Tetrachloride	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
Chlorobenzene	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
Chloroethane	ND	2.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
Chloroform	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
Chloromethane	ND	3.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
2-Chlorotoluene	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
4-Chlorotoluene	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
cis-1,2-DCE	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
Dibromochloromethane	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
Dibromomethane	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202146-001 **Matrix:** AQUEOUS

Client Sample ID: MW-77
Collection Date: 2/2/2022 12:51:00 PM
Received Date: 2/2/2022 3:35:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
1,1-Dichloroethane	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
1,1-Dichloroethene	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
1,2-Dichloropropane	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
1,3-Dichloropropane	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
2,2-Dichloropropane	ND	2.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
1,1-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
Hexachlorobutadiene	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
2-Hexanone	ND	10		µg/L	1	2/4/2022 7:32:00 PM	R85617
Isopropylbenzene	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
4-Isopropyltoluene	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
4-Methyl-2-pentanone	ND	10		µg/L	1	2/4/2022 7:32:00 PM	R85617
Methylene Chloride	ND	3.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
n-Butylbenzene	ND	3.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
n-Propylbenzene	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
sec-Butylbenzene	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
Styrene	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
tert-Butylbenzene	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
trans-1,2-DCE	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
Trichloroethene (TCE)	1.9	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
Trichlorofluoromethane	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
Vinyl chloride	ND	1.0		µg/L	1	2/4/2022 7:32:00 PM	R85617
Xylenes, Total	ND	1.5		µg/L	1	2/4/2022 7:32:00 PM	R85617
Surr: 1,2-Dichloroethane-d4	109	70-130		%Rec	1	2/4/2022 7:32:00 PM	R85617
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	2/4/2022 7:32:00 PM	R85617
Surr: Dibromofluoromethane	105	70-130		%Rec	1	2/4/2022 7:32:00 PM	R85617
Surr: Toluene-d8	93.9	70-130		%Rec	1	2/4/2022 7:32:00 PM	R85617

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202146-002 **Matrix:** AQUEOUS

Client Sample ID: MW-78
Collection Date: 2/2/2022 2:10:00 PM
Received Date: 2/2/2022 3:35:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**bcv**
Chromium	0.038	0.0060		mg/L	1	2/3/2022 5:29:16 PM	B85655
Iron	ND	0.020		mg/L	1	2/3/2022 5:29:16 PM	B85655
Manganese	ND	0.0020		mg/L	1	2/3/2022 5:29:16 PM	B85655
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	1.7	1.0		µg/L	1	2/15/2022 6:11:00 PM	65348
Surr: 2-Fluorobiphenyl	54.0	15-84.5		%Rec	1	2/15/2022 6:11:00 PM	65348
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
Toluene	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
Ethylbenzene	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
Naphthalene	ND	2.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
1-Methylnaphthalene	ND	4.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
2-Methylnaphthalene	ND	4.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
Acetone	ND	10		µg/L	1	2/4/2022 8:41:00 PM	R85617
Bromobenzene	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
Bromodichloromethane	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
Bromoform	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
Bromomethane	ND	3.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
2-Butanone	ND	10		µg/L	1	2/4/2022 8:41:00 PM	R85617
Carbon disulfide	ND	10		µg/L	1	2/4/2022 8:41:00 PM	R85617
Carbon Tetrachloride	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
Chlorobenzene	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
Chloroethane	ND	2.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
Chloroform	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
Chloromethane	ND	3.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
2-Chlorotoluene	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
4-Chlorotoluene	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
cis-1,2-DCE	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
Dibromochloromethane	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
Dibromomethane	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202146-002 **Matrix:** AQUEOUS

Client Sample ID: MW-78
Collection Date: 2/2/2022 2:10:00 PM
Received Date: 2/2/2022 3:35:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
1,1-Dichloroethane	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
1,1-Dichloroethene	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
1,2-Dichloropropane	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
1,3-Dichloropropane	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
2,2-Dichloropropane	ND	2.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
1,1-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
Hexachlorobutadiene	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
2-Hexanone	ND	10		µg/L	1	2/4/2022 8:41:00 PM	R85617
Isopropylbenzene	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
4-Isopropyltoluene	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
4-Methyl-2-pentanone	ND	10		µg/L	1	2/4/2022 8:41:00 PM	R85617
Methylene Chloride	ND	3.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
n-Butylbenzene	ND	3.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
n-Propylbenzene	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
sec-Butylbenzene	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
Styrene	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
tert-Butylbenzene	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
trans-1,2-DCE	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
Trichlorofluoromethane	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
Vinyl chloride	ND	1.0		µg/L	1	2/4/2022 8:41:00 PM	R85617
Xylenes, Total	ND	1.5		µg/L	1	2/4/2022 8:41:00 PM	R85617
Surr: 1,2-Dichloroethane-d4	106	70-130		%Rec	1	2/4/2022 8:41:00 PM	R85617
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	2/4/2022 8:41:00 PM	R85617
Surr: Dibromofluoromethane	103	70-130		%Rec	1	2/4/2022 8:41:00 PM	R85617
Surr: Toluene-d8	94.6	70-130		%Rec	1	2/4/2022 8:41:00 PM	R85617

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton
Collection Date:
Lab ID: 2202146-003
Matrix: TRIP BLANK
Received Date: 2/2/2022 3:35:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
Toluene	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
Ethylbenzene	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
Naphthalene	ND	2.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
1-Methylnaphthalene	ND	4.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
2-Methylnaphthalene	ND	4.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
Acetone	ND	10		µg/L	1	2/4/2022 9:05:00 PM	R85617
Bromobenzene	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
Bromodichloromethane	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
Bromoform	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
Bromomethane	ND	3.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
2-Butanone	ND	10		µg/L	1	2/4/2022 9:05:00 PM	R85617
Carbon disulfide	ND	10		µg/L	1	2/4/2022 9:05:00 PM	R85617
Carbon Tetrachloride	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
Chlorobenzene	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
Chloroethane	ND	2.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
Chloroform	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
Chloromethane	ND	3.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
2-Chlorotoluene	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
4-Chlorotoluene	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
cis-1,2-DCE	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
Dibromochloromethane	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
Dibromomethane	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
1,1-Dichloroethane	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
1,1-Dichloroethene	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
1,2-Dichloropropane	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
1,3-Dichloropropane	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
2,2-Dichloropropane	ND	2.0		µg/L	1	2/4/2022 9:05:00 PM	R85617

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton
Collection Date:
Lab ID: 2202146-003
Matrix: TRIP BLANK
Received Date: 2/2/2022 3:35:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,1-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
Hexachlorobutadiene	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
2-Hexanone	ND	10		µg/L	1	2/4/2022 9:05:00 PM	R85617
Isopropylbenzene	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
4-Isopropyltoluene	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
4-Methyl-2-pentanone	ND	10		µg/L	1	2/4/2022 9:05:00 PM	R85617
Methylene Chloride	ND	3.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
n-Butylbenzene	ND	3.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
n-Propylbenzene	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
sec-Butylbenzene	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
Styrene	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
tert-Butylbenzene	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
trans-1,2-DCE	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
Trichlorofluoromethane	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
Vinyl chloride	ND	1.0		µg/L	1	2/4/2022 9:05:00 PM	R85617
Xylenes, Total	ND	1.5		µg/L	1	2/4/2022 9:05:00 PM	R85617
Surr: 1,2-Dichloroethane-d4	108	70-130		%Rec	1	2/4/2022 9:05:00 PM	R85617
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	2/4/2022 9:05:00 PM	R85617
Surr: Dibromofluoromethane	105	70-130		%Rec	1	2/4/2022 9:05:00 PM	R85617
Surr: Toluene-d8	93.6	70-130		%Rec	1	2/4/2022 9:05:00 PM	R85617

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202146**
18-Feb-22

Client: EA Engineering
Project: Sparton

Sample ID: **MB-B** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **B85655** RunNo: **85655**
Prep Date: Analysis Date: **2/3/2022** SeqNo: **3016080** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID: **LLLCS-B** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **B85655** RunNo: **85655**
Prep Date: Analysis Date: **2/3/2022** SeqNo: **3016081** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.0063	0.0060	0.006000	0	105	50	150			
Iron	0.020	0.020	0.02000	0	100	50	150			
Manganese	0.0022	0.0020	0.002000	0	109	50	150			

Sample ID: **LCS-B** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **B85655** RunNo: **85655**
Prep Date: Analysis Date: **2/3/2022** SeqNo: **3016082** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.52	0.0060	0.5000	0	103	85	115			
Iron	0.48	0.020	0.5000	0	96.6	85	115			
Manganese	0.50	0.0020	0.5000	0	99.6	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202146**
18-Feb-22

Client: EA Engineering
Project: Sparton

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R85617** RunNo: **85617**
Prep Date: Analysis Date: **2/4/2022** SeqNo: **3014058** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	70	130			
Toluene	19	1.0	20.00	0	96.0	70	130			
Chlorobenzene	19	1.0	20.00	0	95.7	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	91.3	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	96.6	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		108	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.7		10.00		96.6	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R85617** RunNo: **85617**
Prep Date: Analysis Date: **2/4/2022** SeqNo: **3014632** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202146**
18-Feb-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R85617**	RunNo: **85617**	
Prep Date:	Analysis Date: **2/4/2022**	SeqNo: **3014632**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202146**
18-Feb-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R85617** RunNo: **85617**
Prep Date: Analysis Date: **2/4/2022** SeqNo: **3014632** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	11		10.00		110	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.6		10.00		96.1	70	130			

Sample ID: **2202146-001ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MW-77** Batch ID: **R85617** RunNo: **85617**
Prep Date: Analysis Date: **2/4/2022** SeqNo: **3014637** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.4	70	130			
Toluene	18	1.0	20.00	0	90.9	70	130			
Chlorobenzene	18	1.0	20.00	0	91.6	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	89.6	70	130			
Trichloroethene (TCE)	21	1.0	20.00	1.932	95.7	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		108	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	9.5		10.00		94.9	70	130			

Sample ID: **2202146-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MW-77** Batch ID: **R85617** RunNo: **85617**
Prep Date: Analysis Date: **2/4/2022** SeqNo: **3014638** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	97.9	70	130	0.479	20	
Toluene	19	1.0	20.00	0	93.0	70	130	2.22	20	
Chlorobenzene	19	1.0	20.00	0	93.5	70	130	1.99	20	
1,1-Dichloroethene	18	1.0	20.00	0	87.8	70	130	2.04	20	
Trichloroethene (TCE)	21	1.0	20.00	1.932	95.0	70	130	0.686	20	
Surr: 1,2-Dichloroethane-d4	11		10.00		107	70	130	0	0	
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130	0	0	
Surr: Dibromofluoromethane	10		10.00		102	70	130	0	0	
Surr: Toluene-d8	9.7		10.00		97.3	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202146**
18-Feb-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb-65348** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **65348** RunNo: **85852**
Prep Date: **2/3/2022** Analysis Date: **2/15/2022** SeqNo: **3023174** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	2.9		4.000		72.5	21.9	89.8			
Surr: 2,4,6-Tribromophenol	6.4		8.000		79.5	23.4	71.6			S
Surr: 2-Fluorobiphenyl	2.3		4.000		57.0	15	84.5			
Surr: 4-Terphenyl-d14	3.8		4.000		96.0	73.1	152			

Sample ID: **lcs-65348** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **65348** RunNo: **85852**
Prep Date: **2/3/2022** Analysis Date: **2/15/2022** SeqNo: **3023175** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.68	0.10	2.000	0	34.0	15	79.8			
Surr: Nitrobenzene-d5	4.2		5.000		83.2	21.9	89.8			
Surr: 2,4,6-Tribromophenol	7.8		10.00		78.4	23.4	71.6			S
Surr: 2-Fluorobiphenyl	2.9		5.000		58.4	15	84.5			
Surr: 4-Terphenyl-d14	5.2		5.000		104	73.1	152			

Sample ID: **lcsd-65348** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **65348** RunNo: **85852**
Prep Date: **2/3/2022** Analysis Date: **2/15/2022** SeqNo: **3023176** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.70	0.10	2.000	0	35.0	15	79.8	2.90	34.2	
Surr: Nitrobenzene-d5	4.4		5.000		88.4	21.9	89.8	0	0	
Surr: 2,4,6-Tribromophenol	8.6		10.00		86.4	23.4	71.6	0	0	S
Surr: 2-Fluorobiphenyl	3.2		5.000		64.4	15	84.5	0	0	
Surr: 4-Terphenyl-d14	5.8		5.000		117	73.1	152	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: EA Engineering Work Order Number: 2202146 RcptNo: 1

Received By: Joseph Alderette 2/2/2022 3:35:00 PM

Completed By: Sean Livingston 2/2/2022 3:37:27 PM

Reviewed By: 2-2-22

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 3
(<2 or >12 unless noted)
Adjusted? NO
Checked by: Sea 2/2/22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.8	Good				

Chain-of-Custody Record

Client: Sparton Technologies Inc.
EA Engineering, Science and Technology, inc
Mailing Address: 320 Gold Ave SW #1300
Albuquerque, NM 87102
Phone #: 505 715-4154
email or Fax#: r marley@eaest.com
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: Sparton
Project #: Bills to Sparton Direct
Project Manager: Bob Marley, EA Engineering
Sampler: Scott Miles
On Ice: ☒ Yes ☐ No
# of Coolers: 1
Cooler Temp (including CF): 2.8-0=2.8 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2202146	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA) VOCs 8260B	8270 (Semi-VOA)	Total Coliform (Present/Absent)	VOCs 8260B	1,4 Dioxane 8270SIM	~~Total Chromium~~	Dissolved Metals (Cr, Fe, Mn)		
2-2-22	1251	Aq	MW-77	3x VOA, Amber 1L 1x HDPE 125ml	HCl, none HNO_3	001											X	X		X		
↓	1410	↓	MW-78	↓	↓	002											X	X		X		
↓	1200	↓	Trip Blank	2x VOA	HCl	003											X					

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
2-2-22	1534			CDO	2-2-22	15:35
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

February 18, 2022

Bob Marley
EA Engineering
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL:
FAX

RE: Sparton OrderNo.: 2202245

Dear Bob Marley:

Hall Environmental Analysis Laboratory received 2 sample(s) on 2/4/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2202245**
Date Reported: **2/18/2022**

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202245-001 **Matrix:** AQUEOUS

Client Sample ID: MW-52R
Collection Date: 2/4/2022 3:18:00 PM
Received Date: 2/4/2022 4:27:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS						Analyst:	**bcv**
Chromium	ND	0.0060		mg/L	1	2/8/2022 6:10:48 PM	65413
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	2/15/2022 10:10:00 PM	65452
Surr: 2-Fluorobiphenyl	66.5	15-84.5		%Rec	1	2/15/2022 10:10:00 PM	65452
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
Toluene	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
Ethylbenzene	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
Naphthalene	ND	2.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
1-Methylnaphthalene	ND	4.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
2-Methylnaphthalene	ND	4.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
Acetone	ND	10		µg/L	1	2/4/2022 9:51:00 PM	R85617
Bromobenzene	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
Bromodichloromethane	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
Bromoform	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
Bromomethane	ND	3.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
2-Butanone	ND	10		µg/L	1	2/4/2022 9:51:00 PM	R85617
Carbon disulfide	ND	10		µg/L	1	2/4/2022 9:51:00 PM	R85617
Carbon Tetrachloride	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
Chlorobenzene	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
Chloroethane	ND	2.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
Chloroform	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
Chloromethane	ND	3.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
2-Chlorotoluene	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
4-Chlorotoluene	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
cis-1,2-DCE	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
Dibromochloromethane	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
Dibromomethane	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202245-001 **Matrix:** AQUEOUS

Client Sample ID: MW-52R
Collection Date: 2/4/2022 3:18:00 PM
Received Date: 2/4/2022 4:27:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
1,1-Dichloroethane	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
1,1-Dichloroethene	15	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
1,2-Dichloropropane	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
1,3-Dichloropropane	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
2,2-Dichloropropane	ND	2.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
1,1-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
Hexachlorobutadiene	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
2-Hexanone	ND	10		µg/L	1	2/4/2022 9:51:00 PM	R85617
Isopropylbenzene	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
4-Isopropyltoluene	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
4-Methyl-2-pentanone	ND	10		µg/L	1	2/4/2022 9:51:00 PM	R85617
Methylene Chloride	ND	3.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
n-Butylbenzene	ND	3.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
n-Propylbenzene	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
sec-Butylbenzene	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
Styrene	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
tert-Butylbenzene	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
trans-1,2-DCE	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
Trichloroethene (TCE)	8.5	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
Trichlorofluoromethane	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
Vinyl chloride	ND	1.0		µg/L	1	2/4/2022 9:51:00 PM	R85617
Xylenes, Total	ND	1.5		µg/L	1	2/4/2022 9:51:00 PM	R85617
Surr: 1,2-Dichloroethane-d4	109	70-130		%Rec	1	2/4/2022 9:51:00 PM	R85617
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	2/4/2022 9:51:00 PM	R85617
Surr: Dibromofluoromethane	105	70-130		%Rec	1	2/4/2022 9:51:00 PM	R85617
Surr: Toluene-d8	94.5	70-130		%Rec	1	2/4/2022 9:51:00 PM	R85617

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton
Collection Date:
Lab ID: 2202245-002
Matrix: TRIP BLANK
Received Date: 2/4/2022 4:27:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
Toluene	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
Ethylbenzene	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
Naphthalene	ND	2.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
1-Methylnaphthalene	ND	4.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
2-Methylnaphthalene	ND	4.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
Acetone	ND	10		µg/L	1	2/4/2022 10:15:00 PM	R85617
Bromobenzene	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
Bromodichloromethane	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
Bromoform	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
Bromomethane	ND	3.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
2-Butanone	ND	10		µg/L	1	2/4/2022 10:15:00 PM	R85617
Carbon disulfide	ND	10		µg/L	1	2/4/2022 10:15:00 PM	R85617
Carbon Tetrachloride	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
Chlorobenzene	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
Chloroethane	ND	2.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
Chloroform	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
Chloromethane	ND	3.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
2-Chlorotoluene	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
4-Chlorotoluene	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
cis-1,2-DCE	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
Dibromochloromethane	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
Dibromomethane	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
1,1-Dichloroethane	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
1,1-Dichloroethene	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
1,2-Dichloropropane	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
1,3-Dichloropropane	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
2,2-Dichloropropane	ND	2.0		µg/L	1	2/4/2022 10:15:00 PM	R85617

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
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S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton
Collection Date:
Lab ID: 2202245-002
Matrix: TRIP BLANK
Received Date: 2/4/2022 4:27:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,1-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
Hexachlorobutadiene	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
2-Hexanone	ND	10		µg/L	1	2/4/2022 10:15:00 PM	R85617
Isopropylbenzene	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
4-Isopropyltoluene	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
4-Methyl-2-pentanone	ND	10		µg/L	1	2/4/2022 10:15:00 PM	R85617
Methylene Chloride	ND	3.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
n-Butylbenzene	ND	3.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
n-Propylbenzene	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
sec-Butylbenzene	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
Styrene	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
tert-Butylbenzene	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
trans-1,2-DCE	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
Trichlorofluoromethane	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
Vinyl chloride	ND	1.0		µg/L	1	2/4/2022 10:15:00 PM	R85617
Xylenes, Total	ND	1.5		µg/L	1	2/4/2022 10:15:00 PM	R85617
Surr: 1,2-Dichloroethane-d4	109	70-130		%Rec	1	2/4/2022 10:15:00 PM	R85617
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	2/4/2022 10:15:00 PM	R85617
Surr: Dibromofluoromethane	102	70-130		%Rec	1	2/4/2022 10:15:00 PM	R85617
Surr: Toluene-d8	94.4	70-130		%Rec	1	2/4/2022 10:15:00 PM	R85617

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202245**
18-Feb-22

Client: EA Engineering
Project: Sparton

Sample ID: **MB-65413** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **65413** RunNo: **85674**
Prep Date: **2/7/2022** Analysis Date: **2/8/2022** SeqNo: **3018099** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LCSLL-65413** SampType: **LCSLL** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC** Batch ID: **65413** RunNo: **85674**
Prep Date: **2/7/2022** Analysis Date: **2/8/2022** SeqNo: **3018102** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.0070	0.0060	0.006000	0	117	50	150			

Sample ID: **LCS-65413** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **65413** RunNo: **85674**
Prep Date: **2/7/2022** Analysis Date: **2/8/2022** SeqNo: **3018103** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.52	0.0060	0.5000	0	105	85	115			

Sample ID: **2202245-001CMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MW-52R** Batch ID: **65413** RunNo: **85674**
Prep Date: **2/7/2022** Analysis Date: **2/8/2022** SeqNo: **3018183** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.52	0.0060	0.5000	0.003267	104	70	130			

Sample ID: **2202245-001CMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MW-52R** Batch ID: **65413** RunNo: **85674**
Prep Date: **2/7/2022** Analysis Date: **2/8/2022** SeqNo: **3018184** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.52	0.0060	0.5000	0.003267	103	70	130	1.18	20	

Qualifiers:

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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202245**
18-Feb-22

Client: EA Engineering
Project: Sparton

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R85617** RunNo: **85617**
Prep Date: Analysis Date: **2/4/2022** SeqNo: **3014058** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	70	130			
Toluene	19	1.0	20.00	0	96.0	70	130			
Chlorobenzene	19	1.0	20.00	0	95.7	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	91.3	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	96.6	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		108	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.7		10.00		96.6	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R85617** RunNo: **85617**
Prep Date: Analysis Date: **2/4/2022** SeqNo: **3014632** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202245**
18-Feb-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R85617**	RunNo: **85617**	
Prep Date:	Analysis Date: **2/4/2022**	SeqNo: **3014632**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202245**
18-Feb-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R85617** RunNo: **85617**
Prep Date: Analysis Date: **2/4/2022** SeqNo: **3014632** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	11		10.00		110	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.6		10.00		96.1	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202245**
18-Feb-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb-65452** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **65452** RunNo: **85852**
Prep Date: **2/9/2022** Analysis Date: **2/15/2022** SeqNo: **3023178** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	2.3		4.000		57.5	21.9	89.8			
Surr: 2,4,6-Tribromophenol	3.9		8.000		49.0	23.4	71.6			
Surr: 2-Fluorobiphenyl	2.2		4.000		55.5	15	84.5			
Surr: 4-Terphenyl-d14	3.3		4.000		82.5	73.1	152			

Sample ID: **lcs-65452** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **65452** RunNo: **85852**
Prep Date: **2/9/2022** Analysis Date: **2/15/2022** SeqNo: **3023179** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.68	0.10	2.000	0	34.0	15	79.8			
Surr: Nitrobenzene-d5	3.9		5.000		78.8	21.9	89.8			
Surr: 2,4,6-Tribromophenol	6.7		10.00		67.2	23.4	71.6			
Surr: 2-Fluorobiphenyl	3.4		5.000		67.6	15	84.5			
Surr: 4-Terphenyl-d14	5.4		5.000		108	73.1	152			

Sample ID: **lcsd-65452** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **65452** RunNo: **85852**
Prep Date: **2/9/2022** Analysis Date: **2/15/2022** SeqNo: **3023180** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.62	0.10	2.000	0	31.0	15	79.8	9.23	34.2	
Surr: Nitrobenzene-d5	3.4		5.000		67.6	21.9	89.8	0	0	
Surr: 2,4,6-Tribromophenol	5.8		10.00		58.2	23.4	71.6	0	0	
Surr: 2-Fluorobiphenyl	2.9		5.000		57.6	15	84.5	0	0	
Surr: 4-Terphenyl-d14	4.8		5.000		96.0	73.1	152	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: EA Engineering Work Order Number: 2202245 RcptNo: 1

Received By: Kasandra Payan 2/4/2022 4:27:00 PM

Completed By: Tracy Casarrubias 2/4/2022 4:33:33 PM

Reviewed By: KPG 2/4/22

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 6 (<2 or >12 unless noted)
Adjusted? NO
Checked by: JR 2/4/22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.7	Good	Not Present			

Chain-of-Custody Record

Client: Sparton Technologies Inc.
EA Engineering, Science and Technology inc.
Mailing Address: 320 Gold Ave SW #1300
Albuquerque, NM 87102
Phone #: 505 715-4154
email or Fax#: r marley@eaest.com
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other_____
☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ **Rush**_____
Project Name: Sparton
Project #: Bills to Sparton Direct
Project Manager: Bob Marley, EA Engineering
Sampler: Scott Miles
On Ice: ☑ Yes ☐ No
# of Coolers: 1
Cooler Temp(including CF): 5.9-0.2=5.7 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2202245	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	VOCs 8260B	1,4 Dioxane 8270 SIM	Total Chromium			
2-4-22	1518	Aq	MW-52R	3x VOA, Amber 1L 1x HDPE 125ml	HCl, none HNO3	001											X	X	X			
↓	1200	↓	Trip Blank	2x VOA	HCl	002											X					

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
2-4-22	1628	[signature]	[signature]	ODO	2/4/22	16:27
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

February 25, 2022

Bob Marley
EA Engineering
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL:
FAX

RE: Sparton OrderNo.: 2202549

Dear Bob Marley:

Hall Environmental Analysis Laboratory received 7 sample(s) on 2/10/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2202549**
Date Reported: **2/25/2022**

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202549-001 **Matrix:** AQUEOUS

Client Sample ID: MW-80
Collection Date: 2/9/2022 10:41:00 AM
Received Date: 2/10/2022 3:38:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS						Analyst:	**bcv**
Chromium	0.013	0.0060		mg/L	1	2/18/2022 3:12:07 PM	65630
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	5.7	1.0		µg/L	1	2/22/2022 3:08:00 PM	65547
Surr: 2-Fluorobiphenyl	59.5	15-84.5		%Rec	1	2/22/2022 3:08:00 PM	65547
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
Toluene	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
Ethylbenzene	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
Naphthalene	ND	2.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
1-Methylnaphthalene	ND	4.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
2-Methylnaphthalene	ND	4.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
Acetone	ND	10		µg/L	1	2/12/2022 5:08:00 PM	R85788
Bromobenzene	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
Bromodichloromethane	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
Bromoform	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
Bromomethane	ND	3.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
2-Butanone	ND	10		µg/L	1	2/12/2022 5:08:00 PM	R85788
Carbon disulfide	ND	10		µg/L	1	2/12/2022 5:08:00 PM	R85788
Carbon Tetrachloride	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
Chlorobenzene	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
Chloroethane	ND	2.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
Chloroform	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
Chloromethane	ND	3.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
2-Chlorotoluene	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
4-Chlorotoluene	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
cis-1,2-DCE	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
Dibromochloromethane	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
Dibromomethane	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202549-001 **Matrix:** AQUEOUS

Client Sample ID: MW-80
Collection Date: 2/9/2022 10:41:00 AM
Received Date: 2/10/2022 3:38:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
1,1-Dichloroethane	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
1,1-Dichloroethene	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
1,2-Dichloropropane	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
1,3-Dichloropropane	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
2,2-Dichloropropane	ND	2.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
1,1-Dichloropropene	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
Hexachlorobutadiene	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
2-Hexanone	ND	10		µg/L	1	2/12/2022 5:08:00 PM	R85788
Isopropylbenzene	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
4-Isopropyltoluene	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
4-Methyl-2-pentanone	ND	10		µg/L	1	2/12/2022 5:08:00 PM	R85788
Methylene Chloride	ND	3.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
n-Butylbenzene	ND	3.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
n-Propylbenzene	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
sec-Butylbenzene	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
Styrene	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
tert-Butylbenzene	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
trans-1,2-DCE	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
Trichlorofluoromethane	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
Vinyl chloride	ND	1.0		µg/L	1	2/12/2022 5:08:00 PM	R85788
Xylenes, Total	ND	1.5		µg/L	1	2/12/2022 5:08:00 PM	R85788
Surr: 1,2-Dichloroethane-d4	96.7	70-130		%Rec	1	2/12/2022 5:08:00 PM	R85788
Surr: 4-Bromofluorobenzene	93.1	70-130		%Rec	1	2/12/2022 5:08:00 PM	R85788
Surr: Dibromofluoromethane	97.2	70-130		%Rec	1	2/12/2022 5:08:00 PM	R85788
Surr: Toluene-d8	96.3	70-130		%Rec	1	2/12/2022 5:08:00 PM	R85788

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202549-002 **Matrix:** AQUEOUS

Client Sample ID: MW-80 Dup
Collection Date: 2/9/2022 10:41:00 AM
Received Date: 2/10/2022 3:38:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS						Analyst:	**bcv**
Chromium	0.013	0.0060		mg/L	1	2/18/2022 3:18:47 PM	65630
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	6.5	1.0		µg/L	1	2/22/2022 3:54:00 PM	65547
Surr: 2-Fluorobiphenyl	66.5	15-84.5		%Rec	1	2/22/2022 3:54:00 PM	65547
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
Toluene	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
Ethylbenzene	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
Naphthalene	ND	2.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
1-Methylnaphthalene	ND	4.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
2-Methylnaphthalene	ND	4.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
Acetone	ND	10		µg/L	1	2/12/2022 5:31:00 PM	R85788
Bromobenzene	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
Bromodichloromethane	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
Bromoform	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
Bromomethane	ND	3.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
2-Butanone	ND	10		µg/L	1	2/12/2022 5:31:00 PM	R85788
Carbon disulfide	ND	10		µg/L	1	2/12/2022 5:31:00 PM	R85788
Carbon Tetrachloride	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
Chlorobenzene	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
Chloroethane	ND	2.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
Chloroform	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
Chloromethane	ND	3.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
2-Chlorotoluene	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
4-Chlorotoluene	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
cis-1,2-DCE	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
Dibromochloromethane	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
Dibromomethane	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202549-002 **Matrix:** AQUEOUS

Client Sample ID: MW-80 Dup
Collection Date: 2/9/2022 10:41:00 AM
Received Date: 2/10/2022 3:38:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
1,1-Dichloroethane	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
1,1-Dichloroethene	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
1,2-Dichloropropane	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
1,3-Dichloropropane	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
2,2-Dichloropropane	ND	2.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
1,1-Dichloropropene	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
Hexachlorobutadiene	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
2-Hexanone	ND	10		µg/L	1	2/12/2022 5:31:00 PM	R85788
Isopropylbenzene	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
4-Isopropyltoluene	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
4-Methyl-2-pentanone	ND	10		µg/L	1	2/12/2022 5:31:00 PM	R85788
Methylene Chloride	ND	3.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
n-Butylbenzene	ND	3.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
n-Propylbenzene	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
sec-Butylbenzene	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
Styrene	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
tert-Butylbenzene	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
trans-1,2-DCE	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
Trichlorofluoromethane	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
Vinyl chloride	ND	1.0		µg/L	1	2/12/2022 5:31:00 PM	R85788
Xylenes, Total	ND	1.5		µg/L	1	2/12/2022 5:31:00 PM	R85788
Surr: 1,2-Dichloroethane-d4	96.4	70-130		%Rec	1	2/12/2022 5:31:00 PM	R85788
Surr: 4-Bromofluorobenzene	91.9	70-130		%Rec	1	2/12/2022 5:31:00 PM	R85788
Surr: Dibromofluoromethane	95.8	70-130		%Rec	1	2/12/2022 5:31:00 PM	R85788
Surr: Toluene-d8	94.9	70-130		%Rec	1	2/12/2022 5:31:00 PM	R85788

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202549-003 **Matrix:** AQUEOUS

Client Sample ID: MW-17
Collection Date: 2/9/2022 1:10:00 PM
Received Date: 2/10/2022 3:38:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**bcv**
Chromium	0.041	0.0060		mg/L	1	2/21/2022 3:37:15 PM	A85995
Iron	0.066	0.020		mg/L	1	2/18/2022 8:12:44 PM	B85965
Manganese	0.0094	0.0020		mg/L	1	2/18/2022 8:12:44 PM	B85965
EPA METHOD 200.7: TOTAL METALS						Analyst:	**bcv**
Chromium	0.045	0.0060		mg/L	1	2/18/2022 3:20:27 PM	65630
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.1	1.0		µg/L	1	2/22/2022 4:41:00 PM	65547
Surr: 2-Fluorobiphenyl	65.5	15-84.5		%Rec	1	2/22/2022 4:41:00 PM	65547
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
Toluene	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
Ethylbenzene	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
Naphthalene	ND	2.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
1-Methylnaphthalene	ND	4.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
2-Methylnaphthalene	ND	4.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
Acetone	ND	10		µg/L	1	2/12/2022 5:55:00 PM	R85788
Bromobenzene	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
Bromodichloromethane	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
Bromoform	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
Bromomethane	ND	3.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
2-Butanone	ND	10		µg/L	1	2/12/2022 5:55:00 PM	R85788
Carbon disulfide	ND	10		µg/L	1	2/12/2022 5:55:00 PM	R85788
Carbon Tetrachloride	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
Chlorobenzene	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
Chloroethane	ND	2.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
Chloroform	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
Chloromethane	ND	3.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
2-Chlorotoluene	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
4-Chlorotoluene	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
cis-1,2-DCE	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
Dibromochloromethane	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202549-003 **Matrix:** AQUEOUS

Client Sample ID: MW-17
Collection Date: 2/9/2022 1:10:00 PM
Received Date: 2/10/2022 3:38:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dibromomethane	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
1,1-Dichloroethane	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
1,1-Dichloroethene	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
1,2-Dichloropropane	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
1,3-Dichloropropane	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
2,2-Dichloropropane	ND	2.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
1,1-Dichloropropene	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
Hexachlorobutadiene	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
2-Hexanone	ND	10		µg/L	1	2/12/2022 5:55:00 PM	R85788
Isopropylbenzene	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
4-Isopropyltoluene	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
4-Methyl-2-pentanone	ND	10		µg/L	1	2/12/2022 5:55:00 PM	R85788
Methylene Chloride	ND	3.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
n-Butylbenzene	ND	3.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
n-Propylbenzene	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
sec-Butylbenzene	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
Styrene	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
tert-Butylbenzene	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
trans-1,2-DCE	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
Trichlorofluoromethane	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
Vinyl chloride	ND	1.0		µg/L	1	2/12/2022 5:55:00 PM	R85788
Xylenes, Total	ND	1.5		µg/L	1	2/12/2022 5:55:00 PM	R85788
Surr: 1,2-Dichloroethane-d4	95.4	70-130		%Rec	1	2/12/2022 5:55:00 PM	R85788
Surr: 4-Bromofluorobenzene	92.2	70-130		%Rec	1	2/12/2022 5:55:00 PM	R85788
Surr: Dibromofluoromethane	97.1	70-130		%Rec	1	2/12/2022 5:55:00 PM	R85788

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202549-003
Matrix: AQUEOUS
Client Sample ID: MW-17
Collection Date: 2/9/2022 1:10:00 PM
Received Date: 2/10/2022 3:38:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Surr: Toluene-d8	95.9	70-130		%Rec	1	2/12/2022 5:55:00 PM	R85788

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202549-004 **Matrix:** AQUEOUS

Client Sample ID: MW-57D
Collection Date: 2/10/2022 9:38:00 AM
Received Date: 2/10/2022 3:38:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS						Analyst:	**bcv**
Chromium	ND	0.0060		mg/L	1	2/18/2022 3:21:52 PM	65630
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	2/22/2022 5:28:00 PM	65547
Surr: 2-Fluorobiphenyl	56.0	15-84.5		%Rec	1	2/22/2022 5:28:00 PM	65547
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
Toluene	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
Ethylbenzene	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
Naphthalene	ND	2.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
1-Methylnaphthalene	ND	4.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
2-Methylnaphthalene	ND	4.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
Acetone	ND	10		µg/L	1	2/12/2022 6:19:00 PM	R85788
Bromobenzene	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
Bromodichloromethane	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
Bromoform	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
Bromomethane	ND	3.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
2-Butanone	ND	10		µg/L	1	2/12/2022 6:19:00 PM	R85788
Carbon disulfide	ND	10		µg/L	1	2/12/2022 6:19:00 PM	R85788
Carbon Tetrachloride	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
Chlorobenzene	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
Chloroethane	ND	2.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
Chloroform	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
Chloromethane	ND	3.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
2-Chlorotoluene	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
4-Chlorotoluene	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
cis-1,2-DCE	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
Dibromochloromethane	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
Dibromomethane	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202549-004 **Matrix:** AQUEOUS

Client Sample ID: MW-57D
Collection Date: 2/10/2022 9:38:00 AM
Received Date: 2/10/2022 3:38:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
1,1-Dichloroethane	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
1,1-Dichloroethene	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
1,2-Dichloropropane	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
1,3-Dichloropropane	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
2,2-Dichloropropane	ND	2.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
1,1-Dichloropropene	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
Hexachlorobutadiene	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
2-Hexanone	ND	10		µg/L	1	2/12/2022 6:19:00 PM	R85788
Isopropylbenzene	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
4-Isopropyltoluene	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
4-Methyl-2-pentanone	ND	10		µg/L	1	2/12/2022 6:19:00 PM	R85788
Methylene Chloride	ND	3.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
n-Butylbenzene	ND	3.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
n-Propylbenzene	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
sec-Butylbenzene	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
Styrene	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
tert-Butylbenzene	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
trans-1,2-DCE	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
Trichlorofluoromethane	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
Vinyl chloride	ND	1.0		µg/L	1	2/12/2022 6:19:00 PM	R85788
Xylenes, Total	ND	1.5		µg/L	1	2/12/2022 6:19:00 PM	R85788
Surr: 1,2-Dichloroethane-d4	95.8	70-130		%Rec	1	2/12/2022 6:19:00 PM	R85788
Surr: 4-Bromofluorobenzene	90.7	70-130		%Rec	1	2/12/2022 6:19:00 PM	R85788
Surr: Dibromofluoromethane	98.0	70-130		%Rec	1	2/12/2022 6:19:00 PM	R85788
Surr: Toluene-d8	95.6	70-130		%Rec	1	2/12/2022 6:19:00 PM	R85788

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202549-005 **Matrix:** AQUEOUS

Client Sample ID: MW-66
Collection Date: 2/10/2022 11:03:00 AM
Received Date: 2/10/2022 3:38:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS						Analyst:	**bcv**
Chromium	ND	0.0060		mg/L	1	2/18/2022 3:23:32 PM	65630
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	2/22/2022 6:14:00 PM	65547
Surr: 2-Fluorobiphenyl	76.5	15-84.5		%Rec	1	2/22/2022 6:14:00 PM	65547
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
Toluene	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
Ethylbenzene	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
Naphthalene	ND	2.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
1-Methylnaphthalene	ND	4.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
2-Methylnaphthalene	ND	4.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
Acetone	ND	10		µg/L	1	2/12/2022 6:42:00 PM	R85788
Bromobenzene	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
Bromodichloromethane	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
Bromoform	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
Bromomethane	ND	3.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
2-Butanone	ND	10		µg/L	1	2/12/2022 6:42:00 PM	R85788
Carbon disulfide	ND	10		µg/L	1	2/12/2022 6:42:00 PM	R85788
Carbon Tetrachloride	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
Chlorobenzene	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
Chloroethane	ND	2.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
Chloroform	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
Chloromethane	ND	3.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
2-Chlorotoluene	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
4-Chlorotoluene	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
cis-1,2-DCE	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
Dibromochloromethane	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
Dibromomethane	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202549-005 **Matrix:** AQUEOUS

Client Sample ID: MW-66
Collection Date: 2/10/2022 11:03:00 AM
Received Date: 2/10/2022 3:38:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
1,1-Dichloroethane	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
1,1-Dichloroethene	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
1,2-Dichloropropane	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
1,3-Dichloropropane	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
2,2-Dichloropropane	ND	2.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
1,1-Dichloropropene	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
Hexachlorobutadiene	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
2-Hexanone	ND	10		µg/L	1	2/12/2022 6:42:00 PM	R85788
Isopropylbenzene	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
4-Isopropyltoluene	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
4-Methyl-2-pentanone	ND	10		µg/L	1	2/12/2022 6:42:00 PM	R85788
Methylene Chloride	ND	3.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
n-Butylbenzene	ND	3.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
n-Propylbenzene	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
sec-Butylbenzene	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
Styrene	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
tert-Butylbenzene	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
trans-1,2-DCE	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
Trichlorofluoromethane	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
Vinyl chloride	ND	1.0		µg/L	1	2/12/2022 6:42:00 PM	R85788
Xylenes, Total	ND	1.5		µg/L	1	2/12/2022 6:42:00 PM	R85788
Surr: 1,2-Dichloroethane-d4	96.9	70-130		%Rec	1	2/12/2022 6:42:00 PM	R85788
Surr: 4-Bromofluorobenzene	92.0	70-130		%Rec	1	2/12/2022 6:42:00 PM	R85788
Surr: Dibromofluoromethane	95.5	70-130		%Rec	1	2/12/2022 6:42:00 PM	R85788
Surr: Toluene-d8	94.8	70-130		%Rec	1	2/12/2022 6:42:00 PM	R85788

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202549-006 **Matrix:** AQUEOUS

Client Sample ID: MW-71R
Collection Date: 2/10/2022 1:42:00 PM
Received Date: 2/10/2022 3:38:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS						Analyst:	**bcv**
Chromium	ND	0.0060		mg/L	1	2/18/2022 3:25:10 PM	65630
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	2/22/2022 7:00:00 PM	65547
Surr: 2-Fluorobiphenyl	67.5	15-84.5		%Rec	1	2/22/2022 7:00:00 PM	65547
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
Toluene	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
Ethylbenzene	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
Naphthalene	ND	2.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
1-Methylnaphthalene	ND	4.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
2-Methylnaphthalene	ND	4.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
Acetone	ND	10		µg/L	1	2/12/2022 7:06:00 PM	R85788
Bromobenzene	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
Bromodichloromethane	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
Bromoform	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
Bromomethane	ND	3.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
2-Butanone	ND	10		µg/L	1	2/12/2022 7:06:00 PM	R85788
Carbon disulfide	ND	10		µg/L	1	2/12/2022 7:06:00 PM	R85788
Carbon Tetrachloride	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
Chlorobenzene	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
Chloroethane	ND	2.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
Chloroform	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
Chloromethane	ND	3.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
2-Chlorotoluene	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
4-Chlorotoluene	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
cis-1,2-DCE	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
Dibromochloromethane	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
Dibromomethane	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202549-006 **Matrix:** AQUEOUS

Client Sample ID: MW-71R
Collection Date: 2/10/2022 1:42:00 PM
Received Date: 2/10/2022 3:38:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
1,1-Dichloroethane	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
1,1-Dichloroethene	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
1,2-Dichloropropane	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
1,3-Dichloropropane	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
2,2-Dichloropropane	ND	2.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
1,1-Dichloropropene	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
Hexachlorobutadiene	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
2-Hexanone	ND	10		µg/L	1	2/12/2022 7:06:00 PM	R85788
Isopropylbenzene	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
4-Isopropyltoluene	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
4-Methyl-2-pentanone	ND	10		µg/L	1	2/12/2022 7:06:00 PM	R85788
Methylene Chloride	ND	3.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
n-Butylbenzene	ND	3.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
n-Propylbenzene	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
sec-Butylbenzene	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
Styrene	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
tert-Butylbenzene	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
trans-1,2-DCE	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
Trichloroethene (TCE)	6.6	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
Trichlorofluoromethane	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
Vinyl chloride	ND	1.0		µg/L	1	2/12/2022 7:06:00 PM	R85788
Xylenes, Total	ND	1.5		µg/L	1	2/12/2022 7:06:00 PM	R85788
Surr: 1,2-Dichloroethane-d4	97.3	70-130		%Rec	1	2/12/2022 7:06:00 PM	R85788
Surr: 4-Bromofluorobenzene	93.0	70-130		%Rec	1	2/12/2022 7:06:00 PM	R85788
Surr: Dibromofluoromethane	97.7	70-130		%Rec	1	2/12/2022 7:06:00 PM	R85788
Surr: Toluene-d8	96.8	70-130		%Rec	1	2/12/2022 7:06:00 PM	R85788

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton
Collection Date:
Lab ID: 2202549-007
Matrix: TRIP BLANK
Received Date: 2/10/2022 3:38:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
Toluene	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
Ethylbenzene	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
Naphthalene	ND	2.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
1-Methylnaphthalene	ND	4.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
2-Methylnaphthalene	ND	4.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
Acetone	ND	10		µg/L	1	2/12/2022 7:29:00 PM	R85788
Bromobenzene	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
Bromodichloromethane	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
Bromoform	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
Bromomethane	ND	3.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
2-Butanone	ND	10		µg/L	1	2/12/2022 7:29:00 PM	R85788
Carbon disulfide	ND	10		µg/L	1	2/12/2022 7:29:00 PM	R85788
Carbon Tetrachloride	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
Chlorobenzene	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
Chloroethane	ND	2.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
Chloroform	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
Chloromethane	ND	3.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
2-Chlorotoluene	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
4-Chlorotoluene	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
cis-1,2-DCE	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
Dibromochloromethane	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
Dibromomethane	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
1,1-Dichloroethane	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
1,1-Dichloroethene	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
1,2-Dichloropropane	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
1,3-Dichloropropane	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
2,2-Dichloropropane	ND	2.0		µg/L	1	2/12/2022 7:29:00 PM	R85788

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton
Collection Date:
Lab ID: 2202549-007
Matrix: TRIP BLANK
Received Date: 2/10/2022 3:38:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,1-Dichloropropene	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
Hexachlorobutadiene	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
2-Hexanone	ND	10		µg/L	1	2/12/2022 7:29:00 PM	R85788
Isopropylbenzene	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
4-Isopropyltoluene	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
4-Methyl-2-pentanone	ND	10		µg/L	1	2/12/2022 7:29:00 PM	R85788
Methylene Chloride	ND	3.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
n-Butylbenzene	ND	3.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
n-Propylbenzene	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
sec-Butylbenzene	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
Styrene	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
tert-Butylbenzene	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
trans-1,2-DCE	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
Trichlorofluoromethane	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
Vinyl chloride	ND	1.0		µg/L	1	2/12/2022 7:29:00 PM	R85788
Xylenes, Total	ND	1.5		µg/L	1	2/12/2022 7:29:00 PM	R85788
Surr: 1,2-Dichloroethane-d4	98.7	70-130		%Rec	1	2/12/2022 7:29:00 PM	R85788
Surr: 4-Bromofluorobenzene	92.3	70-130		%Rec	1	2/12/2022 7:29:00 PM	R85788
Surr: Dibromofluoromethane	97.7	70-130		%Rec	1	2/12/2022 7:29:00 PM	R85788
Surr: Toluene-d8	94.0	70-130		%Rec	1	2/12/2022 7:29:00 PM	R85788

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202549**
25-Feb-22

Client: EA Engineering
Project: Sparton

Sample ID: **MB-B** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **B85965** RunNo: **85965**
Prep Date: Analysis Date: **2/18/2022** SeqNo: **3028005** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID: **LLLCS-B** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **B85965** RunNo: **85965**
Prep Date: Analysis Date: **2/18/2022** SeqNo: **3028006** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.024	0.020	0.02000	0	119	50	150			
Manganese	0.0021	0.0020	0.002000	0	103	50	150			

Sample ID: **LCS-B** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **B85965** RunNo: **85965**
Prep Date: Analysis Date: **2/18/2022** SeqNo: **3028007** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.49	0.020	0.5000	0	98.8	85	115			
Manganese	0.48	0.0020	0.5000	0	96.4	85	115			

Sample ID: **2202549-003DMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MW-17** Batch ID: **B85965** RunNo: **85965**
Prep Date: Analysis Date: **2/18/2022** SeqNo: **3028066** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.53	0.020	0.5000	0.06566	93.8	70	130			
Manganese	0.48	0.0020	0.5000	0.009406	93.7	70	130			

Sample ID: **2202549-003DMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MW-17** Batch ID: **B85965** RunNo: **85965**
Prep Date: Analysis Date: **2/18/2022** SeqNo: **3028067** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.55	0.020	0.5000	0.06566	97.1	70	130	3.02	20	
Manganese	0.49	0.0020	0.5000	0.009406	95.3	70	130	1.67	20	

Sample ID: **MB-A** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **A85995** RunNo: **85995**
Prep Date: Analysis Date: **2/21/2022** SeqNo: **3029641** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202549**
25-Feb-22

Client: EA Engineering
Project: Sparton

Sample ID: **MB-A** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **A85995** RunNo: **85995**
Prep Date: Analysis Date: **2/21/2022** SeqNo: **3029641** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LLLCS-A** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **A85995** RunNo: **85995**
Prep Date: Analysis Date: **2/21/2022** SeqNo: **3029642** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.0065	0.0060	0.006000	0	108	50	150			

Sample ID: **LCS-A** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **A85995** RunNo: **85995**
Prep Date: Analysis Date: **2/21/2022** SeqNo: **3029643** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.53	0.0060	0.5000	0	105	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202549**
25-Feb-22

Client: EA Engineering
Project: Sparton

Sample ID: **MB-65630** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **65630** RunNo: **85956**
Prep Date: **2/17/2022** Analysis Date: **2/18/2022** SeqNo: **3027889** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LCSLL-65630** SampType: **LCSLL** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC** Batch ID: **65630** RunNo: **85956**
Prep Date: **2/17/2022** Analysis Date: **2/18/2022** SeqNo: **3027890** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.0067	0.0060	0.006000	0	111	50	150			

Sample ID: **LCS-65630** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **65630** RunNo: **85956**
Prep Date: **2/17/2022** Analysis Date: **2/18/2022** SeqNo: **3027891** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.50	0.0060	0.5000	0	99.1	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202549**
25-Feb-22

Client: EA Engineering
Project: Sparton

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R85788** RunNo: **85788**
Prep Date: Analysis Date: **2/12/2022** SeqNo: **3020422** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	87.6	70	130			
Toluene	19	1.0	20.00	0	94.1	70	130			
Chlorobenzene	20	1.0	20.00	0	99.0	70	130			
1,1-Dichloroethene	16	1.0	20.00	0	79.4	70	130			
Trichloroethene (TCE)	17	1.0	20.00	0	86.0	70	130			
Surr: 1,2-Dichloroethane-d4	9.5		10.00		95.4	70	130			
Surr: 4-Bromofluorobenzene	9.3		10.00		93.3	70	130			
Surr: Dibromofluoromethane	9.3		10.00		93.0	70	130			
Surr: Toluene-d8	9.5		10.00		95.0	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R85788** RunNo: **85788**
Prep Date: Analysis Date: **2/12/2022** SeqNo: **3022349** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202549**
25-Feb-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R85788**	RunNo: **85788**	
Prep Date:	Analysis Date: **2/12/2022**	SeqNo: **3022349**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202549**
25-Feb-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R85788** RunNo: **85788**
Prep Date: Analysis Date: **2/12/2022** SeqNo: **3022349** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.0	70	130			
Surr: 4-Bromofluorobenzene	9.4		10.00		93.5	70	130			
Surr: Dibromofluoromethane	9.5		10.00		94.6	70	130			
Surr: Toluene-d8	9.5		10.00		95.3	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202549**

25-Feb-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb-65547** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **65547** RunNo: **86013**
Prep Date: **2/15/2022** Analysis Date: **2/22/2022** SeqNo: **3030300** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	2.1		4.000		52.0	21.9	89.8			
Surr: 2,4,6-Tribromophenol	5.0		8.000		62.8	23.4	71.6			
Surr: 2-Fluorobiphenyl	1.7		4.000		42.5	15	84.5			
Surr: 4-Terphenyl-d14	4.2		4.000		104	73.1	152			

Sample ID: **lcs-65547** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **65547** RunNo: **86013**
Prep Date: **2/15/2022** Analysis Date: **2/22/2022** SeqNo: **3030301** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.80	0.10	2.000	0	40.0	15	79.8			
Surr: Nitrobenzene-d5	3.9		5.000		77.2	21.9	89.8			
Surr: 2,4,6-Tribromophenol	7.7		10.00		76.8	23.4	71.6			S
Surr: 2-Fluorobiphenyl	2.5		5.000		50.4	15	84.5			
Surr: 4-Terphenyl-d14	5.8		5.000		117	73.1	152			

Sample ID: **lcsd-65547** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **65547** RunNo: **86013**
Prep Date: **2/15/2022** Analysis Date: **2/22/2022** SeqNo: **3030302** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.82	0.10	2.000	0	41.0	15	79.8	2.47	34.2	
Surr: Nitrobenzene-d5	4.2		5.000		84.0	21.9	89.8	0	0	
Surr: 2,4,6-Tribromophenol	7.3		10.00		73.4	23.4	71.6	0	0	S
Surr: 2-Fluorobiphenyl	3.3		5.000		66.0	15	84.5	0	0	
Surr: 4-Terphenyl-d14	6.4		5.000		127	73.1	152	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: **EA Engineering** Work Order Number: **2202549** RcptNo: 1

Received By: **Tracy Casarrubias** **2/10/2022 3:38:00 PM**

Completed By: **Cheyenne Cason** **2/10/2022 3:49:19 PM** Chml

Reviewed By: JR 2-11-22

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 7 (<2 or >12 unless noted)
Adjusted? NO
Checked by: JR 2/11/22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.6	Good				
2	2.8	Good				

Chain-of-Custody Record

Client: Sparton Technologies Inc.
EA Engineering, Science and Technology
Mailing Address: 320 Gold Ave SW #1300
Albuquerque NM 87102
Phone #: 505 715-4154
email or Fax#: rmarley@eaest.com
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: Sparton
Project #: Bills to Sparton direct
Project Manager: Bob Marley, EA Engineering
Sampler: Scott Miles
On Ice: ☑ Yes ☐ No
# of Coolers: 2
Cooler Temp(including CF): 1.) 2.3+0.3=2.6(°C) 2.) 2.5+0.3=2.8

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2202549	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	VOCs 8260B	1,4 Dioxane 8270 SIM	Total Chromium	Dissolved Metals (Cr, Fe, Mn)		
2-9-22	1041	Aq	MW-80	3x VOA, 1L Amber 1x HDPE 125ml	HNO_3, HCl, none	001											X	X	X			
	1041		MW-80 dup			002											X	X	X			
	1310		MW-17			003											X	X	X	X		
2-10-22	0938		MW-57D			004											X	X	X	X		
	1103		MW-66			005											X	X	X	X		
	1342		MW-71R			006											X	X	X	X		
	1200		Trip Blank	2x VOA	HCl	007											X					

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
2-10-22	1537			CDU	2/10/22	15:38
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

February 28, 2022

Bob Marley
EA Engineering
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL:
FAX

RE: Sparton OrderNo.: 2202648

Dear Bob Marley:

Hall Environmental Analysis Laboratory received 2 sample(s) on 2/11/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2202648**
Date Reported: **2/28/2022**

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202648-001 **Matrix:** AQUEOUS

Client Sample ID: MW-65
Collection Date: 2/11/2022 3:51:00 PM
Received Date: 2/11/2022 4:43:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS						Analyst:	**bcv**
Chromium	ND	0.0060		mg/L	1	2/22/2022 2:33:55 PM	65702
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	2/22/2022 7:45:00 PM	65547
Surr: 2-Fluorobiphenyl	67.5	15-84.5		%Rec	1	2/22/2022 7:45:00 PM	65547
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
Toluene	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
Ethylbenzene	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
Naphthalene	ND	2.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
1-Methylnaphthalene	ND	4.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
2-Methylnaphthalene	ND	4.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
Acetone	ND	10		µg/L	1	2/16/2022 12:40:34 AM	R85850
Bromobenzene	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
Bromodichloromethane	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
Bromoform	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
Bromomethane	ND	3.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
2-Butanone	ND	10		µg/L	1	2/16/2022 12:40:34 AM	R85850
Carbon disulfide	ND	10		µg/L	1	2/16/2022 12:40:34 AM	R85850
Carbon Tetrachloride	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
Chlorobenzene	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
Chloroethane	ND	2.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
Chloroform	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
Chloromethane	ND	3.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
2-Chlorotoluene	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
4-Chlorotoluene	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
cis-1,2-DCE	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
Dibromochloromethane	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
Dibromomethane	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202648-001 **Matrix:** AQUEOUS

Client Sample ID: MW-65
Collection Date: 2/11/2022 3:51:00 PM
Received Date: 2/11/2022 4:43:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
1,1-Dichloroethane	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
1,1-Dichloroethene	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
1,2-Dichloropropane	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
1,3-Dichloropropane	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
2,2-Dichloropropane	ND	2.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
1,1-Dichloropropene	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
Hexachlorobutadiene	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
2-Hexanone	ND	10		µg/L	1	2/16/2022 12:40:34 AM	R85850
Isopropylbenzene	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
4-Isopropyltoluene	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
4-Methyl-2-pentanone	ND	10		µg/L	1	2/16/2022 12:40:34 AM	R85850
Methylene Chloride	ND	3.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
n-Butylbenzene	ND	3.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
n-Propylbenzene	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
sec-Butylbenzene	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
Styrene	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
tert-Butylbenzene	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
trans-1,2-DCE	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
Trichlorofluoromethane	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
Vinyl chloride	ND	1.0		µg/L	1	2/16/2022 12:40:34 AM	R85850
Xylenes, Total	ND	1.5		µg/L	1	2/16/2022 12:40:34 AM	R85850
Surr: 1,2-Dichloroethane-d4	108	70-130		%Rec	1	2/16/2022 12:40:34 AM	R85850
Surr: 4-Bromofluorobenzene	107	70-130		%Rec	1	2/16/2022 12:40:34 AM	R85850
Surr: Dibromofluoromethane	107	70-130		%Rec	1	2/16/2022 12:40:34 AM	R85850
Surr: Toluene-d8	108	70-130		%Rec	1	2/16/2022 12:40:34 AM	R85850

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202648-002
Matrix: TRIP BLANK
Client Sample ID: Trip Blank
Collection Date: 2/11/2022 12:00:00 PM
Received Date: 2/11/2022 4:43:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
Toluene	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
Ethylbenzene	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
Naphthalene	ND	2.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
1-Methylnaphthalene	ND	4.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
2-Methylnaphthalene	ND	4.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
Acetone	ND	10		µg/L	1	2/16/2022 1:09:16 AM	R85850
Bromobenzene	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
Bromodichloromethane	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
Bromoform	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
Bromomethane	ND	3.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
2-Butanone	ND	10		µg/L	1	2/16/2022 1:09:16 AM	R85850
Carbon disulfide	ND	10		µg/L	1	2/16/2022 1:09:16 AM	R85850
Carbon Tetrachloride	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
Chlorobenzene	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
Chloroethane	ND	2.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
Chloroform	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
Chloromethane	ND	3.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
2-Chlorotoluene	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
4-Chlorotoluene	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
cis-1,2-DCE	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
Dibromochloromethane	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
Dibromomethane	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
1,1-Dichloroethane	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
1,1-Dichloroethene	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
1,2-Dichloropropane	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
1,3-Dichloropropane	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
2,2-Dichloropropane	ND	2.0		µg/L	1	2/16/2022 1:09:16 AM	R85850

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202648-002
Matrix: TRIP BLANK
Client Sample ID: Trip Blank
Collection Date: 2/11/2022 12:00:00 PM
Received Date: 2/11/2022 4:43:00 PM

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,1-Dichloropropene	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
Hexachlorobutadiene	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
2-Hexanone	ND	10		µg/L	1	2/16/2022 1:09:16 AM	R85850
Isopropylbenzene	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
4-Isopropyltoluene	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
4-Methyl-2-pentanone	ND	10		µg/L	1	2/16/2022 1:09:16 AM	R85850
Methylene Chloride	ND	3.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
n-Butylbenzene	ND	3.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
n-Propylbenzene	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
sec-Butylbenzene	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
Styrene	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
tert-Butylbenzene	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
trans-1,2-DCE	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
Trichlorofluoromethane	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
Vinyl chloride	ND	1.0		µg/L	1	2/16/2022 1:09:16 AM	R85850
Xylenes, Total	ND	1.5		µg/L	1	2/16/2022 1:09:16 AM	R85850
Surr: 1,2-Dichloroethane-d4	109	70-130		%Rec	1	2/16/2022 1:09:16 AM	R85850
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	2/16/2022 1:09:16 AM	R85850
Surr: Dibromofluoromethane	105	70-130		%Rec	1	2/16/2022 1:09:16 AM	R85850
Surr: Toluene-d8	108	70-130		%Rec	1	2/16/2022 1:09:16 AM	R85850

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202648**
28-Feb-22

Client: EA Engineering
Project: Sparton

Sample ID: **MB-65702** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **65702** RunNo: **86022**
Prep Date: **2/21/2022** Analysis Date: **2/22/2022** SeqNo: **3032473** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LCSLL-65702** SampType: **LCSLL** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC** Batch ID: **65702** RunNo: **86022**
Prep Date: **2/21/2022** Analysis Date: **2/22/2022** SeqNo: **3032474** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060	0.006000	0	84.7	50	150			

Sample ID: **LCS-65702** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **65702** RunNo: **86022**
Prep Date: **2/21/2022** Analysis Date: **2/22/2022** SeqNo: **3032475** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.49	0.0060	0.5000	0	97.1	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202648**
28-Feb-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R85850**	RunNo: **85850**	
Prep Date:	Analysis Date: **2/15/2022**	SeqNo: **3023019**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202648**
28-Feb-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R85850** RunNo: **85850**
Prep Date: Analysis Date: **2/15/2022** SeqNo: **3023019** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		104	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		109	70	130			
Surr: Dibromofluoromethane	10		10.00		105	70	130			
Surr: Toluene-d8	11		10.00		108	70	130			

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R85850** RunNo: **85850**
Prep Date: Analysis Date: **2/15/2022** SeqNo: **3023314** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	70	130			
Toluene	20	1.0	20.00	0	98.9	70	130			
Chlorobenzene	20	1.0	20.00	0	101	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202648**
28-Feb-22

Client: EA Engineering
Project: Sparton

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R85850** RunNo: **85850**
Prep Date: Analysis Date: **2/15/2022** SeqNo: **3023314** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	19	1.0	20.00	0	96.7	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	97.4	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		102	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	11		10.00		114	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202648**
28-Feb-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb-65547** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **65547** RunNo: **86013**
Prep Date: **2/15/2022** Analysis Date: **2/22/2022** SeqNo: **3030300** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	2.1		4.000		52.0	21.9	89.8			
Surr: 2,4,6-Tribromophenol	5.0		8.000		62.8	23.4	71.6			
Surr: 2-Fluorobiphenyl	1.7		4.000		42.5	15	84.5			
Surr: 4-Terphenyl-d14	4.2		4.000		104	73.1	152			

Sample ID: **lcs-65547** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **65547** RunNo: **86013**
Prep Date: **2/15/2022** Analysis Date: **2/22/2022** SeqNo: **3030301** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.80	0.10	2.000	0	40.0	15	79.8			
Surr: Nitrobenzene-d5	3.9		5.000		77.2	21.9	89.8			
Surr: 2,4,6-Tribromophenol	7.7		10.00		76.8	23.4	71.6			S
Surr: 2-Fluorobiphenyl	2.5		5.000		50.4	15	84.5			
Surr: 4-Terphenyl-d14	5.8		5.000		117	73.1	152			

Sample ID: **lcsd-65547** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **65547** RunNo: **86013**
Prep Date: **2/15/2022** Analysis Date: **2/22/2022** SeqNo: **3030302** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.82	0.10	2.000	0	41.0	15	79.8	2.47	34.2	
Surr: Nitrobenzene-d5	4.2		5.000		84.0	21.9	89.8	0	0	
Surr: 2,4,6-Tribromophenol	7.3		10.00		73.4	23.4	71.6	0	0	S
Surr: 2-Fluorobiphenyl	3.3		5.000		66.0	15	84.5	0	0	
Surr: 4-Terphenyl-d14	6.4		5.000		127	73.1	152	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: EA Engineering Work Order Number: 2202648 RcptNo: 1

Received By: Juan Rojas 2/11/2022 4:43:00 PM

Completed By: Tracy Casarrubias 2/14/2022 9:38:52 AM

Reviewed By: 2-14-22

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☑ NA ☐
   Samples were collected the same day and chilled.
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 6/ (<2 or >12 unless noted)
Adjusted? N/O
Checked by: JR 2/14/22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks: Sample 002A. One of the VOAs was leaking. JR 2/14/22.

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	8.7	Good	Not Present			

Chain-of-Custody Record

Client: Sparton Technologies Inc
EA Engineering, Science and Technology
Mailing Address: 320 Gold Ave SW # 1300
Albuquerque, NM 87102
Phone #: 505-715-4154
email or Fax#: r marley@eaest.com
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: Sparton
Project #: Bills to Sparton Direct
Project Manager: Bob Marley, EA Engineering
Sampler: Scott Miles
On Ice: ☒ Yes ☐ No
# of Coolers: 1
Cooler Temp(including CF): 8.8-0.1=8.7 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2202648	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	VOCs 8260B	1,4 Dioxane 8270 SIM	Total Chromium			
2-11-22	1551	Aq	MW-65	3x VOA 1L Amber 1x HDPE 125ml	HNO_3, HCl None	001											X	X	X			
	1200		Trip Blank	2x VOA	HCl	002											X					

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
2-11-22	16:43			CDU	2/11/22	16:43
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

March 10, 2022

Bob Marley
EA Engineering
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL:
FAX:

RE: Sparton OrderNo.: 2202381

Dear Bob Marley:

Hall Environmental Analysis Laboratory received 8 sample(s) on 2/8/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2202381**
Date Reported: **3/10/2022**

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202381-001 **Matrix:** AQUEOUS

Client Sample ID: MW-69
Collection Date: 2/7/2022 2:03:00 PM
Received Date: 2/8/2022 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS						Analyst:	**bcv**
Chromium	0.011	0.0060		mg/L	1	2/15/2022 5:23:14 PM	65527
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	5.7	1.0		µg/L	1	2/16/2022 12:22:00 AM	65452
Surr: 2-Fluorobiphenyl	68.5	15-84.5		%Rec	1	2/16/2022 12:22:00 AM	65452
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
Toluene	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
Ethylbenzene	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
Naphthalene	ND	2.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
1-Methylnaphthalene	ND	4.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
2-Methylnaphthalene	ND	4.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
Acetone	ND	10		µg/L	1	2/10/2022 5:27:40 PM	R85764
Bromobenzene	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
Bromodichloromethane	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
Bromoform	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
Bromomethane	ND	3.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
2-Butanone	ND	10		µg/L	1	2/10/2022 5:27:40 PM	R85764
Carbon disulfide	ND	10		µg/L	1	2/10/2022 5:27:40 PM	R85764
Carbon Tetrachloride	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
Chlorobenzene	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
Chloroethane	ND	2.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
Chloroform	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
Chloromethane	ND	3.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
2-Chlorotoluene	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
4-Chlorotoluene	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
cis-1,2-DCE	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
Dibromochloromethane	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
Dibromomethane	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202381-001 **Matrix:** AQUEOUS

Client Sample ID: MW-69
Collection Date: 2/7/2022 2:03:00 PM
Received Date: 2/8/2022 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
1,1-Dichloroethane	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
1,1-Dichloroethene	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
1,2-Dichloropropane	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
1,3-Dichloropropane	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
2,2-Dichloropropane	ND	2.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
1,1-Dichloropropene	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
Hexachlorobutadiene	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
2-Hexanone	ND	10		µg/L	1	2/10/2022 5:27:40 PM	R85764
Isopropylbenzene	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
4-Isopropyltoluene	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
4-Methyl-2-pentanone	ND	10		µg/L	1	2/10/2022 5:27:40 PM	R85764
Methylene Chloride	ND	3.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
n-Butylbenzene	ND	3.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
n-Propylbenzene	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
sec-Butylbenzene	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
Styrene	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
tert-Butylbenzene	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
trans-1,2-DCE	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
Trichlorofluoromethane	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
Vinyl chloride	ND	1.0		µg/L	1	2/10/2022 5:27:40 PM	R85764
Xylenes, Total	ND	1.5		µg/L	1	2/10/2022 5:27:40 PM	R85764
Surr: 1,2-Dichloroethane-d4	110	70-130		%Rec	1	2/10/2022 5:27:40 PM	R85764
Surr: 4-Bromofluorobenzene	107	70-130		%Rec	1	2/10/2022 5:27:40 PM	R85764
Surr: Dibromofluoromethane	104	70-130		%Rec	1	2/10/2022 5:27:40 PM	R85764
Surr: Toluene-d8	102	70-130		%Rec	1	2/10/2022 5:27:40 PM	R85764

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202381-002 **Matrix:** AQUEOUS

Client Sample ID: MW-68
Collection Date: 2/7/2022 2:15:00 PM
Received Date: 2/8/2022 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS						Analyst:	**bcv**
Chromium	ND	0.0060		mg/L	1	2/15/2022 5:24:49 PM	65527
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	2/16/2022 1:05:00 AM	65452
Surr: 2-Fluorobiphenyl	66.0	15-84.5		%Rec	1	2/16/2022 1:05:00 AM	65452
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
Toluene	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
Ethylbenzene	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
Naphthalene	ND	2.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
1-Methylnaphthalene	ND	4.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
2-Methylnaphthalene	ND	4.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
Acetone	ND	10		µg/L	1	2/10/2022 5:56:29 PM	R85764
Bromobenzene	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
Bromodichloromethane	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
Bromoform	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
Bromomethane	ND	3.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
2-Butanone	ND	10		µg/L	1	2/10/2022 5:56:29 PM	R85764
Carbon disulfide	ND	10		µg/L	1	2/10/2022 5:56:29 PM	R85764
Carbon Tetrachloride	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
Chlorobenzene	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
Chloroethane	ND	2.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
Chloroform	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
Chloromethane	ND	3.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
2-Chlorotoluene	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
4-Chlorotoluene	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
cis-1,2-DCE	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
Dibromochloromethane	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
Dibromomethane	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202381-002 **Matrix:** AQUEOUS

Client Sample ID: MW-68
Collection Date: 2/7/2022 2:15:00 PM
Received Date: 2/8/2022 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
1,1-Dichloroethane	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
1,1-Dichloroethene	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
1,2-Dichloropropane	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
1,3-Dichloropropane	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
2,2-Dichloropropane	ND	2.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
1,1-Dichloropropene	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
Hexachlorobutadiene	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
2-Hexanone	ND	10		µg/L	1	2/10/2022 5:56:29 PM	R85764
Isopropylbenzene	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
4-Isopropyltoluene	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
4-Methyl-2-pentanone	ND	10		µg/L	1	2/10/2022 5:56:29 PM	R85764
Methylene Chloride	ND	3.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
n-Butylbenzene	ND	3.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
n-Propylbenzene	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
sec-Butylbenzene	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
Styrene	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
tert-Butylbenzene	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
trans-1,2-DCE	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
Trichlorofluoromethane	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
Vinyl chloride	ND	1.0		µg/L	1	2/10/2022 5:56:29 PM	R85764
Xylenes, Total	ND	1.5		µg/L	1	2/10/2022 5:56:29 PM	R85764
Surr: 1,2-Dichloroethane-d4	112	70-130		%Rec	1	2/10/2022 5:56:29 PM	R85764
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	1	2/10/2022 5:56:29 PM	R85764
Surr: Dibromofluoromethane	110	70-130		%Rec	1	2/10/2022 5:56:29 PM	R85764
Surr: Toluene-d8	106	70-130		%Rec	1	2/10/2022 5:56:29 PM	R85764

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202381-003 **Matrix:** AQUEOUS

Client Sample ID: MW-69 Dup
Collection Date: 2/7/2022 2:03:00 PM
Received Date: 2/8/2022 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS						Analyst:	**bcv**
Chromium	0.010	0.0060		mg/L	1	2/15/2022 5:26:26 PM	65527
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	5.3	1.0		µg/L	1	2/16/2022 1:48:00 AM	65452
Surr: 2-Fluorobiphenyl	54.0	15-84.5		%Rec	1	2/16/2022 1:48:00 AM	65452
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
Toluene	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
Ethylbenzene	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
Naphthalene	ND	2.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
1-Methylnaphthalene	ND	4.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
2-Methylnaphthalene	ND	4.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
Acetone	ND	10		µg/L	1	2/10/2022 6:25:25 PM	R85764
Bromobenzene	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
Bromodichloromethane	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
Bromoform	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
Bromomethane	ND	3.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
2-Butanone	ND	10		µg/L	1	2/10/2022 6:25:25 PM	R85764
Carbon disulfide	ND	10		µg/L	1	2/10/2022 6:25:25 PM	R85764
Carbon Tetrachloride	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
Chlorobenzene	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
Chloroethane	ND	2.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
Chloroform	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
Chloromethane	ND	3.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
2-Chlorotoluene	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
4-Chlorotoluene	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
cis-1,2-DCE	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
Dibromochloromethane	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
Dibromomethane	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202381-003 **Matrix:** AQUEOUS

Client Sample ID: MW-69 Dup
Collection Date: 2/7/2022 2:03:00 PM
Received Date: 2/8/2022 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
1,1-Dichloroethane	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
1,1-Dichloroethene	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
1,2-Dichloropropane	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
1,3-Dichloropropane	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
2,2-Dichloropropane	ND	2.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
1,1-Dichloropropene	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
Hexachlorobutadiene	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
2-Hexanone	ND	10		µg/L	1	2/10/2022 6:25:25 PM	R85764
Isopropylbenzene	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
4-Isopropyltoluene	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
4-Methyl-2-pentanone	ND	10		µg/L	1	2/10/2022 6:25:25 PM	R85764
Methylene Chloride	ND	3.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
n-Butylbenzene	ND	3.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
n-Propylbenzene	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
sec-Butylbenzene	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
Styrene	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
tert-Butylbenzene	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
trans-1,2-DCE	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
Trichlorofluoromethane	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
Vinyl chloride	ND	1.0		µg/L	1	2/10/2022 6:25:25 PM	R85764
Xylenes, Total	ND	1.5		µg/L	1	2/10/2022 6:25:25 PM	R85764
Surr: 1,2-Dichloroethane-d4	112	70-130		%Rec	1	2/10/2022 6:25:25 PM	R85764
Surr: 4-Bromofluorobenzene	107	70-130		%Rec	1	2/10/2022 6:25:25 PM	R85764
Surr: Dibromofluoromethane	116	70-130		%Rec	1	2/10/2022 6:25:25 PM	R85764
Surr: Toluene-d8	105	70-130		%Rec	1	2/10/2022 6:25:25 PM	R85764

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202381-004 **Matrix:** AQUEOUS

Client Sample ID: MW-62R
Collection Date: 2/7/2022 3:31:00 PM
Received Date: 2/8/2022 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS						Analyst:	**bcv**
Chromium	ND	0.0060		mg/L	1	2/15/2022 5:28:03 PM	65527
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	2/16/2022 2:32:00 AM	65452
Surr: 2-Fluorobiphenyl	60.0	15-84.5		%Rec	1	2/16/2022 2:32:00 AM	65452
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
Toluene	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
Ethylbenzene	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
Naphthalene	ND	2.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
1-Methylnaphthalene	ND	4.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
2-Methylnaphthalene	ND	4.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
Acetone	ND	10		µg/L	1	2/10/2022 6:54:18 PM	R85764
Bromobenzene	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
Bromodichloromethane	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
Bromoform	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
Bromomethane	ND	3.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
2-Butanone	ND	10		µg/L	1	2/10/2022 6:54:18 PM	R85764
Carbon disulfide	ND	10		µg/L	1	2/10/2022 6:54:18 PM	R85764
Carbon Tetrachloride	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
Chlorobenzene	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
Chloroethane	ND	2.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
Chloroform	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
Chloromethane	ND	3.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
2-Chlorotoluene	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
4-Chlorotoluene	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
cis-1,2-DCE	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
Dibromochloromethane	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
Dibromomethane	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202381-004 **Matrix:** AQUEOUS

Client Sample ID: MW-62R
Collection Date: 2/7/2022 3:31:00 PM
Received Date: 2/8/2022 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
1,1-Dichloroethane	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
1,1-Dichloroethene	5.3	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
1,2-Dichloropropane	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
1,3-Dichloropropane	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
2,2-Dichloropropane	ND	2.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
1,1-Dichloropropene	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
Hexachlorobutadiene	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
2-Hexanone	ND	10		µg/L	1	2/10/2022 6:54:18 PM	R85764
Isopropylbenzene	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
4-Isopropyltoluene	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
4-Methyl-2-pentanone	ND	10		µg/L	1	2/10/2022 6:54:18 PM	R85764
Methylene Chloride	ND	3.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
n-Butylbenzene	ND	3.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
n-Propylbenzene	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
sec-Butylbenzene	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
Styrene	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
tert-Butylbenzene	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
trans-1,2-DCE	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
Trichloroethene (TCE)	4.3	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
Trichlorofluoromethane	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
Vinyl chloride	ND	1.0		µg/L	1	2/10/2022 6:54:18 PM	R85764
Xylenes, Total	ND	1.5		µg/L	1	2/10/2022 6:54:18 PM	R85764
Surr: 1,2-Dichloroethane-d4	114	70-130		%Rec	1	2/10/2022 6:54:18 PM	R85764
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	2/10/2022 6:54:18 PM	R85764
Surr: Dibromofluoromethane	117	70-130		%Rec	1	2/10/2022 6:54:18 PM	R85764
Surr: Toluene-d8	108	70-130		%Rec	1	2/10/2022 6:54:18 PM	R85764

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202381-005 **Matrix:** AQUEOUS

Client Sample ID: MW-74
Collection Date: 2/8/2022 10:36:00 AM
Received Date: 2/8/2022 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**bcv**
Chromium	ND	0.0060		mg/L	1	2/17/2022 7:49:08 PM	C85934
Iron	ND	0.020		mg/L	1	2/14/2022 5:02:35 PM	B85824
Manganese	ND	0.0020		mg/L	1	2/14/2022 5:02:35 PM	B85824
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.0	1.0		µg/L	1	2/16/2022 3:15:00 AM	65452
Surr: 2-Fluorobiphenyl	61.0	15-84.5		%Rec	1	2/16/2022 3:15:00 AM	65452
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
Toluene	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
Ethylbenzene	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
Naphthalene	ND	2.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
1-Methylnaphthalene	ND	4.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
2-Methylnaphthalene	ND	4.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
Acetone	ND	10		µg/L	1	2/10/2022 7:23:13 PM	R85764
Bromobenzene	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
Bromodichloromethane	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
Bromoform	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
Bromomethane	ND	3.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
2-Butanone	ND	10		µg/L	1	2/10/2022 7:23:13 PM	R85764
Carbon disulfide	ND	10		µg/L	1	2/10/2022 7:23:13 PM	R85764
Carbon Tetrachloride	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
Chlorobenzene	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
Chloroethane	ND	2.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
Chloroform	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
Chloromethane	ND	3.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
2-Chlorotoluene	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
4-Chlorotoluene	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
cis-1,2-DCE	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
Dibromochloromethane	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
Dibromomethane	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202381-005 **Matrix:** AQUEOUS

Client Sample ID: MW-74
Collection Date: 2/8/2022 10:36:00 AM
Received Date: 2/8/2022 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
1,1-Dichloroethane	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
1,1-Dichloroethene	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
1,2-Dichloropropane	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
1,3-Dichloropropane	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
2,2-Dichloropropane	ND	2.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
1,1-Dichloropropene	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
Hexachlorobutadiene	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
2-Hexanone	ND	10		µg/L	1	2/10/2022 7:23:13 PM	R85764
Isopropylbenzene	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
4-Isopropyltoluene	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
4-Methyl-2-pentanone	ND	10		µg/L	1	2/10/2022 7:23:13 PM	R85764
Methylene Chloride	ND	3.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
n-Butylbenzene	ND	3.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
n-Propylbenzene	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
sec-Butylbenzene	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
Styrene	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
tert-Butylbenzene	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
trans-1,2-DCE	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
Trichlorofluoromethane	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
Vinyl chloride	ND	1.0		µg/L	1	2/10/2022 7:23:13 PM	R85764
Xylenes, Total	ND	1.5		µg/L	1	2/10/2022 7:23:13 PM	R85764
Surr: 1,2-Dichloroethane-d4	113	70-130		%Rec	1	2/10/2022 7:23:13 PM	R85764
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	2/10/2022 7:23:13 PM	R85764
Surr: Dibromofluoromethane	114	70-130		%Rec	1	2/10/2022 7:23:13 PM	R85764
Surr: Toluene-d8	106	70-130		%Rec	1	2/10/2022 7:23:13 PM	R85764

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202381-006 **Matrix:** AQUEOUS

Client Sample ID: MW-76
Collection Date: 2/8/2022 12:53:00 PM
Received Date: 2/8/2022 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**bcv**
Chromium	ND	0.0060		mg/L	1	2/17/2022 7:50:37 PM	C85934
Iron	ND	0.020		mg/L	1	2/14/2022 5:04:48 PM	B85824
Manganese	ND	0.0020		mg/L	1	2/14/2022 5:04:48 PM	B85824
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	1.6	1.0		µg/L	1	2/16/2022 3:58:00 AM	65452
Surr: 2-Fluorobiphenyl	49.0	15-84.5		%Rec	1	2/16/2022 3:58:00 AM	65452
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
Toluene	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
Ethylbenzene	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
Naphthalene	ND	2.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
1-Methylnaphthalene	ND	4.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
2-Methylnaphthalene	ND	4.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
Acetone	ND	10		µg/L	1	2/10/2022 7:52:04 PM	R85764
Bromobenzene	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
Bromodichloromethane	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
Bromoform	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
Bromomethane	ND	3.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
2-Butanone	ND	10		µg/L	1	2/10/2022 7:52:04 PM	R85764
Carbon disulfide	ND	10		µg/L	1	2/10/2022 7:52:04 PM	R85764
Carbon Tetrachloride	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
Chlorobenzene	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
Chloroethane	ND	2.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
Chloroform	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
Chloromethane	ND	3.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
2-Chlorotoluene	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
4-Chlorotoluene	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
cis-1,2-DCE	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
Dibromochloromethane	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
Dibromomethane	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202381-006 **Matrix:** AQUEOUS

Client Sample ID: MW-76
Collection Date: 2/8/2022 12:53:00 PM
Received Date: 2/8/2022 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
1,1-Dichloroethane	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
1,1-Dichloroethene	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
1,2-Dichloropropane	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
1,3-Dichloropropane	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
2,2-Dichloropropane	ND	2.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
1,1-Dichloropropene	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
Hexachlorobutadiene	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
2-Hexanone	ND	10		µg/L	1	2/10/2022 7:52:04 PM	R85764
Isopropylbenzene	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
4-Isopropyltoluene	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
4-Methyl-2-pentanone	ND	10		µg/L	1	2/10/2022 7:52:04 PM	R85764
Methylene Chloride	ND	3.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
n-Butylbenzene	ND	3.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
n-Propylbenzene	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
sec-Butylbenzene	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
Styrene	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
tert-Butylbenzene	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
trans-1,2-DCE	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
Trichlorofluoromethane	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
Vinyl chloride	ND	1.0		µg/L	1	2/10/2022 7:52:04 PM	R85764
Xylenes, Total	ND	1.5		µg/L	1	2/10/2022 7:52:04 PM	R85764
Surr: 1,2-Dichloroethane-d4	106	70-130		%Rec	1	2/10/2022 7:52:04 PM	R85764
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	2/10/2022 7:52:04 PM	R85764
Surr: Dibromofluoromethane	111	70-130		%Rec	1	2/10/2022 7:52:04 PM	R85764
Surr: Toluene-d8	106	70-130		%Rec	1	2/10/2022 7:52:04 PM	R85764

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202381-007 **Matrix:** AQUEOUS

Client Sample ID: MW-75
Collection Date: 2/8/2022 2:23:00 PM
Received Date: 2/8/2022 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**bcv**
Chromium	ND	0.0060		mg/L	1	2/17/2022 7:54:38 PM	C85934
Iron	ND	0.020		mg/L	1	2/14/2022 5:07:02 PM	B85824
Manganese	ND	0.0020		mg/L	1	2/14/2022 5:07:02 PM	B85824
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	1.9	1.0		µg/L	1	2/16/2022 4:42:00 AM	65452
Surr: 2-Fluorobiphenyl	59.5	15-84.5		%Rec	1	2/16/2022 4:42:00 AM	65452
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
Toluene	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
Ethylbenzene	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
Naphthalene	ND	2.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
1-Methylnaphthalene	ND	4.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
2-Methylnaphthalene	ND	4.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
Acetone	ND	10		µg/L	1	2/10/2022 8:20:58 PM	R85764
Bromobenzene	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
Bromodichloromethane	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
Bromoform	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
Bromomethane	ND	3.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
2-Butanone	ND	10		µg/L	1	2/10/2022 8:20:58 PM	R85764
Carbon disulfide	ND	10		µg/L	1	2/10/2022 8:20:58 PM	R85764
Carbon Tetrachloride	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
Chlorobenzene	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
Chloroethane	ND	2.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
Chloroform	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
Chloromethane	ND	3.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
2-Chlorotoluene	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
4-Chlorotoluene	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
cis-1,2-DCE	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
Dibromochloromethane	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
Dibromomethane	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2202381-007 **Matrix:** AQUEOUS

Client Sample ID: MW-75
Collection Date: 2/8/2022 2:23:00 PM
Received Date: 2/8/2022 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
1,1-Dichloroethane	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
1,1-Dichloroethene	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
1,2-Dichloropropane	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
1,3-Dichloropropane	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
2,2-Dichloropropane	ND	2.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
1,1-Dichloropropene	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
Hexachlorobutadiene	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
2-Hexanone	ND	10		µg/L	1	2/10/2022 8:20:58 PM	R85764
Isopropylbenzene	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
4-Isopropyltoluene	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
4-Methyl-2-pentanone	ND	10		µg/L	1	2/10/2022 8:20:58 PM	R85764
Methylene Chloride	ND	3.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
n-Butylbenzene	ND	3.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
n-Propylbenzene	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
sec-Butylbenzene	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
Styrene	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
tert-Butylbenzene	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
trans-1,2-DCE	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
Trichlorofluoromethane	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
Vinyl chloride	ND	1.0		µg/L	1	2/10/2022 8:20:58 PM	R85764
Xylenes, Total	ND	1.5		µg/L	1	2/10/2022 8:20:58 PM	R85764
Surr: 1,2-Dichloroethane-d4	109	70-130		%Rec	1	2/10/2022 8:20:58 PM	R85764
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	2/10/2022 8:20:58 PM	R85764
Surr: Dibromofluoromethane	110	70-130		%Rec	1	2/10/2022 8:20:58 PM	R85764
Surr: Toluene-d8	111	70-130		%Rec	1	2/10/2022 8:20:58 PM	R85764

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton
Collection Date:
Lab ID: 2202381-008
Matrix: TRIP BLANK
Received Date: 2/8/2022 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
Toluene	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
Ethylbenzene	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
Naphthalene	ND	2.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
1-Methylnaphthalene	ND	4.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
2-Methylnaphthalene	ND	4.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
Acetone	ND	10		µg/L	1	2/10/2022 8:49:51 PM	R85764
Bromobenzene	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
Bromodichloromethane	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
Bromoform	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
Bromomethane	ND	3.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
2-Butanone	ND	10		µg/L	1	2/10/2022 8:49:51 PM	R85764
Carbon disulfide	ND	10		µg/L	1	2/10/2022 8:49:51 PM	R85764
Carbon Tetrachloride	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
Chlorobenzene	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
Chloroethane	ND	2.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
Chloroform	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
Chloromethane	ND	3.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
2-Chlorotoluene	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
4-Chlorotoluene	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
cis-1,2-DCE	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
Dibromochloromethane	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
Dibromomethane	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
1,1-Dichloroethane	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
1,1-Dichloroethene	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
1,2-Dichloropropane	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
1,3-Dichloropropane	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
2,2-Dichloropropane	ND	2.0		µg/L	1	2/10/2022 8:49:51 PM	R85764

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton
Collection Date:
Lab ID: 2202381-008
Matrix: TRIP BLANK
Received Date: 2/8/2022 4:00:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,1-Dichloropropene	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
Hexachlorobutadiene	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
2-Hexanone	ND	10		µg/L	1	2/10/2022 8:49:51 PM	R85764
Isopropylbenzene	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
4-Isopropyltoluene	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
4-Methyl-2-pentanone	ND	10		µg/L	1	2/10/2022 8:49:51 PM	R85764
Methylene Chloride	ND	3.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
n-Butylbenzene	ND	3.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
n-Propylbenzene	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
sec-Butylbenzene	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
Styrene	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
tert-Butylbenzene	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
trans-1,2-DCE	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
Trichlorofluoromethane	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
Vinyl chloride	ND	1.0		µg/L	1	2/10/2022 8:49:51 PM	R85764
Xylenes, Total	ND	1.5		µg/L	1	2/10/2022 8:49:51 PM	R85764
Surr: 1,2-Dichloroethane-d4	110	70-130		%Rec	1	2/10/2022 8:49:51 PM	R85764
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	2/10/2022 8:49:51 PM	R85764
Surr: Dibromofluoromethane	114	70-130		%Rec	1	2/10/2022 8:49:51 PM	R85764
Surr: Toluene-d8	108	70-130		%Rec	1	2/10/2022 8:49:51 PM	R85764

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202381**
10-Mar-22

Client: EA Engineering
Project: Sparton

Sample ID: **MB-B** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **B85824** RunNo: **85824**
Prep Date: Analysis Date: **2/14/2022** SeqNo: **3022190** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID: **LLLCS-B** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **B85824** RunNo: **85824**
Prep Date: Analysis Date: **2/14/2022** SeqNo: **3022191** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.022	0.020	0.02000	0	109	50	150			
Manganese	0.0020	0.0020	0.002000	0	101	50	150			

Sample ID: **LCS-B** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **B85824** RunNo: **85824**
Prep Date: Analysis Date: **2/14/2022** SeqNo: **3022192** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.49	0.020	0.5000	0	98.7	85	115			
Manganese	0.49	0.0020	0.5000	0	97.7	85	115			

Sample ID: **MB-C** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **C85934** RunNo: **85934**
Prep Date: Analysis Date: **2/17/2022** SeqNo: **3026588** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LLLCS-C** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **C85934** RunNo: **85934**
Prep Date: Analysis Date: **2/17/2022** SeqNo: **3026589** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060	0.006000	0	77.2	50	150			

Sample ID: **LCS-C** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **C85934** RunNo: **85934**
Prep Date: Analysis Date: **2/17/2022** SeqNo: **3026590** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.48	0.0060	0.5000	0	95.8	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202381**
10-Mar-22

Client: EA Engineering
Project: Sparton

Sample ID: **2202381-006CMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MW-76** Batch ID: **C85934** RunNo: **85934**
Prep Date: Analysis Date: **2/17/2022** SeqNo: **3026615** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.46	0.0060	0.5000	0.002301	92.1	70	130			

Sample ID: **2202381-006CMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MW-76** Batch ID: **C85934** RunNo: **85934**
Prep Date: Analysis Date: **2/17/2022** SeqNo: **3026616** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.48	0.0060	0.5000	0.002301	95.5	70	130	3.64	20	

Sample ID: **2202381-007CMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MW-75** Batch ID: **C85934** RunNo: **85934**
Prep Date: Analysis Date: **2/17/2022** SeqNo: **3026618** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.48	0.0060	0.5000	0.002986	95.2	70	130			

Sample ID: **2202381-007CMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MW-75** Batch ID: **C85934** RunNo: **85934**
Prep Date: Analysis Date: **2/17/2022** SeqNo: **3026619** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.46	0.0060	0.5000	0.002986	90.7	70	130	4.78	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202381**
10-Mar-22

Client: EA Engineering
Project: Sparton

Sample ID: **MB-65527** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **65527** RunNo: **85838**
Prep Date: **2/14/2022** Analysis Date: **2/15/2022** SeqNo: **3022765** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LCSLL-65527** SampType: **LCSLL** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC** Batch ID: **65527** RunNo: **85838**
Prep Date: **2/14/2022** Analysis Date: **2/15/2022** SeqNo: **3022766** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060	0.006000	0	87.7	50	150			

Sample ID: **LCS-65527** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **65527** RunNo: **85838**
Prep Date: **2/14/2022** Analysis Date: **2/15/2022** SeqNo: **3022767** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.52	0.0060	0.5000	0	104	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202381**
10-Mar-22

Client: EA Engineering
Project: Sparton

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R85764** RunNo: **85764**
Prep Date: Analysis Date: **2/10/2022** SeqNo: **3019485** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.1	70	130			
Toluene	21	1.0	20.00	0	107	70	130			
Chlorobenzene	22	1.0	20.00	0	108	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	98.7	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	93.6	70	130			
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.7	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		109	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R85764** RunNo: **85764**
Prep Date: Analysis Date: **2/10/2022** SeqNo: **3019508** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202381**
10-Mar-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R85764**	RunNo: **85764**	
Prep Date:	Analysis Date: **2/10/2022**	SeqNo: **3019508**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202381**
10-Mar-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R85764**	RunNo: **85764**			
Prep Date:	Analysis Date: **2/10/2022**	SeqNo: **3019508**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		105	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		108	70	130			
Surr: Dibromofluoromethane	11		10.00		106	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2202381**
10-Mar-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb-65452** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **65452** RunNo: **85852**
Prep Date: **2/9/2022** Analysis Date: **2/15/2022** SeqNo: **3023178** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	2.3		4.000		57.5	21.9	89.8			
Surr: 2,4,6-Tribromophenol	3.9		8.000		49.0	23.4	71.6			
Surr: 2-Fluorobiphenyl	2.2		4.000		55.5	15	84.5			
Surr: 4-Terphenyl-d14	3.3		4.000		82.5	73.1	152			

Sample ID: **lcs-65452** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **65452** RunNo: **85852**
Prep Date: **2/9/2022** Analysis Date: **2/15/2022** SeqNo: **3023179** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.68	0.10	2.000	0	34.0	15	79.8			
Surr: Nitrobenzene-d5	3.9		5.000		78.8	21.9	89.8			
Surr: 2,4,6-Tribromophenol	6.7		10.00		67.2	23.4	71.6			
Surr: 2-Fluorobiphenyl	3.4		5.000		67.6	15	84.5			
Surr: 4-Terphenyl-d14	5.4		5.000		108	73.1	152			

Sample ID: **lcsd-65452** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **65452** RunNo: **85852**
Prep Date: **2/9/2022** Analysis Date: **2/15/2022** SeqNo: **3023180** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.62	0.10	2.000	0	31.0	15	79.8	9.23	34.2	
Surr: Nitrobenzene-d5	3.4		5.000		67.6	21.9	89.8	0	0	
Surr: 2,4,6-Tribromophenol	5.8		10.00		58.2	23.4	71.6	0	0	
Surr: 2-Fluorobiphenyl	2.9		5.000		57.6	15	84.5	0	0	
Surr: 4-Terphenyl-d14	4.8		5.000		96.0	73.1	152	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: EA Engineering Work Order Number: 2202381 RcptNo: 1

Received By: **Juan Rojas** 2/8/2022 4:00:00 PM

Completed By: **Tracy Casarrubias** 2/8/2022 4:04:36 PM

Reviewed By:

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 7
(<2 or >12 unless noted)
Adjusted? NO
Checked by: TMC 2/8/22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.3	Good	Not Present			
2	1.9	Good	Not Present			

Chain-of-Custody Record

Client: Sparton Technologies Inc
EA Engineering, Science and Technology
Mailing Address: 320 Gold Ave SW #1300
Albuquerque, NM 87102
Phone #: 505 715-4154
email or Fax#: r marley @ eaest.com
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: Sparton
Project #: Bills to Sparton Direct
Project Manager: Bob Marley, EA Engineering
Sampler: Scott Miles
On Ice: ☒ Yes ☐ No
# of Coolers: 2
Cooler Temp (including CF): 5.3-0=5.3 (°C) 1.9-0=1.9

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2202381	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	VOCs 8260B	1,4 Dioxane 8270 SIM	Total Chromium	Dissolved Metals (Cr, Fe, Mn)		
2-7-22	1403	Aq	MW-69	3x VOA, Amber 1L 1x HDPE 125ml	HNO_3, HCl none	001											X	X	X			
	1415		MW-68			002											X	X	X			
	1403		MW-69 dup			003											X	X	X			
	1531		MW-62R			004											X	X	X	X		
2-8-22	1036		MW-74			005											X	X	X	X		
	1253		MW-76			006											X	X	X	X		
	1423		MW-75			007											X	X	X	X		
	–		Trip Blank	2x VOA	HCl	008											X					

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
2-8-22	1600			CDO	2/8/22	16:00
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

March 23, 2022

Bob Marley
EA Engineering
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL:
FAX

RE: Sparton OrderNo.: 2203070

Dear Bob Marley:

Hall Environmental Analysis Laboratory received 7 sample(s) on 3/1/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2203070**
Date Reported: **3/23/2022**

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2203070-001 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Influent
Collection Date: 3/1/2022 10:49:00 AM
Received Date: 3/1/2022 4:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**ELS**
Chromium	ND	0.0060		mg/L	1	3/11/2022 10:46:30 AM	B86413
Iron	ND	0.020		mg/L	1	3/10/2022 2:05:17 PM	C86392
Manganese	ND	0.0020		mg/L	1	3/10/2022 2:05:17 PM	C86392
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	ND	0.0060		mg/L	1	3/4/2022 10:48:32 AM	65932
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.5	1.0		µg/L	1	3/4/2022 7:07:00 PM	65930
Surr: 2-Fluorobiphenyl	48.5	15-84.5		%Rec	1	3/4/2022 7:07:00 PM	65930
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
Toluene	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
Ethylbenzene	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
Naphthalene	ND	2.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
1-Methylnaphthalene	ND	4.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
2-Methylnaphthalene	ND	4.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
Acetone	ND	10		µg/L	1	3/4/2022 2:58:33 PM	R86271
Bromobenzene	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
Bromodichloromethane	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
Bromoform	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
Bromomethane	ND	3.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
2-Butanone	ND	10		µg/L	1	3/4/2022 2:58:33 PM	R86271
Carbon disulfide	ND	10		µg/L	1	3/4/2022 2:58:33 PM	R86271
Carbon Tetrachloride	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
Chlorobenzene	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
Chloroethane	ND	2.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
Chloroform	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
Chloromethane	ND	3.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
2-Chlorotoluene	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
4-Chlorotoluene	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
cis-1,2-DCE	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
Dibromochloromethane	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2203070-001 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Influent
Collection Date: 3/1/2022 10:49:00 AM
Received Date: 3/1/2022 4:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dibromomethane	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
1,1-Dichloroethane	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
1,1-Dichloroethene	16	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
1,2-Dichloropropane	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
1,3-Dichloropropane	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
2,2-Dichloropropane	ND	2.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
1,1-Dichloropropene	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
Hexachlorobutadiene	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
2-Hexanone	ND	10		µg/L	1	3/4/2022 2:58:33 PM	R86271
Isopropylbenzene	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
4-Isopropyltoluene	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
4-Methyl-2-pentanone	ND	10		µg/L	1	3/4/2022 2:58:33 PM	R86271
Methylene Chloride	ND	3.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
n-Butylbenzene	ND	3.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
n-Propylbenzene	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
sec-Butylbenzene	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
Styrene	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
tert-Butylbenzene	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
Tetrachloroethene (PCE)	1.0	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
trans-1,2-DCE	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
Trichloroethene (TCE)	130	10		µg/L	10	3/4/2022 2:29:45 PM	R86271
Trichlorofluoromethane	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
Vinyl chloride	ND	1.0		µg/L	1	3/4/2022 2:58:33 PM	R86271
Xylenes, Total	ND	1.5		µg/L	1	3/4/2022 2:58:33 PM	R86271
Surr: 1,2-Dichloroethane-d4	82.7	70-130		%Rec	1	3/4/2022 2:58:33 PM	R86271
Surr: 4-Bromofluorobenzene	107	70-130		%Rec	1	3/4/2022 2:58:33 PM	R86271
Surr: Dibromofluoromethane	101	70-130		%Rec	1	3/4/2022 2:58:33 PM	R86271

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2203070-001 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Influent
Collection Date: 3/1/2022 10:49:00 AM
Received Date: 3/1/2022 4:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Surr: Toluene-d8	103	70-130		%Rec	1	3/4/2022 2:58:33 PM	R86271

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2203070-002 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Effluent
Collection Date: 3/1/2022 10:53:00 AM
Received Date: 3/1/2022 4:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**ELS**
Chromium	ND	0.0060		mg/L	1	3/11/2022 10:48:11 AM	B86413
Iron	ND	0.020		mg/L	1	3/10/2022 2:06:56 PM	C86392
Manganese	ND	0.0020		mg/L	1	3/10/2022 2:06:56 PM	C86392
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	ND	0.0060		mg/L	1	3/4/2022 10:50:05 AM	65932
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.6	1.0		µg/L	1	3/4/2022 7:54:00 PM	65930
Surr: 2-Fluorobiphenyl	67.0	15-84.5		%Rec	1	3/4/2022 7:54:00 PM	65930
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
Toluene	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
Ethylbenzene	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
Naphthalene	ND	2.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
1-Methylnaphthalene	ND	4.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
2-Methylnaphthalene	ND	4.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
Acetone	ND	10		µg/L	1	3/4/2022 3:27:07 PM	R86271
Bromobenzene	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
Bromodichloromethane	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
Bromoform	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
Bromomethane	ND	3.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
2-Butanone	ND	10		µg/L	1	3/4/2022 3:27:07 PM	R86271
Carbon disulfide	ND	10		µg/L	1	3/4/2022 3:27:07 PM	R86271
Carbon Tetrachloride	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
Chlorobenzene	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
Chloroethane	ND	2.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
Chloroform	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
Chloromethane	ND	3.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
2-Chlorotoluene	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
4-Chlorotoluene	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
cis-1,2-DCE	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
Dibromochloromethane	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2203070-002 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Effluent
Collection Date: 3/1/2022 10:53:00 AM
Received Date: 3/1/2022 4:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dibromomethane	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
1,1-Dichloroethane	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
1,1-Dichloroethene	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
1,2-Dichloropropane	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
1,3-Dichloropropane	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
2,2-Dichloropropane	ND	2.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
1,1-Dichloropropene	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
Hexachlorobutadiene	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
2-Hexanone	ND	10		µg/L	1	3/4/2022 3:27:07 PM	R86271
Isopropylbenzene	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
4-Isopropyltoluene	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
4-Methyl-2-pentanone	ND	10		µg/L	1	3/4/2022 3:27:07 PM	R86271
Methylene Chloride	ND	3.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
n-Butylbenzene	ND	3.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
n-Propylbenzene	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
sec-Butylbenzene	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
Styrene	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
tert-Butylbenzene	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
trans-1,2-DCE	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
Trichlorofluoromethane	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
Vinyl chloride	ND	1.0		µg/L	1	3/4/2022 3:27:07 PM	R86271
Xylenes, Total	ND	1.5		µg/L	1	3/4/2022 3:27:07 PM	R86271
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	3/4/2022 3:27:07 PM	R86271
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	3/4/2022 3:27:07 PM	R86271
Surr: Dibromofluoromethane	98.5	70-130		%Rec	1	3/4/2022 3:27:07 PM	R86271

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2203070-002 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Effluent
Collection Date: 3/1/2022 10:53:00 AM
Received Date: 3/1/2022 4:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Surr: Toluene-d8	105	70-130		%Rec	1	3/4/2022 3:27:07 PM	R86271

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2203070-003
Matrix: AQUEOUS
Client Sample ID: CW-1 Effluent Duplicate
Collection Date: 3/1/2022 10:53:00 AM
Received Date: 3/1/2022 4:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst: **DAM**	
1,4-Dioxane	2.3	1.1		µg/L	1	3/4/2022 8:40:00 PM	65930
Surr: 2-Fluorobiphenyl	53.5	15-84.5		%Rec	1	3/4/2022 8:40:00 PM	65930

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2203070-004 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Influent
Collection Date: 3/1/2022 11:21:00 AM
Received Date: 3/1/2022 4:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**ELS**
Chromium	0.043	0.0060		mg/L	1	3/11/2022 10:49:50 AM	B86413
Iron	ND	0.020		mg/L	1	3/10/2022 2:08:34 PM	C86392
Manganese	0.050	0.0020	*	mg/L	1	3/11/2022 10:49:50 AM	B86413
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	0.040	0.0060		mg/L	1	3/4/2022 10:51:43 AM	65932
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.8	1.0		µg/L	1	3/4/2022 9:25:00 PM	65930
Surr: 2-Fluorobiphenyl	67.5	15-84.5		%Rec	1	3/4/2022 9:25:00 PM	65930
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
Toluene	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
Ethylbenzene	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
Naphthalene	ND	2.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
1-Methylnaphthalene	ND	4.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
2-Methylnaphthalene	ND	4.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
Acetone	ND	10		µg/L	1	3/4/2022 4:53:25 PM	R86271
Bromobenzene	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
Bromodichloromethane	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
Bromoform	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
Bromomethane	ND	3.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
2-Butanone	ND	10		µg/L	1	3/4/2022 4:53:25 PM	R86271
Carbon disulfide	ND	10		µg/L	1	3/4/2022 4:53:25 PM	R86271
Carbon Tetrachloride	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
Chlorobenzene	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
Chloroethane	ND	2.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
Chloroform	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
Chloromethane	ND	3.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
2-Chlorotoluene	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
4-Chlorotoluene	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
cis-1,2-DCE	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
Dibromochloromethane	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2203070-004 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Influent
Collection Date: 3/1/2022 11:21:00 AM
Received Date: 3/1/2022 4:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dibromomethane	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
1,1-Dichloroethane	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
1,1-Dichloroethene	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
1,2-Dichloropropane	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
1,3-Dichloropropane	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
2,2-Dichloropropane	ND	2.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
1,1-Dichloropropene	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
Hexachlorobutadiene	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
2-Hexanone	ND	10		µg/L	1	3/4/2022 4:53:25 PM	R86271
Isopropylbenzene	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
4-Isopropyltoluene	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
4-Methyl-2-pentanone	ND	10		µg/L	1	3/4/2022 4:53:25 PM	R86271
Methylene Chloride	ND	3.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
n-Butylbenzene	ND	3.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
n-Propylbenzene	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
sec-Butylbenzene	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
Styrene	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
tert-Butylbenzene	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
trans-1,2-DCE	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
Trichloroethene (TCE)	5.6	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
Trichlorofluoromethane	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
Vinyl chloride	ND	1.0		µg/L	1	3/4/2022 4:53:25 PM	R86271
Xylenes, Total	ND	1.5		µg/L	1	3/4/2022 4:53:25 PM	R86271
Surr: 1,2-Dichloroethane-d4	109	70-130		%Rec	1	3/4/2022 4:53:25 PM	R86271
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	3/4/2022 4:53:25 PM	R86271
Surr: Dibromofluoromethane	111	70-130		%Rec	1	3/4/2022 4:53:25 PM	R86271

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2203070-004 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Influent
Collection Date: 3/1/2022 11:21:00 AM
Received Date: 3/1/2022 4:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Surr: Toluene-d8	106	70-130		%Rec	1	3/4/2022 4:53:25 PM	R86271

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2203070-005 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent
Collection Date: 3/1/2022 11:26:00 AM
Received Date: 3/1/2022 4:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**ELS**
Chromium	0.043	0.0060		mg/L	1	3/11/2022 10:51:28 AM	B86413
Iron	ND	0.020		mg/L	1	3/10/2022 2:10:15 PM	C86392
Manganese	0.037	0.0020		mg/L	1	3/11/2022 10:51:28 AM	B86413
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	0.040	0.0060		mg/L	1	3/4/2022 10:53:20 AM	65932
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.4	1.0		µg/L	1	3/4/2022 10:11:00 PM	65930
Surr: 2-Fluorobiphenyl	58.5	15-84.5		%Rec	1	3/4/2022 10:11:00 PM	65930
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
Toluene	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
Ethylbenzene	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
Naphthalene	ND	2.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
1-Methylnaphthalene	ND	4.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
2-Methylnaphthalene	ND	4.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
Acetone	ND	10		µg/L	1	3/4/2022 5:22:32 PM	R86271
Bromobenzene	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
Bromodichloromethane	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
Bromoform	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
Bromomethane	ND	3.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
2-Butanone	ND	10		µg/L	1	3/4/2022 5:22:32 PM	R86271
Carbon disulfide	ND	10		µg/L	1	3/4/2022 5:22:32 PM	R86271
Carbon Tetrachloride	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
Chlorobenzene	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
Chloroethane	ND	2.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
Chloroform	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
Chloromethane	ND	3.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
2-Chlorotoluene	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
4-Chlorotoluene	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
cis-1,2-DCE	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
Dibromochloromethane	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2203070-005 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent
Collection Date: 3/1/2022 11:26:00 AM
Received Date: 3/1/2022 4:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dibromomethane	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
1,1-Dichloroethane	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
1,1-Dichloroethene	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
1,2-Dichloropropane	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
1,3-Dichloropropane	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
2,2-Dichloropropane	ND	2.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
1,1-Dichloropropene	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
Hexachlorobutadiene	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
2-Hexanone	ND	10		µg/L	1	3/4/2022 5:22:32 PM	R86271
Isopropylbenzene	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
4-Isopropyltoluene	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
4-Methyl-2-pentanone	ND	10		µg/L	1	3/4/2022 5:22:32 PM	R86271
Methylene Chloride	ND	3.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
n-Butylbenzene	ND	3.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
n-Propylbenzene	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
sec-Butylbenzene	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
Styrene	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
tert-Butylbenzene	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
trans-1,2-DCE	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
Trichlorofluoromethane	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
Vinyl chloride	ND	1.0		µg/L	1	3/4/2022 5:22:32 PM	R86271
Xylenes, Total	ND	1.5		µg/L	1	3/4/2022 5:22:32 PM	R86271
Surr: 1,2-Dichloroethane-d4	106	70-130		%Rec	1	3/4/2022 5:22:32 PM	R86271
Surr: 4-Bromofluorobenzene	98.9	70-130		%Rec	1	3/4/2022 5:22:32 PM	R86271
Surr: Dibromofluoromethane	114	70-130		%Rec	1	3/4/2022 5:22:32 PM	R86271

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2203070-005 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent
Collection Date: 3/1/2022 11:26:00 AM
Received Date: 3/1/2022 4:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Surr: Toluene-d8	104	70-130		%Rec	1	3/4/2022 5:22:32 PM	R86271

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2203070-006
Matrix: AQUEOUS
Client Sample ID: CW-2 Effluent Duplicate
Collection Date: 3/1/2022 11:26:00 AM
Received Date: 3/1/2022 4:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst: **DAM**	
1,4-Dioxane	2.8	1.0		µg/L	1	3/4/2022 10:55:00 PM	65930
Surr: 2-Fluorobiphenyl	56.0	15-84.5		%Rec	1	3/4/2022 10:55:00 PM	65930

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton
Collection Date:
Lab ID: 2203070-007
Matrix: AQUEOUS
Received Date: 3/1/2022 4:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
Toluene	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
Ethylbenzene	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
Naphthalene	ND	2.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
1-Methylnaphthalene	ND	4.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
2-Methylnaphthalene	ND	4.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
Acetone	ND	10		µg/L	1	3/4/2022 5:51:48 PM	R86271
Bromobenzene	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
Bromodichloromethane	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
Bromoform	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
Bromomethane	ND	3.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
2-Butanone	ND	10		µg/L	1	3/4/2022 5:51:48 PM	R86271
Carbon disulfide	ND	10		µg/L	1	3/4/2022 5:51:48 PM	R86271
Carbon Tetrachloride	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
Chlorobenzene	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
Chloroethane	ND	2.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
Chloroform	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
Chloromethane	ND	3.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
2-Chlorotoluene	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
4-Chlorotoluene	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
cis-1,2-DCE	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
Dibromochloromethane	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
Dibromomethane	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
1,2-Dichlorobenzene	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
1,3-Dichlorobenzene	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
1,4-Dichlorobenzene	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
Dichlorodifluoromethane	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
1,1-Dichloroethane	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
1,1-Dichloroethene	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
1,2-Dichloropropane	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
1,3-Dichloropropane	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
2,2-Dichloropropane	ND	2.0		µg/L	1	3/4/2022 5:51:48 PM	R86271

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton
Collection Date:
Lab ID: 2203070-007
Matrix: AQUEOUS
Received Date: 3/1/2022 4:45:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,1-Dichloropropene	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
Hexachlorobutadiene	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
2-Hexanone	ND	10		µg/L	1	3/4/2022 5:51:48 PM	R86271
Isopropylbenzene	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
4-Isopropyltoluene	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
4-Methyl-2-pentanone	ND	10		µg/L	1	3/4/2022 5:51:48 PM	R86271
Methylene Chloride	ND	3.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
n-Butylbenzene	ND	3.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
n-Propylbenzene	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
sec-Butylbenzene	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
Styrene	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
tert-Butylbenzene	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
trans-1,2-DCE	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
1,1,1-Trichloroethane	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
1,1,2-Trichloroethane	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
Trichloroethene (TCE)	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
Trichlorofluoromethane	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
1,2,3-Trichloropropane	ND	2.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
Vinyl chloride	ND	1.0		µg/L	1	3/4/2022 5:51:48 PM	R86271
Xylenes, Total	ND	1.5		µg/L	1	3/4/2022 5:51:48 PM	R86271
Surr: 1,2-Dichloroethane-d4	109	70-130		%Rec	1	3/4/2022 5:51:48 PM	R86271
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	3/4/2022 5:51:48 PM	R86271
Surr: Dibromofluoromethane	116	70-130		%Rec	1	3/4/2022 5:51:48 PM	R86271
Surr: Toluene-d8	104	70-130		%Rec	1	3/4/2022 5:51:48 PM	R86271

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2203070**
23-Mar-22

Client: EA Engineering
Project: Sparton

Sample ID: **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **C86392** RunNo: **86392**
Prep Date: Analysis Date: **3/10/2022** SeqNo: **3047259** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID: **LLLCS** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **C86392** RunNo: **86392**
Prep Date: Analysis Date: **3/10/2022** SeqNo: **3047263** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	ND	0.020	0.02000	0	99.8	50	150			
Manganese	0.0020	0.0020	0.002000	0	102	50	150			

Sample ID: **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **C86392** RunNo: **86392**
Prep Date: Analysis Date: **3/10/2022** SeqNo: **3047264** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.50	0.020	0.5000	0	99.4	85	115			
Manganese	0.50	0.0020	0.5000	0	100	85	115			

Sample ID: **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **B86413** RunNo: **86413**
Prep Date: Analysis Date: **3/11/2022** SeqNo: **3048350** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								
Manganese	ND	0.0020								

Sample ID: **LLLCS** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **B86413** RunNo: **86413**
Prep Date: Analysis Date: **3/11/2022** SeqNo: **3048351** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.0060	0.0060	0.006000	0	101	50	150			
Manganese	0.0022	0.0020	0.002000	0	111	50	150			

Sample ID: **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **B86413** RunNo: **86413**
Prep Date: Analysis Date: **3/11/2022** SeqNo: **3048352** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2203070**
23-Mar-22

Client: EA Engineering
Project: Sparton

Sample ID: **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **B86413** RunNo: **86413**
Prep Date: Analysis Date: **3/11/2022** SeqNo: **3048352** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.50	0.0060	0.5000	0	99.9	85	115			
Manganese	0.49	0.0020	0.5000	0	98.4	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2203070**
23-Mar-22

Client: EA Engineering
Project: Sparton

Sample ID: **MB-65932** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **65932** RunNo: **86269**
Prep Date: **3/3/2022** Analysis Date: **3/4/2022** SeqNo: **3041349** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LLLCS-65932** SampType: **LCSLL** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC** Batch ID: **65932** RunNo: **86269**
Prep Date: **3/3/2022** Analysis Date: **3/4/2022** SeqNo: **3041352** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060	0.006000	0	96.4	50	150			

Sample ID: **LCS-65932** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **65932** RunNo: **86269**
Prep Date: **3/3/2022** Analysis Date: **3/4/2022** SeqNo: **3041355** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.51	0.0060	0.5000	0	101	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2203070**
23-Mar-22

Client: EA Engineering
Project: Sparton

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R86271** RunNo: **86271**
Prep Date: Analysis Date: **3/4/2022** SeqNo: **3041543** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	109	70	130			
Toluene	23	1.0	20.00	0	114	70	130			
Chlorobenzene	22	1.0	20.00	0	112	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	109	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	101	70	130			
Surr: 1,2-Dichloroethane-d4	9.6		10.00		95.6	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		108	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Sample ID: **2203070-002ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **CW-1 Effluent** Batch ID: **R86271** RunNo: **86271**
Prep Date: Analysis Date: **3/4/2022** SeqNo: **3041547** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	70	130			
Toluene	22	1.0	20.00	0	108	70	130			
Chlorobenzene	21	1.0	20.00	0	104	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	105	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0.4146	98.0	70	130			
Surr: 1,2-Dichloroethane-d4	9.6		10.00		95.7	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	9.9		10.00		99.4	70	130			

Sample ID: **2203070-002amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **CW-1 Effluent** Batch ID: **R86271** RunNo: **86271**
Prep Date: Analysis Date: **3/4/2022** SeqNo: **3041548** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	70	130	4.17	20	
Toluene	21	1.0	20.00	0	103	70	130	4.52	20	
Chlorobenzene	20	1.0	20.00	0	101	70	130	2.69	20	
1,1-Dichloroethene	20	1.0	20.00	0	97.7	70	130	7.52	20	
Trichloroethene (TCE)	19	1.0	20.00	0.4146	93.8	70	130	4.27	20	
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130	0	0	
Surr: 4-Bromofluorobenzene	11		10.00		108	70	130	0	0	
Surr: Dibromofluoromethane	10		10.00		105	70	130	0	0	
Surr: Toluene-d8	10		10.00		103	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2203070**
23-Mar-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R86271**	RunNo: **86271**	
Prep Date:	Analysis Date: **3/4/2022**	SeqNo: **3041567**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2203070**
23-Mar-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R86271** RunNo: **86271**
Prep Date: Analysis Date: **3/4/2022** SeqNo: **3041567** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	11		10.00		107	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	10		10.00		99.8	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2203070**
23-Mar-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb-65930** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **65930** RunNo: **86258**
Prep Date: **3/3/2022** Analysis Date: **3/4/2022** SeqNo: **3041493** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	2.2		4.000		55.0	21.9	89.8			
Surr: 2,4,6-Tribromophenol	3.2		8.000		39.8	23.4	71.6			
Surr: 2-Fluorobiphenyl	2.3		4.000		57.0	15	84.5			
Surr: 4-Terphenyl-d14	4.5		4.000		113	73.1	152			

Sample ID: **lcs-65930** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **65930** RunNo: **86258**
Prep Date: **3/3/2022** Analysis Date: **3/4/2022** SeqNo: **3041494** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.64	0.10	2.000	0	32.0	15	79.8			
Surr: Nitrobenzene-d5	3.1		5.000		62.4	21.9	89.8			
Surr: 2,4,6-Tribromophenol	5.0		10.00		49.6	23.4	71.6			
Surr: 2-Fluorobiphenyl	2.6		5.000		51.2	15	84.5			
Surr: 4-Terphenyl-d14	5.7		5.000		113	73.1	152			

Sample ID: **lcsd-65930** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **65930** RunNo: **86258**
Prep Date: **3/3/2022** Analysis Date: **3/4/2022** SeqNo: **3041495** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.86	0.10	2.000	0	43.0	15	79.8	29.3	34.2	
Surr: Nitrobenzene-d5	4.3		5.000		85.2	21.9	89.8	0	0	
Surr: 2,4,6-Tribromophenol	7.0		10.00		69.6	23.4	71.6	0	0	
Surr: 2-Fluorobiphenyl	3.5		5.000		69.2	15	84.5	0	0	
Surr: 4-Terphenyl-d14	7.4		5.000		147	73.1	152	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: EA Engineering Work Order Number: 2203070 RcptNo: 1

Received By: **Sean Livingston** 3/1/2022 4:45:00 PM S. Livingston
Completed By: **Sean Livingston** 3/2/2022 8:30:53 AM S. Livingston
Reviewed By: CM 3/2/22

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☑ NA ☐
   Samples were collected the same day and chilled.
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 8
(<2 or >12 unless noted)
Adjusted? NO
Checked by: JM 3/2/22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	6.6	Good				

Chain-of-Custody Record

Client: Sparton Technologies Inc

Mailing Address: 320 Gold Ave SW #1300 Albuquerque NM, 87102

Phone #: 505-715-4141

email or Fax#: rmaillox@eaest.com

QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush

Project Name: Sparton

Project #: 1569302

Project Manager: Bob Mallox

Sampler: Aaron Kupper

On Ice: ☐ Yes ☐ No

# of Coolers: 1

Cooler Temp (including CF): 6.7-0.1=6.6 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2203070	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	1,4 Dioxane 8270 SIM	Total Chromium	Dissolved Metals Cr, Fe, Mn			
3/1/22	1049		CW-1 Influent	3 VOA, 3 poly		001								✓			✓	✓	✓			
3/1/22	1053		CW-1 Effluent	3 VOA 3 poly		002								✓			✓	✓	✓			
3/1/22	1053		CW-1 Effluent Duplicate	1, 1L Poly		003											✓					
3/1/22	1121		CW-2 Influent	3 VOA, 3 poly		004								✓			✓	✓	✓			
3/1/22	1126		CW-2 Effluent	3 VOA 3 poly		005								✓			✓	✓	✓			
3/1/22	1126		CW-2 Effluent Duplicate	1, 1L Poly		006											✓					
3/1/22	1049		Trip Blank	2 VOA		007								✓								

Date	Time	Relinquished by	Received by	Via	Date	Time
3/1/2022	1645	D. Schweelk	[illegible]	[illegible]	3/1/22	16:45
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

April 15, 2022

Bob Marley
EA Engineering
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL:
FAX:

RE: Sparton OrderNo.: 2204048

Dear Bob Marley:

Hall Environmental Analysis Laboratory received 7 sample(s) on 4/1/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2204048**
Date Reported: **4/15/2022**

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2204048-001 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Influent
Collection Date: 4/1/2022 12:40:00 PM
Received Date: 4/1/2022 1:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**ELS**
Chromium	ND	0.0060		mg/L	1	4/4/2022 10:39:06 AM	A86961
Iron	ND	0.020		mg/L	1	4/4/2022 10:39:06 AM	A86961
Manganese	ND	0.0020		mg/L	1	4/4/2022 10:39:06 AM	A86961
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	ND	0.0060		mg/L	1	4/7/2022 10:20:38 AM	66677
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.6	1.0		µg/L	1	4/14/2022 4:54:00 AM	66629
Surr: 2-Fluorobiphenyl	87.0	26.7-90.1		%Rec	1	4/14/2022 4:54:00 AM	66629
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
Toluene	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
Ethylbenzene	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
Naphthalene	ND	2.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
1-Methylnaphthalene	ND	4.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
2-Methylnaphthalene	ND	4.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
Acetone	ND	10		µg/L	1	4/8/2022 7:26:48 PM	R87130
Bromobenzene	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
Bromodichloromethane	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
Bromoform	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
Bromomethane	ND	3.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
2-Butanone	ND	10		µg/L	1	4/8/2022 7:26:48 PM	R87130
Carbon disulfide	ND	10		µg/L	1	4/8/2022 7:26:48 PM	R87130
Carbon Tetrachloride	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
Chlorobenzene	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
Chloroethane	ND	2.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
Chloroform	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
Chloromethane	ND	3.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
2-Chlorotoluene	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
4-Chlorotoluene	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
cis-1,2-DCE	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
Dibromochloromethane	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2204048-001 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Influent
Collection Date: 4/1/2022 12:40:00 PM
Received Date: 4/1/2022 1:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dibromomethane	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
1,1-Dichloroethane	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
1,1-Dichloroethene	18	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
1,2-Dichloropropane	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
1,3-Dichloropropane	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
2,2-Dichloropropane	ND	2.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
1,1-Dichloropropene	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
Hexachlorobutadiene	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
2-Hexanone	ND	10		µg/L	1	4/8/2022 7:26:48 PM	R87130
Isopropylbenzene	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
4-Isopropyltoluene	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
4-Methyl-2-pentanone	ND	10		µg/L	1	4/8/2022 7:26:48 PM	R87130
Methylene Chloride	ND	3.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
n-Butylbenzene	ND	3.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
n-Propylbenzene	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
sec-Butylbenzene	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
Styrene	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
tert-Butylbenzene	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
trans-1,2-DCE	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
Trichloroethene (TCE)	140	10		µg/L	10	4/12/2022 6:58:24 PM	R87207
Trichlorofluoromethane	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
Vinyl chloride	ND	1.0		µg/L	1	4/8/2022 7:26:48 PM	R87130
Xylenes, Total	ND	1.5		µg/L	1	4/8/2022 7:26:48 PM	R87130
Surr: 1,2-Dichloroethane-d4	94.5	70-130		%Rec	1	4/8/2022 7:26:48 PM	R87130
Surr: 4-Bromofluorobenzene	99.0	70-130		%Rec	1	4/8/2022 7:26:48 PM	R87130
Surr: Dibromofluoromethane	110	70-130		%Rec	1	4/8/2022 7:26:48 PM	R87130

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2204048-001 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Influent
Collection Date: 4/1/2022 12:40:00 PM
Received Date: 4/1/2022 1:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Surr: Toluene-d8	102	70-130		%Rec	1	4/8/2022 7:26:48 PM	R87130

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2204048-002 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Effluent
Collection Date: 4/1/2022 12:50:00 PM
Received Date: 4/1/2022 1:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**ELS**
Chromium	ND	0.0060		mg/L	1	4/4/2022 10:40:46 AM	A86961
Iron	ND	0.020		mg/L	1	4/4/2022 10:40:46 AM	A86961
Manganese	ND	0.0020		mg/L	1	4/4/2022 10:40:46 AM	A86961
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	ND	0.0060		mg/L	1	4/7/2022 10:30:09 AM	66677
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.4	1.0		µg/L	1	4/14/2022 5:37:00 AM	66629
Surr: 2-Fluorobiphenyl	78.0	26.7-90.1		%Rec	1	4/14/2022 5:37:00 AM	66629
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
Toluene	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
Ethylbenzene	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
Naphthalene	ND	2.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
1-Methylnaphthalene	ND	4.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
2-Methylnaphthalene	ND	4.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
Acetone	ND	10		µg/L	1	4/8/2022 7:55:21 PM	R87130
Bromobenzene	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
Bromodichloromethane	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
Bromoform	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
Bromomethane	ND	3.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
2-Butanone	ND	10		µg/L	1	4/8/2022 7:55:21 PM	R87130
Carbon disulfide	ND	10		µg/L	1	4/8/2022 7:55:21 PM	R87130
Carbon Tetrachloride	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
Chlorobenzene	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
Chloroethane	ND	2.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
Chloroform	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
Chloromethane	ND	3.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
2-Chlorotoluene	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
4-Chlorotoluene	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
cis-1,2-DCE	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
Dibromochloromethane	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2204048-002 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Effluent
Collection Date: 4/1/2022 12:50:00 PM
Received Date: 4/1/2022 1:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dibromomethane	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
1,1-Dichloroethane	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
1,1-Dichloroethene	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
1,2-Dichloropropane	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
1,3-Dichloropropane	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
2,2-Dichloropropane	ND	2.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
1,1-Dichloropropene	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
Hexachlorobutadiene	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
2-Hexanone	ND	10		µg/L	1	4/8/2022 7:55:21 PM	R87130
Isopropylbenzene	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
4-Isopropyltoluene	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
4-Methyl-2-pentanone	ND	10		µg/L	1	4/8/2022 7:55:21 PM	R87130
Methylene Chloride	ND	3.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
n-Butylbenzene	ND	3.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
n-Propylbenzene	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
sec-Butylbenzene	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
Styrene	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
tert-Butylbenzene	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
trans-1,2-DCE	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
Trichlorofluoromethane	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
Vinyl chloride	ND	1.0		µg/L	1	4/8/2022 7:55:21 PM	R87130
Xylenes, Total	ND	1.5		µg/L	1	4/8/2022 7:55:21 PM	R87130
Surr: 1,2-Dichloroethane-d4	108	70-130		%Rec	1	4/8/2022 7:55:21 PM	R87130
Surr: 4-Bromofluorobenzene	98.3	70-130		%Rec	1	4/8/2022 7:55:21 PM	R87130
Surr: Dibromofluoromethane	107	70-130		%Rec	1	4/8/2022 7:55:21 PM	R87130

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2204048-002
Matrix: AQUEOUS
Client Sample ID: CW-1 Effluent
Collection Date: 4/1/2022 12:50:00 PM
Received Date: 4/1/2022 1:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Surr: Toluene-d8	102	70-130		%Rec	1	4/8/2022 7:55:21 PM	R87130

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2204048-003
Matrix: AQUEOUS
Client Sample ID: CW-1 Effluent Duplicate
Collection Date: 4/1/2022 12:50:00 PM
Received Date: 4/1/2022 1:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst: **DAM**	
1,4-Dioxane	2.6	1.0		µg/L	1	4/14/2022 6:19:00 AM	66629
Surr: 2-Fluorobiphenyl	77.0	26.7-90.1		%Rec	1	4/14/2022 6:19:00 AM	66629

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2204048-004 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Influent
Collection Date: 4/1/2022 11:55:00 AM
Received Date: 4/1/2022 1:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**ELS**
Chromium	0.041	0.0060		mg/L	1	4/4/2022 10:47:14 AM	A86961
Iron	ND	0.020		mg/L	1	4/4/2022 10:47:14 AM	A86961
Manganese	0.061	0.0020	*	mg/L	1	4/4/2022 10:47:14 AM	A86961
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	0.044	0.0060		mg/L	1	4/7/2022 10:31:49 AM	66677
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.2	1.0		µg/L	1	4/14/2022 7:01:00 AM	66629
Surr: 2-Fluorobiphenyl	54.5	26.7-90.1		%Rec	1	4/14/2022 7:01:00 AM	66629
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
Toluene	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
Ethylbenzene	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
Naphthalene	ND	2.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
1-Methylnaphthalene	ND	4.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
2-Methylnaphthalene	ND	4.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
Acetone	ND	10		µg/L	1	4/8/2022 8:24:02 PM	R87130
Bromobenzene	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
Bromodichloromethane	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
Bromoform	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
Bromomethane	ND	3.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
2-Butanone	ND	10		µg/L	1	4/8/2022 8:24:02 PM	R87130
Carbon disulfide	ND	10		µg/L	1	4/8/2022 8:24:02 PM	R87130
Carbon Tetrachloride	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
Chlorobenzene	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
Chloroethane	ND	2.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
Chloroform	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
Chloromethane	ND	3.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
2-Chlorotoluene	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
4-Chlorotoluene	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
cis-1,2-DCE	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
Dibromochloromethane	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2204048-004 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Influent
Collection Date: 4/1/2022 11:55:00 AM
Received Date: 4/1/2022 1:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dibromomethane	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
1,1-Dichloroethane	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
1,1-Dichloroethene	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
1,2-Dichloropropane	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
1,3-Dichloropropane	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
2,2-Dichloropropane	ND	2.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
1,1-Dichloropropene	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
Hexachlorobutadiene	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
2-Hexanone	ND	10		µg/L	1	4/8/2022 8:24:02 PM	R87130
Isopropylbenzene	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
4-Isopropyltoluene	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
4-Methyl-2-pentanone	ND	10		µg/L	1	4/8/2022 8:24:02 PM	R87130
Methylene Chloride	ND	3.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
n-Butylbenzene	ND	3.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
n-Propylbenzene	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
sec-Butylbenzene	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
Styrene	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
tert-Butylbenzene	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
trans-1,2-DCE	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
Trichloroethene (TCE)	5.0	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
Trichlorofluoromethane	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
Vinyl chloride	ND	1.0		µg/L	1	4/8/2022 8:24:02 PM	R87130
Xylenes, Total	ND	1.5		µg/L	1	4/8/2022 8:24:02 PM	R87130
Surr: 1,2-Dichloroethane-d4	109	70-130		%Rec	1	4/8/2022 8:24:02 PM	R87130
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	4/8/2022 8:24:02 PM	R87130
Surr: Dibromofluoromethane	107	70-130		%Rec	1	4/8/2022 8:24:02 PM	R87130

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2204048-004
Matrix: AQUEOUS
Client Sample ID: CW-2 Influent
Collection Date: 4/1/2022 11:55:00 AM
Received Date: 4/1/2022 1:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Surr: Toluene-d8	103	70-130		%Rec	1	4/8/2022 8:24:02 PM	R87130

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2204048-005 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent
Collection Date: 4/1/2022 12:00:00 PM
Received Date: 4/1/2022 1:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**ELS**
Chromium	0.042	0.0060		mg/L	1	4/4/2022 10:48:42 AM	A86961
Iron	ND	0.020		mg/L	1	4/4/2022 10:48:42 AM	A86961
Manganese	0.037	0.0020		mg/L	1	4/4/2022 10:48:42 AM	A86961
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	0.043	0.0060		mg/L	1	4/7/2022 10:33:28 AM	66677
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.2	1.0		µg/L	1	4/14/2022 7:44:00 AM	66629
Surr: 2-Fluorobiphenyl	71.0	26.7-90.1		%Rec	1	4/14/2022 7:44:00 AM	66629
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
Toluene	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
Ethylbenzene	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
Naphthalene	ND	2.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
1-Methylnaphthalene	ND	4.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
2-Methylnaphthalene	ND	4.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
Acetone	ND	10		µg/L	1	4/8/2022 8:52:34 PM	R87130
Bromobenzene	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
Bromodichloromethane	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
Bromoform	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
Bromomethane	ND	3.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
2-Butanone	ND	10		µg/L	1	4/8/2022 8:52:34 PM	R87130
Carbon disulfide	ND	10		µg/L	1	4/8/2022 8:52:34 PM	R87130
Carbon Tetrachloride	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
Chlorobenzene	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
Chloroethane	ND	2.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
Chloroform	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
Chloromethane	ND	3.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
2-Chlorotoluene	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
4-Chlorotoluene	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
cis-1,2-DCE	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
Dibromochloromethane	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2204048-005 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent
Collection Date: 4/1/2022 12:00:00 PM
Received Date: 4/1/2022 1:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dibromomethane	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
1,1-Dichloroethane	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
1,1-Dichloroethene	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
1,2-Dichloropropane	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
1,3-Dichloropropane	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
2,2-Dichloropropane	ND	2.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
1,1-Dichloropropene	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
Hexachlorobutadiene	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
2-Hexanone	ND	10		µg/L	1	4/8/2022 8:52:34 PM	R87130
Isopropylbenzene	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
4-Isopropyltoluene	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
4-Methyl-2-pentanone	ND	10		µg/L	1	4/8/2022 8:52:34 PM	R87130
Methylene Chloride	ND	3.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
n-Butylbenzene	ND	3.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
n-Propylbenzene	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
sec-Butylbenzene	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
Styrene	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
tert-Butylbenzene	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
trans-1,2-DCE	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
Trichlorofluoromethane	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
Vinyl chloride	ND	1.0		µg/L	1	4/8/2022 8:52:34 PM	R87130
Xylenes, Total	ND	1.5		µg/L	1	4/8/2022 8:52:34 PM	R87130
Surr: 1,2-Dichloroethane-d4	107	70-130		%Rec	1	4/8/2022 8:52:34 PM	R87130
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	4/8/2022 8:52:34 PM	R87130
Surr: Dibromofluoromethane	110	70-130		%Rec	1	4/8/2022 8:52:34 PM	R87130

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2204048-005 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent
Collection Date: 4/1/2022 12:00:00 PM
Received Date: 4/1/2022 1:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Surr: Toluene-d8	101	70-130		%Rec	1	4/8/2022 8:52:34 PM	R87130

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2204048-006 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent Duplicate
Collection Date: 4/1/2022 12:00:00 PM
Received Date: 4/1/2022 1:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst: **DAM**	
1,4-Dioxane	2.5	1.0		µg/L	1	4/14/2022 8:26:00 AM	66629
Surr: 2-Fluorobiphenyl	81.0	26.7-90.1		%Rec	1	4/14/2022 8:26:00 AM	66629

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton
Collection Date:
Lab ID: 2204048-007
Matrix: TRIP BLANK
Received Date: 4/1/2022 1:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
Toluene	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
Ethylbenzene	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
Naphthalene	ND	2.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
1-Methylnaphthalene	ND	4.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
2-Methylnaphthalene	ND	4.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
Acetone	ND	10		µg/L	1	4/8/2022 9:20:58 PM	R87130
Bromobenzene	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
Bromodichloromethane	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
Bromoform	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
Bromomethane	ND	3.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
2-Butanone	ND	10		µg/L	1	4/8/2022 9:20:58 PM	R87130
Carbon disulfide	ND	10		µg/L	1	4/8/2022 9:20:58 PM	R87130
Carbon Tetrachloride	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
Chlorobenzene	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
Chloroethane	ND	2.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
Chloroform	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
Chloromethane	ND	3.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
2-Chlorotoluene	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
4-Chlorotoluene	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
cis-1,2-DCE	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
Dibromochloromethane	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
Dibromomethane	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
1,1-Dichloroethane	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
1,1-Dichloroethene	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
1,2-Dichloropropane	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
1,3-Dichloropropane	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
2,2-Dichloropropane	ND	2.0		µg/L	1	4/8/2022 9:20:58 PM	R87130

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton
Collection Date:
Lab ID: 2204048-007
Matrix: TRIP BLANK
Received Date: 4/1/2022 1:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,1-Dichloropropene	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
Hexachlorobutadiene	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
2-Hexanone	ND	10		µg/L	1	4/8/2022 9:20:58 PM	R87130
Isopropylbenzene	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
4-Isopropyltoluene	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
4-Methyl-2-pentanone	ND	10		µg/L	1	4/8/2022 9:20:58 PM	R87130
Methylene Chloride	ND	3.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
n-Butylbenzene	ND	3.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
n-Propylbenzene	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
sec-Butylbenzene	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
Styrene	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
tert-Butylbenzene	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
trans-1,2-DCE	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
Trichlorofluoromethane	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
Vinyl chloride	ND	1.0		µg/L	1	4/8/2022 9:20:58 PM	R87130
Xylenes, Total	ND	1.5		µg/L	1	4/8/2022 9:20:58 PM	R87130
Surr: 1,2-Dichloroethane-d4	111	70-130		%Rec	1	4/8/2022 9:20:58 PM	R87130
Surr: 4-Bromofluorobenzene	96.5	70-130		%Rec	1	4/8/2022 9:20:58 PM	R87130
Surr: Dibromofluoromethane	107	70-130		%Rec	1	4/8/2022 9:20:58 PM	R87130
Surr: Toluene-d8	102	70-130		%Rec	1	4/8/2022 9:20:58 PM	R87130

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2204048**
15-Apr-22

Client: EA Engineering
Project: Sparton

Sample ID: **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **A86961** RunNo: **86961**
Prep Date: Analysis Date: ***4/4/2022*** SeqNo: **3072912** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID: **LLLCS** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **A86961** RunNo: **86961**
Prep Date: Analysis Date: ***4/4/2022*** SeqNo: **3072913** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.0062	0.0060	0.006000	0	103	50	150			
Iron	0.022	0.020	0.02000	0	110	50	150			
Manganese	ND	0.0020	0.002000	0	88.4	50	150			

Sample ID: **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **A86961** RunNo: **86961**
Prep Date: Analysis Date: ***4/4/2022*** SeqNo: **3072914** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.48	0.0060	0.5000	0	96.3	85	115			
Iron	0.51	0.020	0.5000	0	102	85	115			
Manganese	0.48	0.0020	0.5000	0	96.2	85	115			

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2204048**
15-Apr-22

Client: EA Engineering
Project: Sparton

Sample ID: **MB-66677** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **66677** RunNo: **87067**
Prep Date: **4/6/2022** Analysis Date: **4/7/2022** SeqNo: **3077620** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LLLCS-66677** SampType: **LCSLL** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC** Batch ID: **66677** RunNo: **87067**
Prep Date: **4/6/2022** Analysis Date: **4/7/2022** SeqNo: **3077622** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.0066	0.0060	0.006000	0	110	50	150			

Sample ID: **LCS-66677** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **66677** RunNo: **87067**
Prep Date: **4/6/2022** Analysis Date: **4/7/2022** SeqNo: **3077624** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.50	0.0060	0.5000	0	100	85	115			

Sample ID: **2204048-001CMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **CW-1 Influent** Batch ID: **66677** RunNo: **87067**
Prep Date: **4/6/2022** Analysis Date: **4/7/2022** SeqNo: **3077672** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.50	0.0060	0.5000	0.004999	99.1	70	130			

Sample ID: **2204048-001CMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **CW-1 Influent** Batch ID: **66677** RunNo: **87067**
Prep Date: **4/6/2022** Analysis Date: **4/7/2022** SeqNo: **3077676** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.52	0.0060	0.5000	0.004999	103	70	130	3.90	20	

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2204048**
15-Apr-22

Client: EA Engineering
Project: Sparton

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R87130** RunNo: **87130**
Prep Date: Analysis Date: **4/8/2022** SeqNo: **3080523** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	23	1.0	20.00	0	115	70	130			
Toluene	20	1.0	20.00	0	97.6	70	130			
Chlorobenzene	20	1.0	20.00	0	102	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	112	70	130			
Trichloroethene (TCE)	21	1.0	20.00	0	106	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		105	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		98.7	70	130			
Surr: Dibromofluoromethane	11		10.00		109	70	130			
Surr: Toluene-d8	9.9		10.00		99.1	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R87130** RunNo: **87130**
Prep Date: Analysis Date: **4/8/2022** SeqNo: **3080547** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2204048**
15-Apr-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R87130**	RunNo: **87130**	
Prep Date:	Analysis Date: **4/8/2022**	SeqNo: **3080547**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2204048**
15-Apr-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R87130** RunNo: **87130**
Prep Date: Analysis Date: **4/8/2022** SeqNo: **3080547** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	11		10.00		106	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.2	70	130			
Surr: Dibromofluoromethane	11		10.00		107	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Sample ID: **100ng lcs4** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R87207** RunNo: **87207**
Prep Date: Analysis Date: **4/12/2022** SeqNo: **3083595** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	21	1.0	20.00	0	105	70	130			
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.6	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		95.3	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	9.6		10.00		95.9	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R87207** RunNo: **87207**
Prep Date: Analysis Date: **4/12/2022** SeqNo: **3083599** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	ND	1.0								
Surr: 1,2-Dichloroethane-d4	10		10.00		100	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.3	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	9.9		10.00		99.1	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2204048**
15-Apr-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb-66629** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **66629** RunNo: **87241**
Prep Date: **4/5/2022** Analysis Date: **4/14/2022** SeqNo: **3085080** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	2.4		4.000		59.0	31.6	100			
Surr: 2,4,6-Tribromophenol	4.3		8.000		53.5	22	101			
Surr: 2-Fluorobiphenyl	2.6		4.000		64.5	26.7	90.1			
Surr: 4-Terphenyl-d14	4.6		4.000		116	72.3	147			

Sample ID: **lcs-66629** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **66629** RunNo: **87241**
Prep Date: **4/5/2022** Analysis Date: **4/14/2022** SeqNo: **3085081** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.66	0.10	2.000	0	33.0	20.2	48.4			
Surr: Nitrobenzene-d5	3.2		5.000		64.4	31.6	100			
Surr: 2,4,6-Tribromophenol	5.3		10.00		52.6	22	101			
Surr: 2-Fluorobiphenyl	3.2		5.000		64.0	26.7	90.1			
Surr: 4-Terphenyl-d14	5.7		5.000		113	72.3	147			

Sample ID: **lcsd-66629** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **66629** RunNo: **87241**
Prep Date: **4/5/2022** Analysis Date: **4/14/2022** SeqNo: **3085083** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.78	0.10	2.000	0	39.0	20.2	48.4	16.7	30.1	
Surr: Nitrobenzene-d5	4.0		5.000		79.2	31.6	100	0	0	
Surr: 2,4,6-Tribromophenol	6.5		10.00		65.0	22	101	0	0	
Surr: 2-Fluorobiphenyl	3.7		5.000		74.8	26.7	90.1	0	0	
Surr: 4-Terphenyl-d14	6.5		5.000		130	72.3	147	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: EA Engineering Work Order Number: 2204048 RcptNo: 1

Received By: **Kasandra Payan** 4/1/2022 1:12:00 PM

Completed By: **Sean Livingston** 4/1/2022 1:46:33 PM

Reviewed By: JR 4/1/22

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☑ NA ☐
   Samples were collected the same day and chilled.
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☐ No ☐ NA ☑
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 4
(<2 or >12 unless noted)
Adjusted? NO
Checked by: Sa 4/1/22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	12.3	Good				

Chain-of-Custody Record

Client: Sparton Technologies Inc

Mailing Address: 320 Gold Ave SW
Suite 1300 Albuquerque NM 87102

Phone #: 505-715-4154

email or Fax#: rmarlox@eaest.com

QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☑ Standard ☐ Rush _____

Project Name: Sparton

Project #: 1569302

Project Manager: Bob Marlox

Sampler: Aaron Kupper

On Ice: ☑ Yes ☐ No

# of Coolers: 1

Cooler Temp(including CF): 12.4 - 0.1 = 12.3 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2204048	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	1,4 Dioxane 8270 SIM	Total Chromium	Dissolved ~~Chromium~~ Metals Cr, Fe, Mn			
4-1-22	1240		CW-1 Influent	3 voa, ~~3 pol x~~, 1 glass		001								✓			✓	✓	✓			
	1250		CW-1 Effluent	3 voa, 2 pol x 1 glass		002								✓			✓	✓	✓			
	1250		CW-1 Effluent Duplicate	~~3 voa, 2 pol x~~ 1 glass		003											✓					
	1155		CW-2 Influent	3 voa, 2 pol x 1 glass		004								✓			✓	✓	✓			
	1200		CW-2 Effluent	3 voa, 2 pol x 1 glass		005								✓			✓	✓	✓			
	1200		CW-2 Effluent Duplicate	3 voa 1 glass		006											✓					
↓	1155		Trip Blank	2 voa		007								✓								

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
4-1-22	1311			CPO	4/1/22	13:12
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

May 31, 2022

Bob Marley
EA Engineering
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL:
FAX:

RE: Sparton OrderNo.: 2205039

Dear Bob Marley:

Hall Environmental Analysis Laboratory received 7 sample(s) on 5/2/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2205039**
Date Reported: **5/31/2022**

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205039-001 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Influent
Collection Date: 5/2/2022 11:56:00 AM
Received Date: 5/2/2022 2:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**ELS**
Chromium	ND	0.0060		mg/L	1	5/3/2022 3:14:09 PM	C87703
Iron	ND	0.020		mg/L	1	5/3/2022 3:14:09 PM	C87703
Manganese	ND	0.0020		mg/L	1	5/3/2022 3:14:09 PM	C87703
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	ND	0.0060		mg/L	1	5/11/2022 11:03:03 AM	67376
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.3	1.0		µg/L	1	5/11/2022 10:27:00 PM	67218
Surr: 2-Fluorobiphenyl	70.5	26.7-90.1		%Rec	1	5/11/2022 10:27:00 PM	67218
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
Toluene	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
Ethylbenzene	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
Naphthalene	ND	2.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
1-Methylnaphthalene	ND	4.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
2-Methylnaphthalene	ND	4.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
Acetone	ND	10		µg/L	1	5/6/2022 3:09:47 PM	R87830
Bromobenzene	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
Bromodichloromethane	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
Bromoform	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
Bromomethane	ND	3.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
2-Butanone	ND	10		µg/L	1	5/6/2022 3:09:47 PM	R87830
Carbon disulfide	ND	10		µg/L	1	5/6/2022 3:09:47 PM	R87830
Carbon Tetrachloride	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
Chlorobenzene	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
Chloroethane	ND	2.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
Chloroform	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
Chloromethane	ND	3.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
2-Chlorotoluene	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
4-Chlorotoluene	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
cis-1,2-DCE	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
Dibromochloromethane	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205039-001 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Influent
Collection Date: 5/2/2022 11:56:00 AM
Received Date: 5/2/2022 2:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dibromomethane	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
1,1-Dichloroethane	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
1,1-Dichloroethene	14	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
1,2-Dichloropropane	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
1,3-Dichloropropane	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
2,2-Dichloropropane	ND	2.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
1,1-Dichloropropene	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
Hexachlorobutadiene	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
2-Hexanone	ND	10		µg/L	1	5/6/2022 3:09:47 PM	R87830
Isopropylbenzene	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
4-Isopropyltoluene	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
4-Methyl-2-pentanone	ND	10		µg/L	1	5/6/2022 3:09:47 PM	R87830
Methylene Chloride	ND	3.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
n-Butylbenzene	ND	3.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
n-Propylbenzene	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
sec-Butylbenzene	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
Styrene	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
tert-Butylbenzene	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
trans-1,2-DCE	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
Trichloroethene (TCE)	130	10		µg/L	10	5/9/2022 11:37:23 AM	R87853
Trichlorofluoromethane	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
Vinyl chloride	ND	1.0		µg/L	1	5/6/2022 3:09:47 PM	R87830
Xylenes, Total	ND	1.5		µg/L	1	5/6/2022 3:09:47 PM	R87830
Surr: 1,2-Dichloroethane-d4	82.2	70-130		%Rec	1	5/6/2022 3:09:47 PM	R87830
Surr: 4-Bromofluorobenzene	97.4	70-130		%Rec	1	5/6/2022 3:09:47 PM	R87830
Surr: Dibromofluoromethane	115	70-130		%Rec	1	5/6/2022 3:09:47 PM	R87830

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205039-001
Matrix: AQUEOUS
Client Sample ID: CW-1 Influent
Collection Date: 5/2/2022 11:56:00 AM
Received Date: 5/2/2022 2:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Surr: Toluene-d8	89.0	70-130		%Rec	1	5/6/2022 3:09:47 PM	R87830

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205039-002 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Effluent
Collection Date: 5/2/2022 12:00:00 PM
Received Date: 5/2/2022 2:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**ELS**
Chromium	ND	0.0060		mg/L	1	5/3/2022 3:18:43 PM	C87703
Iron	ND	0.020		mg/L	1	5/3/2022 3:18:43 PM	C87703
Manganese	ND	0.0020		mg/L	1	5/3/2022 3:18:43 PM	C87703
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	ND	0.0060		mg/L	1	5/11/2022 11:04:36 AM	67376
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.5	1.0		µg/L	1	5/12/2022 12:26:00 AM	67218
Surr: 2-Fluorobiphenyl	73.0	26.7-90.1		%Rec	1	5/12/2022 12:26:00 AM	67218
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
Toluene	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
Ethylbenzene	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
Naphthalene	ND	2.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
1-Methylnaphthalene	ND	4.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
2-Methylnaphthalene	ND	4.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
Acetone	ND	10		µg/L	1	5/6/2022 3:38:21 PM	R87830
Bromobenzene	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
Bromodichloromethane	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
Bromoform	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
Bromomethane	ND	3.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
2-Butanone	ND	10		µg/L	1	5/6/2022 3:38:21 PM	R87830
Carbon disulfide	ND	10		µg/L	1	5/6/2022 3:38:21 PM	R87830
Carbon Tetrachloride	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
Chlorobenzene	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
Chloroethane	ND	2.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
Chloroform	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
Chloromethane	ND	3.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
2-Chlorotoluene	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
4-Chlorotoluene	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
cis-1,2-DCE	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
Dibromochloromethane	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205039-002 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Effluent
Collection Date: 5/2/2022 12:00:00 PM
Received Date: 5/2/2022 2:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dibromomethane	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
1,1-Dichloroethane	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
1,1-Dichloroethene	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
1,2-Dichloropropane	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
1,3-Dichloropropane	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
2,2-Dichloropropane	ND	2.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
1,1-Dichloropropene	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
Hexachlorobutadiene	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
2-Hexanone	ND	10		µg/L	1	5/6/2022 3:38:21 PM	R87830
Isopropylbenzene	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
4-Isopropyltoluene	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
4-Methyl-2-pentanone	ND	10		µg/L	1	5/6/2022 3:38:21 PM	R87830
Methylene Chloride	ND	3.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
n-Butylbenzene	ND	3.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
n-Propylbenzene	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
sec-Butylbenzene	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
Styrene	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
tert-Butylbenzene	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
trans-1,2-DCE	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
Trichlorofluoromethane	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
Vinyl chloride	ND	1.0		µg/L	1	5/6/2022 3:38:21 PM	R87830
Xylenes, Total	ND	1.5		µg/L	1	5/6/2022 3:38:21 PM	R87830
Surr: 1,2-Dichloroethane-d4	94.4	70-130		%Rec	1	5/6/2022 3:38:21 PM	R87830
Surr: 4-Bromofluorobenzene	96.0	70-130		%Rec	1	5/6/2022 3:38:21 PM	R87830
Surr: Dibromofluoromethane	115	70-130		%Rec	1	5/6/2022 3:38:21 PM	R87830

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205039-002
Matrix: AQUEOUS
Client Sample ID: CW-1 Effluent
Collection Date: 5/2/2022 12:00:00 PM
Received Date: 5/2/2022 2:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Surr: Toluene-d8	90.4	70-130		%Rec	1	5/6/2022 3:38:21 PM	R87830

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205039-003 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Effluent Duplicate
Collection Date: 5/2/2022 12:05:00 PM
Received Date: 5/2/2022 2:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**ELS**
Chromium	ND	0.0060		mg/L	1	5/3/2022 3:23:17 PM	C87703
Iron	ND	0.020		mg/L	1	5/3/2022 3:23:17 PM	C87703
Manganese	ND	0.0020		mg/L	1	5/3/2022 3:23:17 PM	C87703
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	ND	0.0060		mg/L	1	5/11/2022 11:06:11 AM	67376
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.3	1.0		µg/L	1	5/16/2022 7:44:00 PM	67334
Surr: 2-Fluorobiphenyl	60.5	26.7-90.1		%Rec	1	5/16/2022 7:44:00 PM	67334
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
Toluene	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
Ethylbenzene	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
Naphthalene	ND	2.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
1-Methylnaphthalene	ND	4.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
2-Methylnaphthalene	ND	4.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
Acetone	ND	10		µg/L	1	5/6/2022 4:06:55 PM	R87830
Bromobenzene	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
Bromodichloromethane	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
Bromoform	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
Bromomethane	ND	3.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
2-Butanone	ND	10		µg/L	1	5/6/2022 4:06:55 PM	R87830
Carbon disulfide	ND	10		µg/L	1	5/6/2022 4:06:55 PM	R87830
Carbon Tetrachloride	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
Chlorobenzene	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
Chloroethane	ND	2.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
Chloroform	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
Chloromethane	ND	3.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
2-Chlorotoluene	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
4-Chlorotoluene	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
cis-1,2-DCE	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
Dibromochloromethane	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205039-003 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Effluent Duplicate
Collection Date: 5/2/2022 12:05:00 PM
Received Date: 5/2/2022 2:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dibromomethane	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
1,1-Dichloroethane	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
1,1-Dichloroethene	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
1,2-Dichloropropane	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
1,3-Dichloropropane	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
2,2-Dichloropropane	ND	2.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
1,1-Dichloropropene	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
Hexachlorobutadiene	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
2-Hexanone	ND	10		µg/L	1	5/6/2022 4:06:55 PM	R87830
Isopropylbenzene	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
4-Isopropyltoluene	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
4-Methyl-2-pentanone	ND	10		µg/L	1	5/6/2022 4:06:55 PM	R87830
Methylene Chloride	ND	3.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
n-Butylbenzene	ND	3.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
n-Propylbenzene	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
sec-Butylbenzene	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
Styrene	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
tert-Butylbenzene	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
trans-1,2-DCE	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
Trichlorofluoromethane	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
Vinyl chloride	ND	1.0		µg/L	1	5/6/2022 4:06:55 PM	R87830
Xylenes, Total	ND	1.5		µg/L	1	5/6/2022 4:06:55 PM	R87830
Surr: 1,2-Dichloroethane-d4	93.4	70-130		%Rec	1	5/6/2022 4:06:55 PM	R87830
Surr: 4-Bromofluorobenzene	98.0	70-130		%Rec	1	5/6/2022 4:06:55 PM	R87830
Surr: Dibromofluoromethane	116	70-130		%Rec	1	5/6/2022 4:06:55 PM	R87830

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205039-003
Matrix: AQUEOUS
Client Sample ID: CW-1 Effluent Duplicate
Collection Date: 5/2/2022 12:05:00 PM
Received Date: 5/2/2022 2:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Surr: Toluene-d8	91.9	70-130		%Rec	1	5/6/2022 4:06:55 PM	R87830

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205039-004 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Influent
Collection Date: 5/2/2022 12:51:00 PM
Received Date: 5/2/2022 2:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**ELS**
Chromium	0.044	0.0060		mg/L	1	5/3/2022 3:24:56 PM	C87703
Iron	ND	0.020		mg/L	1	5/3/2022 3:24:56 PM	C87703
Manganese	0.051	0.0020	*	mg/L	1	5/3/2022 3:24:56 PM	C87703
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	0.043	0.0060		mg/L	1	5/11/2022 11:07:51 AM	67376
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.1	1.0		µg/L	1	5/16/2022 8:40:00 PM	67334
Surr: 2-Fluorobiphenyl	47.0	26.7-90.1		%Rec	1	5/16/2022 8:40:00 PM	67334
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
Toluene	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
Ethylbenzene	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
Naphthalene	ND	2.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
1-Methylnaphthalene	ND	4.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
2-Methylnaphthalene	ND	4.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
Acetone	ND	10		µg/L	1	5/6/2022 4:35:28 PM	R87830
Bromobenzene	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
Bromodichloromethane	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
Bromoform	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
Bromomethane	ND	3.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
2-Butanone	ND	10		µg/L	1	5/6/2022 4:35:28 PM	R87830
Carbon disulfide	ND	10		µg/L	1	5/6/2022 4:35:28 PM	R87830
Carbon Tetrachloride	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
Chlorobenzene	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
Chloroethane	ND	2.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
Chloroform	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
Chloromethane	ND	3.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
2-Chlorotoluene	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
4-Chlorotoluene	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
cis-1,2-DCE	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
Dibromochloromethane	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205039-004 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Influent
Collection Date: 5/2/2022 12:51:00 PM
Received Date: 5/2/2022 2:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dibromomethane	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
1,1-Dichloroethane	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
1,1-Dichloroethene	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
1,2-Dichloropropane	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
1,3-Dichloropropane	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
2,2-Dichloropropane	ND	2.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
1,1-Dichloropropene	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
Hexachlorobutadiene	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
2-Hexanone	ND	10		µg/L	1	5/6/2022 4:35:28 PM	R87830
Isopropylbenzene	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
4-Isopropyltoluene	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
4-Methyl-2-pentanone	ND	10		µg/L	1	5/6/2022 4:35:28 PM	R87830
Methylene Chloride	ND	3.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
n-Butylbenzene	ND	3.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
n-Propylbenzene	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
sec-Butylbenzene	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
Styrene	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
tert-Butylbenzene	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
trans-1,2-DCE	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
Trichloroethene (TCE)	4.6	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
Trichlorofluoromethane	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
Vinyl chloride	ND	1.0		µg/L	1	5/6/2022 4:35:28 PM	R87830
Xylenes, Total	ND	1.5		µg/L	1	5/6/2022 4:35:28 PM	R87830
Surr: 1,2-Dichloroethane-d4	94.5	70-130		%Rec	1	5/6/2022 4:35:28 PM	R87830
Surr: 4-Bromofluorobenzene	94.8	70-130		%Rec	1	5/6/2022 4:35:28 PM	R87830
Surr: Dibromofluoromethane	115	70-130		%Rec	1	5/6/2022 4:35:28 PM	R87830

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205039-004
Matrix: AQUEOUS
Client Sample ID: CW-2 Influent
Collection Date: 5/2/2022 12:51:00 PM
Received Date: 5/2/2022 2:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Surr: Toluene-d8	91.6	70-130		%Rec	1	5/6/2022 4:35:28 PM	R87830

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205039-005 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent
Collection Date: 5/2/2022 12:55:00 PM
Received Date: 5/2/2022 2:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**ELS**
Chromium	0.044	0.0060		mg/L	1	5/3/2022 3:26:35 PM	C87703
Iron	ND	0.020		mg/L	1	5/3/2022 3:26:35 PM	C87703
Manganese	0.038	0.0020		mg/L	1	5/3/2022 3:26:35 PM	C87703
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	0.043	0.0060		mg/L	1	5/11/2022 11:09:31 AM	67376
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.4	1.0		µg/L	1	5/16/2022 10:38:00 PM	67334
Surr: 2-Fluorobiphenyl	63.5	26.7-90.1		%Rec	1	5/16/2022 10:38:00 PM	67334
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
Toluene	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
Ethylbenzene	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
Naphthalene	ND	2.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
1-Methylnaphthalene	ND	4.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
2-Methylnaphthalene	ND	4.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
Acetone	ND	10		µg/L	1	5/6/2022 5:03:59 PM	R87830
Bromobenzene	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
Bromodichloromethane	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
Bromoform	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
Bromomethane	ND	3.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
2-Butanone	ND	10		µg/L	1	5/6/2022 5:03:59 PM	R87830
Carbon disulfide	ND	10		µg/L	1	5/6/2022 5:03:59 PM	R87830
Carbon Tetrachloride	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
Chlorobenzene	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
Chloroethane	ND	2.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
Chloroform	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
Chloromethane	ND	3.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
2-Chlorotoluene	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
4-Chlorotoluene	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
cis-1,2-DCE	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
Dibromochloromethane	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205039-005 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent
Collection Date: 5/2/2022 12:55:00 PM
Received Date: 5/2/2022 2:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dibromomethane	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
1,1-Dichloroethane	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
1,1-Dichloroethene	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
1,2-Dichloropropane	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
1,3-Dichloropropane	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
2,2-Dichloropropane	ND	2.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
1,1-Dichloropropene	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
Hexachlorobutadiene	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
2-Hexanone	ND	10		µg/L	1	5/6/2022 5:03:59 PM	R87830
Isopropylbenzene	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
4-Isopropyltoluene	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
4-Methyl-2-pentanone	ND	10		µg/L	1	5/6/2022 5:03:59 PM	R87830
Methylene Chloride	ND	3.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
n-Butylbenzene	ND	3.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
n-Propylbenzene	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
sec-Butylbenzene	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
Styrene	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
tert-Butylbenzene	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
trans-1,2-DCE	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
Trichlorofluoromethane	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
Vinyl chloride	ND	1.0		µg/L	1	5/6/2022 5:03:59 PM	R87830
Xylenes, Total	ND	1.5		µg/L	1	5/6/2022 5:03:59 PM	R87830
Surr: 1,2-Dichloroethane-d4	93.6	70-130		%Rec	1	5/6/2022 5:03:59 PM	R87830
Surr: 4-Bromofluorobenzene	97.0	70-130		%Rec	1	5/6/2022 5:03:59 PM	R87830
Surr: Dibromofluoromethane	117	70-130		%Rec	1	5/6/2022 5:03:59 PM	R87830

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205039-005
Matrix: AQUEOUS
Client Sample ID: CW-2 Effluent
Collection Date: 5/2/2022 12:55:00 PM
Received Date: 5/2/2022 2:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Surr: Toluene-d8	91.7	70-130		%Rec	1	5/6/2022 5:03:59 PM	R87830

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205039-006 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent Duplicate
Collection Date: 5/2/2022 1:00:00 PM
Received Date: 5/2/2022 2:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**ELS**
Chromium	0.044	0.0060		mg/L	1	5/3/2022 3:28:15 PM	C87703
Iron	ND	0.020		mg/L	1	5/3/2022 3:28:15 PM	C87703
Manganese	0.038	0.0020		mg/L	1	5/3/2022 3:28:15 PM	C87703
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	0.043	0.0060		mg/L	1	5/11/2022 11:11:09 AM	67376
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.1	1.0		µg/L	1	5/16/2022 11:28:00 PM	67334
Surr: 2-Fluorobiphenyl	57.5	26.7-90.1		%Rec	1	5/16/2022 11:28:00 PM	67334
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
Toluene	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
Ethylbenzene	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
Naphthalene	ND	2.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
1-Methylnaphthalene	ND	4.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
2-Methylnaphthalene	ND	4.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
Acetone	ND	10		µg/L	1	5/6/2022 5:32:35 PM	R87830
Bromobenzene	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
Bromodichloromethane	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
Bromoform	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
Bromomethane	ND	3.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
2-Butanone	ND	10		µg/L	1	5/6/2022 5:32:35 PM	R87830
Carbon disulfide	ND	10		µg/L	1	5/6/2022 5:32:35 PM	R87830
Carbon Tetrachloride	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
Chlorobenzene	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
Chloroethane	ND	2.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
Chloroform	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
Chloromethane	ND	3.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
2-Chlorotoluene	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
4-Chlorotoluene	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
cis-1,2-DCE	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
Dibromochloromethane	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205039-006 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent Duplicate
Collection Date: 5/2/2022 1:00:00 PM
Received Date: 5/2/2022 2:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dibromomethane	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
1,1-Dichloroethane	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
1,1-Dichloroethene	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
1,2-Dichloropropane	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
1,3-Dichloropropane	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
2,2-Dichloropropane	ND	2.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
1,1-Dichloropropene	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
Hexachlorobutadiene	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
2-Hexanone	ND	10		µg/L	1	5/6/2022 5:32:35 PM	R87830
Isopropylbenzene	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
4-Isopropyltoluene	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
4-Methyl-2-pentanone	ND	10		µg/L	1	5/6/2022 5:32:35 PM	R87830
Methylene Chloride	ND	3.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
n-Butylbenzene	ND	3.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
n-Propylbenzene	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
sec-Butylbenzene	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
Styrene	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
tert-Butylbenzene	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
trans-1,2-DCE	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
Trichlorofluoromethane	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
Vinyl chloride	ND	1.0		µg/L	1	5/6/2022 5:32:35 PM	R87830
Xylenes, Total	ND	1.5		µg/L	1	5/6/2022 5:32:35 PM	R87830
Surr: 1,2-Dichloroethane-d4	92.8	70-130		%Rec	1	5/6/2022 5:32:35 PM	R87830
Surr: 4-Bromofluorobenzene	94.8	70-130		%Rec	1	5/6/2022 5:32:35 PM	R87830
Surr: Dibromofluoromethane	117	70-130		%Rec	1	5/6/2022 5:32:35 PM	R87830

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205039-006
Matrix: AQUEOUS
Client Sample ID: CW-2 Effluent Duplicate
Collection Date: 5/2/2022 1:00:00 PM
Received Date: 5/2/2022 2:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Surr: Toluene-d8	89.8	70-130		%Rec	1	5/6/2022 5:32:35 PM	R87830

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205039-007 **Matrix:** AQUEOUS

Client Sample ID: Trip Blank
Collection Date:
Received Date: 5/2/2022 2:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
Toluene	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
Ethylbenzene	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
Naphthalene	ND	2.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
1-Methylnaphthalene	ND	4.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
2-Methylnaphthalene	ND	4.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
Acetone	ND	10		µg/L	1	5/6/2022 6:01:11 PM	R87830
Bromobenzene	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
Bromodichloromethane	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
Bromoform	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
Bromomethane	ND	3.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
2-Butanone	ND	10		µg/L	1	5/6/2022 6:01:11 PM	R87830
Carbon disulfide	ND	10		µg/L	1	5/6/2022 6:01:11 PM	R87830
Carbon Tetrachloride	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
Chlorobenzene	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
Chloroethane	ND	2.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
Chloroform	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
Chloromethane	ND	3.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
2-Chlorotoluene	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
4-Chlorotoluene	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
cis-1,2-DCE	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
Dibromochloromethane	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
Dibromomethane	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
1,1-Dichloroethane	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
1,1-Dichloroethene	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
1,2-Dichloropropane	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
1,3-Dichloropropane	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
2,2-Dichloropropane	ND	2.0		µg/L	1	5/6/2022 6:01:11 PM	R87830

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205039-007 **Matrix:** AQUEOUS

Client Sample ID: Trip Blank
Collection Date:
Received Date: 5/2/2022 2:50:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,1-Dichloropropene	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
Hexachlorobutadiene	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
2-Hexanone	ND	10		µg/L	1	5/6/2022 6:01:11 PM	R87830
Isopropylbenzene	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
4-Isopropyltoluene	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
4-Methyl-2-pentanone	ND	10		µg/L	1	5/6/2022 6:01:11 PM	R87830
Methylene Chloride	ND	3.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
n-Butylbenzene	ND	3.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
n-Propylbenzene	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
sec-Butylbenzene	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
Styrene	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
tert-Butylbenzene	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
trans-1,2-DCE	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
Trichlorofluoromethane	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
Vinyl chloride	ND	1.0		µg/L	1	5/6/2022 6:01:11 PM	R87830
Xylenes, Total	ND	1.5		µg/L	1	5/6/2022 6:01:11 PM	R87830
Surr: 1,2-Dichloroethane-d4	89.0	70-130		%Rec	1	5/6/2022 6:01:11 PM	R87830
Surr: 4-Bromofluorobenzene	94.5	70-130		%Rec	1	5/6/2022 6:01:11 PM	R87830
Surr: Dibromofluoromethane	114	70-130		%Rec	1	5/6/2022 6:01:11 PM	R87830
Surr: Toluene-d8	90.2	70-130		%Rec	1	5/6/2022 6:01:11 PM	R87830

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2205039**
31-May-22

Client: EA Engineering
Project: Sparton

Sample ID: **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **C87703** RunNo: **87703**
Prep Date: Analysis Date: **5/3/2022** SeqNo: **3105468** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID: **LLLCS** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **C87703** RunNo: **87703**
Prep Date: Analysis Date: **5/3/2022** SeqNo: **3105469** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.0065	0.0060	0.006000	0	109	50	150			
Iron	0.022	0.020	0.02000	0	108	50	150			
Manganese	0.0020	0.0020	0.002000	0	101	50	150			

Sample ID: **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **C87703** RunNo: **87703**
Prep Date: Analysis Date: **5/3/2022** SeqNo: **3105470** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.53	0.0060	0.5000	0	107	85	115			
Iron	0.54	0.020	0.5000	0	109	85	115			
Manganese	0.51	0.0020	0.5000	0	101	85	115			

Sample ID: **2205039-001DMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **CW-1 Influent** Batch ID: **C87703** RunNo: **87703**
Prep Date: Analysis Date: **5/3/2022** SeqNo: **3105496** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.54	0.0060	0.5000	0.005006	106	70	130			
Iron	0.52	0.020	0.5000	0	103	70	130			
Manganese	0.52	0.0020	0.5000	0.0006029	104	70	130			

Sample ID: **2205039-001DMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **CW-1 Influent** Batch ID: **C87703** RunNo: **87703**
Prep Date: Analysis Date: **5/3/2022** SeqNo: **3105497** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.53	0.0060	0.5000	0.005006	105	70	130	1.17	20	
Iron	0.56	0.020	0.5000	0	111	70	130	7.67	20	
Manganese	0.52	0.0020	0.5000	0.0006029	104	70	130	0.348	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2205039**
31-May-22

Client: EA Engineering
Project: Sparton

Sample ID: **2205039-002DMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **CW-1 Effluent** Batch ID: **C87703** RunNo: **87703**
Prep Date: Analysis Date: **5/3/2022** SeqNo: **3105499** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.56	0.0060	0.5000	0.005300	111	70	130			
Iron	0.56	0.020	0.5000	0	112	70	130			
Manganese	0.54	0.0020	0.5000	0	108	70	130			

Sample ID: **2205039-002DMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **CW-1 Effluent** Batch ID: **C87703** RunNo: **87703**
Prep Date: Analysis Date: **5/3/2022** SeqNo: **3105500** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.54	0.0060	0.5000	0.005300	107	70	130	3.38	20	
Iron	0.54	0.020	0.5000	0	109	70	130	3.16	20	
Manganese	0.53	0.0020	0.5000	0	105	70	130	2.90	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2205039**
31-May-22

Client: EA Engineering
Project: Sparton

Sample ID: **MB-67376** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **67376** RunNo: **87920**
Prep Date: **5/10/2022** Analysis Date: **5/11/2022** SeqNo: **3116136** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LLLCS-67376** SampType: **LCSLL** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC** Batch ID: **67376** RunNo: **87920**
Prep Date: Analysis Date: **5/11/2022** SeqNo: **3116138** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.0063	0.0060	0.006000	0	105	50	150			

Sample ID: **LCS-67376** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **67376** RunNo: **87920**
Prep Date: **5/10/2022** Analysis Date: **5/11/2022** SeqNo: **3116219** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.50	0.0060	0.5000	0	99.5	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2205039**
31-May-22

Client: EA Engineering
Project: Sparton

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R87830** RunNo: **87830**
Prep Date: Analysis Date: **5/6/2022** SeqNo: **3111371** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	103	70	130			
Toluene	18	1.0	20.00	0	88.7	70	130			
Chlorobenzene	19	1.0	20.00	0	94.4	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	95.8	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	101	70	130			
Surr: 1,2-Dichloroethane-d4	9.1		10.00		91.4	70	130			
Surr: 4-Bromofluorobenzene	9.4		10.00		93.5	70	130			
Surr: Dibromofluoromethane	12		10.00		117	70	130			
Surr: Toluene-d8	9.0		10.00		90.1	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R87830** RunNo: **87830**
Prep Date: Analysis Date: **5/6/2022** SeqNo: **3111393** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2205039**
31-May-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R87830**	RunNo: **87830**	
Prep Date:	Analysis Date: **5/6/2022**	SeqNo: **3111393**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2205039**
31-May-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R87830** RunNo: **87830**
Prep Date: Analysis Date: **5/6/2022** SeqNo: **3111393** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.8	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		94.7	70	130			
Surr: Dibromofluoromethane	11		10.00		113	70	130			
Surr: Toluene-d8	8.7		10.00		87.2	70	130			

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R87853** RunNo: **87853**
Prep Date: Analysis Date: **5/9/2022** SeqNo: **3112397** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	20	1.0	20.00	0	100	70	130			
Surr: 1,2-Dichloroethane-d4	9.0		10.00		89.6	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		96.7	70	130			
Surr: Dibromofluoromethane	12		10.00		116	70	130			
Surr: Toluene-d8	8.9		10.00		88.7	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R87853** RunNo: **87853**
Prep Date: Analysis Date: **5/9/2022** SeqNo: **3112405** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	ND	1.0								
Surr: 1,2-Dichloroethane-d4	9.2		10.00		92.5	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.2	70	130			
Surr: Dibromofluoromethane	12		10.00		119	70	130			
Surr: Toluene-d8	9.4		10.00		93.5	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2205039**
31-May-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb-67218** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **67218** RunNo: **87933**
Prep Date: **5/3/2022** Analysis Date: **5/11/2022** SeqNo: **3117215** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	2.3		4.000		57.0	31.6	100			
Surr: 2,4,6-Tribromophenol	3.9		8.000		48.8	22	101			
Surr: 2-Fluorobiphenyl	2.2		4.000		56.0	26.7	90.1			
Surr: 4-Terphenyl-d14	4.5		4.000		112	72.3	147			

Sample ID: **lcs-67218** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **67218** RunNo: **87933**
Prep Date: **5/3/2022** Analysis Date: **5/11/2022** SeqNo: **3117216** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.82	0.10	2.000	0	41.0	20.2	48.4			
Surr: Nitrobenzene-d5	4.3		5.000		86.0	31.6	100			
Surr: 2,4,6-Tribromophenol	6.6		10.00		66.0	22	101			
Surr: 2-Fluorobiphenyl	3.9		5.000		77.2	26.7	90.1			
Surr: 4-Terphenyl-d14	7.6		5.000		152	72.3	147			S

Sample ID: **lcsd-67218** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **67218** RunNo: **87933**
Prep Date: **5/3/2022** Analysis Date: **5/11/2022** SeqNo: **3117217** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.86	0.10	2.000	0	43.0	20.2	48.4	4.76	30.1	
Surr: Nitrobenzene-d5	4.4		5.000		87.6	31.6	100	0	0	
Surr: 2,4,6-Tribromophenol	7.0		10.00		70.4	22	101	0	0	
Surr: 2-Fluorobiphenyl	3.6		5.000		72.8	26.7	90.1	0	0	
Surr: 4-Terphenyl-d14	6.4		5.000		129	72.3	147	0	0	

Sample ID: **mb-67334** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **67334** RunNo: **88045**
Prep Date: **5/9/2022** Analysis Date: **5/16/2022** SeqNo: **3121038** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	2.2		4.000		55.5	31.6	100			
Surr: 2,4,6-Tribromophenol	4.3		8.000		53.5	22	101			
Surr: 2-Fluorobiphenyl	1.8		4.000		46.0	26.7	90.1			
Surr: 4-Terphenyl-d14	4.4		4.000		111	72.3	147			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2205039**
31-May-22

Client: EA Engineering
Project: Sparton

Sample ID: **lcs-67334** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **67334** RunNo: **88045**
Prep Date: **5/9/2022** Analysis Date: **5/16/2022** SeqNo: **3121039** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.62	0.10	2.000	0	31.0	20.2	48.4			
Surr: Nitrobenzene-d5	3.3		5.000		66.8	31.6	100			
Surr: 2,4,6-Tribromophenol	7.3		10.00		73.2	22	101			
Surr: 2-Fluorobiphenyl	2.9		5.000		58.4	26.7	90.1			
Surr: 4-Terphenyl-d14	6.4		5.000		128	72.3	147			

Sample ID: **lcsd-67334** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **67334** RunNo: **88045**
Prep Date: **5/9/2022** Analysis Date: **5/16/2022** SeqNo: **3121040** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.66	0.10	2.000	0	33.0	20.2	48.4	6.25	30.1	
Surr: Nitrobenzene-d5	3.2		5.000		63.6	31.6	100	0	0	
Surr: 2,4,6-Tribromophenol	6.2		10.00		62.0	22	101	0	0	
Surr: 2-Fluorobiphenyl	2.4		5.000		47.6	26.7	90.1	0	0	
Surr: 4-Terphenyl-d14	6.1		5.000		122	72.3	147	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: EA Engineering Work Order Number: 2205039 RcptNo: 1

Received By: **Sean Livingston** 5/2/2022 2:50:00 PM S. Livingston
Completed By: **Sean Livingston** 5/2/2022 2:58:21 PM S. Livingston
Reviewed By: KPG 5.2.22

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☑ NA ☐
   Samples were collected the same day and chilled.
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 12
(<2 or >12 unless noted)
Adjusted? NO
Checked by: JN 5/2/22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.1	Good				
2	7.3	Good				

Chain-of-Custody Record

Client: Sparton Technologies Inc

EA Engineering, Science, and Technology, Inc., PBC

Mailing Address: 320 Gold Av SW #1300
Albuquerque, NM 87102

Phone #: 505-715-4154

email or Fax#: rmarley@eaest.com

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation:
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ **Rush** 72 Hours

Project Name: Sparton

Project #: Bills to Sparton direct

Project Manager: Bob Marley, EA Engineering

Sampler: Scott Miles

On Ice: ☑ Yes ☐ No

Sample Temperature: 5.1 ±0=5.1°C 7.3±0=7.3°

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2205039	VOCs, 8260B	1,4-Dioxane, 8270SIM	Total Chromium	Dissolved Metals (Cr, Fe, Mn)	Air Bubbles (Y or N)
5-2-22	1156	Water	CW-1 Influent	1x ~~500ml~~ 1L Amber 2x 125ml HDPE 3xVOA	HNO_3, HCl, none	001	X	X	X	X	
	1200	Water	CW-1 Effluent			002	X	X	X	X	
	1205	Water	CW-1 Effluent Duplicate			003	X	X	X	X	
	1251	Water	CW-2 Influent			004	X	X	X	X	
	1255	Water	CW-2 Effluent			005	X	X	X	X	
	1300	Water	CW-2 Effluent Duplicate			006	X	X	X	X	
		Water	Trip Blank	2xVOA	HCl	007	X				

Date	Time	Relinquished by:	Received by:	Date	Time
5-2-2022	14:48	Scott Miles	CDO	5/2/22	14:50
Date:	Time:	Relinquished by:	Received by:	Date	Time

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

May 31, 2022

Bob Marley
EA Engineering
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL:
FAX:

RE: Sparton OrderNo.: 2205386

Dear Bob Marley:

Hall Environmental Analysis Laboratory received 9 sample(s) on 5/6/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2205386**
Date Reported: **5/31/2022**

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205386-001 **Matrix:** AQUEOUS

Client Sample ID: MW-57D
Collection Date: 5/5/2022 2:14:00 PM
Received Date: 5/6/2022 4:01:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	ND	0.0060		mg/L	1	5/17/2022 1:02:52 PM	67490
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	5/17/2022 6:38:00 AM	67395
Surr: 2-Fluorobiphenyl	89.5	26.7-90.1		%Rec	1	5/17/2022 6:38:00 AM	67395
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
Toluene	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
Ethylbenzene	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
Naphthalene	ND	2.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
1-Methylnaphthalene	ND	4.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
2-Methylnaphthalene	ND	4.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
Acetone	ND	10		µg/L	1	5/10/2022 6:12:00 PM	R87867
Bromobenzene	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
Bromodichloromethane	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
Bromoform	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
Bromomethane	ND	3.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
2-Butanone	ND	10		µg/L	1	5/10/2022 6:12:00 PM	R87867
Carbon disulfide	ND	10		µg/L	1	5/10/2022 6:12:00 PM	R87867
Carbon Tetrachloride	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
Chlorobenzene	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
Chloroethane	ND	2.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
Chloroform	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
Chloromethane	ND	3.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
2-Chlorotoluene	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
4-Chlorotoluene	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
cis-1,2-DCE	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
Dibromochloromethane	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
Dibromomethane	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205386-001 **Matrix:** AQUEOUS

Client Sample ID: MW-57D
Collection Date: 5/5/2022 2:14:00 PM
Received Date: 5/6/2022 4:01:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
1,1-Dichloroethane	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
1,1-Dichloroethene	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
1,2-Dichloropropane	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
1,3-Dichloropropane	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
2,2-Dichloropropane	ND	2.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
1,1-Dichloropropene	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
Hexachlorobutadiene	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
2-Hexanone	ND	10		µg/L	1	5/10/2022 6:12:00 PM	R87867
Isopropylbenzene	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
4-Isopropyltoluene	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
4-Methyl-2-pentanone	ND	10		µg/L	1	5/10/2022 6:12:00 PM	R87867
Methylene Chloride	ND	3.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
n-Butylbenzene	ND	3.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
n-Propylbenzene	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
sec-Butylbenzene	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
Styrene	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
tert-Butylbenzene	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
trans-1,2-DCE	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
Trichlorofluoromethane	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
Vinyl chloride	ND	1.0		µg/L	1	5/10/2022 6:12:00 PM	R87867
Xylenes, Total	ND	1.5		µg/L	1	5/10/2022 6:12:00 PM	R87867
Surr: 1,2-Dichloroethane-d4	110	70-130		%Rec	1	5/10/2022 6:12:00 PM	R87867
Surr: 4-Bromofluorobenzene	97.4	70-130		%Rec	1	5/10/2022 6:12:00 PM	R87867
Surr: Dibromofluoromethane	113	70-130		%Rec	1	5/10/2022 6:12:00 PM	R87867
Surr: Toluene-d8	96.1	70-130		%Rec	1	5/10/2022 6:12:00 PM	R87867

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205386-002 **Matrix:** AQUEOUS

Client Sample ID: MW-66
Collection Date: 5/5/2022 3:23:00 PM
Received Date: 5/6/2022 4:01:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	ND	0.0060		mg/L	1	5/17/2022 1:07:23 PM	67490
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	5/17/2022 7:23:00 AM	67395
Surr: 2-Fluorobiphenyl	75.0	26.7-90.1		%Rec	1	5/17/2022 7:23:00 AM	67395
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
Toluene	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
Ethylbenzene	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
Naphthalene	ND	2.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
1-Methylnaphthalene	ND	4.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
2-Methylnaphthalene	ND	4.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
Acetone	ND	10		µg/L	1	5/10/2022 7:21:00 PM	R87867
Bromobenzene	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
Bromodichloromethane	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
Bromoform	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
Bromomethane	ND	3.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
2-Butanone	ND	10		µg/L	1	5/10/2022 7:21:00 PM	R87867
Carbon disulfide	ND	10		µg/L	1	5/10/2022 7:21:00 PM	R87867
Carbon Tetrachloride	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
Chlorobenzene	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
Chloroethane	ND	2.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
Chloroform	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
Chloromethane	ND	3.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
2-Chlorotoluene	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
4-Chlorotoluene	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
cis-1,2-DCE	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
Dibromochloromethane	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
Dibromomethane	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205386-002 **Matrix:** AQUEOUS

Client Sample ID: MW-66
Collection Date: 5/5/2022 3:23:00 PM
Received Date: 5/6/2022 4:01:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
1,1-Dichloroethane	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
1,1-Dichloroethene	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
1,2-Dichloropropane	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
1,3-Dichloropropane	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
2,2-Dichloropropane	ND	2.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
1,1-Dichloropropene	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
Hexachlorobutadiene	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
2-Hexanone	ND	10		µg/L	1	5/10/2022 7:21:00 PM	R87867
Isopropylbenzene	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
4-Isopropyltoluene	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
4-Methyl-2-pentanone	ND	10		µg/L	1	5/10/2022 7:21:00 PM	R87867
Methylene Chloride	ND	3.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
n-Butylbenzene	ND	3.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
n-Propylbenzene	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
sec-Butylbenzene	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
Styrene	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
tert-Butylbenzene	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
trans-1,2-DCE	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
Trichlorofluoromethane	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
Vinyl chloride	ND	1.0		µg/L	1	5/10/2022 7:21:00 PM	R87867
Xylenes, Total	ND	1.5		µg/L	1	5/10/2022 7:21:00 PM	R87867
Surr: 1,2-Dichloroethane-d4	110	70-130		%Rec	1	5/10/2022 7:21:00 PM	R87867
Surr: 4-Bromofluorobenzene	99.5	70-130		%Rec	1	5/10/2022 7:21:00 PM	R87867
Surr: Dibromofluoromethane	111	70-130		%Rec	1	5/10/2022 7:21:00 PM	R87867
Surr: Toluene-d8	96.6	70-130		%Rec	1	5/10/2022 7:21:00 PM	R87867

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205386-003 **Matrix:** AQUEOUS

Client Sample ID: MW-77
Collection Date: 5/5/2022 5:06:00 PM
Received Date: 5/6/2022 4:01:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**ELS**
Chromium	0.036	0.0060		mg/L	1	5/11/2022 1:24:04 PM	B87920
Iron	ND	0.020		mg/L	1	5/11/2022 1:24:04 PM	B87920
Manganese	ND	0.0020		mg/L	1	5/11/2022 1:24:04 PM	B87920
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.3	1.0		µg/L	1	5/17/2022 8:09:00 AM	67395
Surr: 2-Fluorobiphenyl	72.5	26.7-90.1		%Rec	1	5/17/2022 8:09:00 AM	67395
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
Toluene	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
Ethylbenzene	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
Naphthalene	ND	2.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
1-Methylnaphthalene	ND	4.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
2-Methylnaphthalene	ND	4.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
Acetone	ND	10		µg/L	1	5/10/2022 7:44:00 PM	R87867
Bromobenzene	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
Bromodichloromethane	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
Bromoform	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
Bromomethane	ND	3.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
2-Butanone	ND	10		µg/L	1	5/10/2022 7:44:00 PM	R87867
Carbon disulfide	ND	10		µg/L	1	5/10/2022 7:44:00 PM	R87867
Carbon Tetrachloride	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
Chlorobenzene	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
Chloroethane	ND	2.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
Chloroform	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
Chloromethane	ND	3.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
2-Chlorotoluene	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
4-Chlorotoluene	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
cis-1,2-DCE	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
Dibromochloromethane	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
Dibromomethane	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205386-003 **Matrix:** AQUEOUS

Client Sample ID: MW-77
Collection Date: 5/5/2022 5:06:00 PM
Received Date: 5/6/2022 4:01:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
1,1-Dichloroethane	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
1,1-Dichloroethene	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
1,2-Dichloropropane	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
1,3-Dichloropropane	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
2,2-Dichloropropane	ND	2.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
1,1-Dichloropropene	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
Hexachlorobutadiene	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
2-Hexanone	ND	10		µg/L	1	5/10/2022 7:44:00 PM	R87867
Isopropylbenzene	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
4-Isopropyltoluene	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
4-Methyl-2-pentanone	ND	10		µg/L	1	5/10/2022 7:44:00 PM	R87867
Methylene Chloride	ND	3.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
n-Butylbenzene	ND	3.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
n-Propylbenzene	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
sec-Butylbenzene	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
Styrene	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
tert-Butylbenzene	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
trans-1,2-DCE	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
Trichloroethene (TCE)	2.7	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
Trichlorofluoromethane	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
Vinyl chloride	ND	1.0		µg/L	1	5/10/2022 7:44:00 PM	R87867
Xylenes, Total	ND	1.5		µg/L	1	5/10/2022 7:44:00 PM	R87867
Surr: 1,2-Dichloroethane-d4	109	70-130		%Rec	1	5/10/2022 7:44:00 PM	R87867
Surr: 4-Bromofluorobenzene	98.4	70-130		%Rec	1	5/10/2022 7:44:00 PM	R87867
Surr: Dibromofluoromethane	114	70-130		%Rec	1	5/10/2022 7:44:00 PM	R87867
Surr: Toluene-d8	96.1	70-130		%Rec	1	5/10/2022 7:44:00 PM	R87867

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205386-004 **Matrix:** AQUEOUS

Client Sample ID: MW-74
Collection Date: 5/6/2022 9:59:00 AM
Received Date: 5/6/2022 4:01:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**ELS**
Chromium	ND	0.0060		mg/L	1	5/11/2022 1:33:40 PM	B87920
Iron	ND	0.020		mg/L	1	5/11/2022 1:33:40 PM	B87920
Manganese	ND	0.0020		mg/L	1	5/11/2022 1:33:40 PM	B87920
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.6	1.0		µg/L	1	5/17/2022 8:53:00 AM	67395
Surr: 2-Fluorobiphenyl	73.0	26.7-90.1		%Rec	1	5/17/2022 8:53:00 AM	67395
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
Toluene	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
Ethylbenzene	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
Naphthalene	ND	2.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
1-Methylnaphthalene	ND	4.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
2-Methylnaphthalene	ND	4.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
Acetone	ND	10		µg/L	1	5/10/2022 8:07:00 PM	R87867
Bromobenzene	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
Bromodichloromethane	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
Bromoform	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
Bromomethane	ND	3.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
2-Butanone	ND	10		µg/L	1	5/10/2022 8:07:00 PM	R87867
Carbon disulfide	ND	10		µg/L	1	5/10/2022 8:07:00 PM	R87867
Carbon Tetrachloride	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
Chlorobenzene	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
Chloroethane	ND	2.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
Chloroform	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
Chloromethane	ND	3.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
2-Chlorotoluene	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
4-Chlorotoluene	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
cis-1,2-DCE	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
Dibromochloromethane	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
Dibromomethane	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205386-004 **Matrix:** AQUEOUS

Client Sample ID: MW-74
Collection Date: 5/6/2022 9:59:00 AM
Received Date: 5/6/2022 4:01:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
1,1-Dichloroethane	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
1,1-Dichloroethene	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
1,2-Dichloropropane	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
1,3-Dichloropropane	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
2,2-Dichloropropane	ND	2.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
1,1-Dichloropropene	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
Hexachlorobutadiene	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
2-Hexanone	ND	10		µg/L	1	5/10/2022 8:07:00 PM	R87867
Isopropylbenzene	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
4-Isopropyltoluene	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
4-Methyl-2-pentanone	ND	10		µg/L	1	5/10/2022 8:07:00 PM	R87867
Methylene Chloride	ND	3.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
n-Butylbenzene	ND	3.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
n-Propylbenzene	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
sec-Butylbenzene	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
Styrene	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
tert-Butylbenzene	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
trans-1,2-DCE	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
Trichlorofluoromethane	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
Vinyl chloride	ND	1.0		µg/L	1	5/10/2022 8:07:00 PM	R87867
Xylenes, Total	ND	1.5		µg/L	1	5/10/2022 8:07:00 PM	R87867
Surr: 1,2-Dichloroethane-d4	109	70-130		%Rec	1	5/10/2022 8:07:00 PM	R87867
Surr: 4-Bromofluorobenzene	98.4	70-130		%Rec	1	5/10/2022 8:07:00 PM	R87867
Surr: Dibromofluoromethane	113	70-130		%Rec	1	5/10/2022 8:07:00 PM	R87867
Surr: Toluene-d8	96.0	70-130		%Rec	1	5/10/2022 8:07:00 PM	R87867

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205386-005 **Matrix:** AQUEOUS

Client Sample ID: MW-76
Collection Date: 5/6/2022 11:51:00 AM
Received Date: 5/6/2022 4:01:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**ELS**
Chromium	ND	0.0060		mg/L	1	5/11/2022 1:35:19 PM	B87920
Iron	ND	0.020		mg/L	1	5/11/2022 1:35:19 PM	B87920
Manganese	ND	0.0020		mg/L	1	5/11/2022 1:35:19 PM	B87920
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.7	1.0		µg/L	1	5/17/2022 6:20:00 PM	67395
Surr: 2-Fluorobiphenyl	84.0	26.7-90.1		%Rec	1	5/17/2022 6:20:00 PM	67395
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
Toluene	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
Ethylbenzene	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
Naphthalene	ND	2.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
1-Methylnaphthalene	ND	4.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
2-Methylnaphthalene	ND	4.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
Acetone	ND	10		µg/L	1	5/10/2022 8:30:00 PM	R87867
Bromobenzene	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
Bromodichloromethane	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
Bromoform	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
Bromomethane	ND	3.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
2-Butanone	ND	10		µg/L	1	5/10/2022 8:30:00 PM	R87867
Carbon disulfide	ND	10		µg/L	1	5/10/2022 8:30:00 PM	R87867
Carbon Tetrachloride	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
Chlorobenzene	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
Chloroethane	ND	2.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
Chloroform	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
Chloromethane	ND	3.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
2-Chlorotoluene	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
4-Chlorotoluene	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
cis-1,2-DCE	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
Dibromochloromethane	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
Dibromomethane	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205386-005 **Matrix:** AQUEOUS

Client Sample ID: MW-76
Collection Date: 5/6/2022 11:51:00 AM
Received Date: 5/6/2022 4:01:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
1,1-Dichloroethane	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
1,1-Dichloroethene	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
1,2-Dichloropropane	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
1,3-Dichloropropane	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
2,2-Dichloropropane	ND	2.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
1,1-Dichloropropene	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
Hexachlorobutadiene	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
2-Hexanone	ND	10		µg/L	1	5/10/2022 8:30:00 PM	R87867
Isopropylbenzene	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
4-Isopropyltoluene	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
4-Methyl-2-pentanone	ND	10		µg/L	1	5/10/2022 8:30:00 PM	R87867
Methylene Chloride	ND	3.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
n-Butylbenzene	ND	3.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
n-Propylbenzene	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
sec-Butylbenzene	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
Styrene	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
tert-Butylbenzene	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
trans-1,2-DCE	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
Trichlorofluoromethane	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
Vinyl chloride	ND	1.0		µg/L	1	5/10/2022 8:30:00 PM	R87867
Xylenes, Total	ND	1.5		µg/L	1	5/10/2022 8:30:00 PM	R87867
Surr: 1,2-Dichloroethane-d4	110	70-130		%Rec	1	5/10/2022 8:30:00 PM	R87867
Surr: 4-Bromofluorobenzene	96.4	70-130		%Rec	1	5/10/2022 8:30:00 PM	R87867
Surr: Dibromofluoromethane	114	70-130		%Rec	1	5/10/2022 8:30:00 PM	R87867
Surr: Toluene-d8	96.9	70-130		%Rec	1	5/10/2022 8:30:00 PM	R87867

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205386-006 **Matrix:** AQUEOUS

Client Sample ID: MW-75
Collection Date: 5/6/2022 1:26:00 PM
Received Date: 5/6/2022 4:01:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**ELS**
Chromium	ND	0.0060		mg/L	1	5/11/2022 1:37:00 PM	B87920
Iron	ND	0.020		mg/L	1	5/11/2022 1:37:00 PM	B87920
Manganese	ND	0.0020		mg/L	1	5/11/2022 1:37:00 PM	B87920
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	1.9	1.0		µg/L	1	5/17/2022 7:25:00 PM	67395
Surr: 2-Fluorobiphenyl	65.5	26.7-90.1		%Rec	1	5/17/2022 7:25:00 PM	67395
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
Toluene	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
Ethylbenzene	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
Naphthalene	ND	2.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
1-Methylnaphthalene	ND	4.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
2-Methylnaphthalene	ND	4.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
Acetone	ND	10		µg/L	1	5/10/2022 8:54:00 PM	R87867
Bromobenzene	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
Bromodichloromethane	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
Bromoform	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
Bromomethane	ND	3.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
2-Butanone	ND	10		µg/L	1	5/10/2022 8:54:00 PM	R87867
Carbon disulfide	ND	10		µg/L	1	5/10/2022 8:54:00 PM	R87867
Carbon Tetrachloride	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
Chlorobenzene	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
Chloroethane	ND	2.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
Chloroform	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
Chloromethane	ND	3.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
2-Chlorotoluene	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
4-Chlorotoluene	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
cis-1,2-DCE	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
Dibromochloromethane	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
Dibromomethane	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205386-006 **Matrix:** AQUEOUS

Client Sample ID: MW-75
Collection Date: 5/6/2022 1:26:00 PM
Received Date: 5/6/2022 4:01:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
1,1-Dichloroethane	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
1,1-Dichloroethene	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
1,2-Dichloropropane	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
1,3-Dichloropropane	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
2,2-Dichloropropane	ND	2.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
1,1-Dichloropropene	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
Hexachlorobutadiene	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
2-Hexanone	ND	10		µg/L	1	5/10/2022 8:54:00 PM	R87867
Isopropylbenzene	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
4-Isopropyltoluene	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
4-Methyl-2-pentanone	ND	10		µg/L	1	5/10/2022 8:54:00 PM	R87867
Methylene Chloride	ND	3.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
n-Butylbenzene	ND	3.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
n-Propylbenzene	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
sec-Butylbenzene	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
Styrene	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
tert-Butylbenzene	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
trans-1,2-DCE	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
Trichlorofluoromethane	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
Vinyl chloride	ND	1.0		µg/L	1	5/10/2022 8:54:00 PM	R87867
Xylenes, Total	ND	1.5		µg/L	1	5/10/2022 8:54:00 PM	R87867
Surr: 1,2-Dichloroethane-d4	110	70-130		%Rec	1	5/10/2022 8:54:00 PM	R87867
Surr: 4-Bromofluorobenzene	97.9	70-130		%Rec	1	5/10/2022 8:54:00 PM	R87867
Surr: Dibromofluoromethane	114	70-130		%Rec	1	5/10/2022 8:54:00 PM	R87867
Surr: Toluene-d8	95.3	70-130		%Rec	1	5/10/2022 8:54:00 PM	R87867

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205386-007 **Matrix:** AQUEOUS

Client Sample ID: MW-78
Collection Date: 5/6/2022 2:58:00 PM
Received Date: 5/6/2022 4:01:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**ELS**
Chromium	0.042	0.0060		mg/L	1	5/11/2022 1:38:41 PM	B87920
Iron	ND	0.020		mg/L	1	5/11/2022 1:38:41 PM	B87920
Manganese	ND	0.0020		mg/L	1	5/11/2022 1:38:41 PM	B87920
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.4	1.0		µg/L	1	5/17/2022 8:18:00 PM	67395
Surr: 2-Fluorobiphenyl	74.5	26.7-90.1		%Rec	1	5/17/2022 8:18:00 PM	67395
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
Toluene	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
Ethylbenzene	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
Naphthalene	ND	2.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
1-Methylnaphthalene	ND	4.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
2-Methylnaphthalene	ND	4.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
Acetone	ND	10		µg/L	1	5/10/2022 9:17:00 PM	R87867
Bromobenzene	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
Bromodichloromethane	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
Bromoform	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
Bromomethane	ND	3.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
2-Butanone	ND	10		µg/L	1	5/10/2022 9:17:00 PM	R87867
Carbon disulfide	ND	10		µg/L	1	5/10/2022 9:17:00 PM	R87867
Carbon Tetrachloride	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
Chlorobenzene	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
Chloroethane	ND	2.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
Chloroform	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
Chloromethane	ND	3.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
2-Chlorotoluene	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
4-Chlorotoluene	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
cis-1,2-DCE	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
Dibromochloromethane	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
Dibromomethane	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205386-007 **Matrix:** AQUEOUS

Client Sample ID: MW-78
Collection Date: 5/6/2022 2:58:00 PM
Received Date: 5/6/2022 4:01:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
1,1-Dichloroethane	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
1,1-Dichloroethene	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
1,2-Dichloropropane	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
1,3-Dichloropropane	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
2,2-Dichloropropane	ND	2.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
1,1-Dichloropropene	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
Hexachlorobutadiene	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
2-Hexanone	ND	10		µg/L	1	5/10/2022 9:17:00 PM	R87867
Isopropylbenzene	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
4-Isopropyltoluene	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
4-Methyl-2-pentanone	ND	10		µg/L	1	5/10/2022 9:17:00 PM	R87867
Methylene Chloride	ND	3.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
n-Butylbenzene	ND	3.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
n-Propylbenzene	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
sec-Butylbenzene	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
Styrene	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
tert-Butylbenzene	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
trans-1,2-DCE	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
Trichlorofluoromethane	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
Vinyl chloride	ND	1.0		µg/L	1	5/10/2022 9:17:00 PM	R87867
Xylenes, Total	ND	1.5		µg/L	1	5/10/2022 9:17:00 PM	R87867
Surr: 1,2-Dichloroethane-d4	108	70-130		%Rec	1	5/10/2022 9:17:00 PM	R87867
Surr: 4-Bromofluorobenzene	96.6	70-130		%Rec	1	5/10/2022 9:17:00 PM	R87867
Surr: Dibromofluoromethane	111	70-130		%Rec	1	5/10/2022 9:17:00 PM	R87867
Surr: Toluene-d8	95.1	70-130		%Rec	1	5/10/2022 9:17:00 PM	R87867

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205386-008 **Matrix:** AQUEOUS

Client Sample ID: MW-78 DUP
Collection Date: 5/6/2022 2:58:00 PM
Received Date: 5/6/2022 4:01:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**ELS**
Chromium	0.043	0.0060		mg/L	1	5/11/2022 1:40:21 PM	B87920
Iron	ND	0.020		mg/L	1	5/11/2022 1:40:21 PM	B87920
Manganese	ND	0.0020		mg/L	1	5/11/2022 1:40:21 PM	B87920
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.7	1.0		µg/L	1	5/17/2022 9:10:00 PM	67395
Surr: 2-Fluorobiphenyl	60.5	26.7-90.1		%Rec	1	5/17/2022 9:10:00 PM	67395
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
Toluene	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
Ethylbenzene	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
Naphthalene	ND	2.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
1-Methylnaphthalene	ND	4.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
2-Methylnaphthalene	ND	4.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
Acetone	ND	10		µg/L	1	5/10/2022 9:40:00 PM	R87867
Bromobenzene	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
Bromodichloromethane	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
Bromoform	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
Bromomethane	ND	3.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
2-Butanone	ND	10		µg/L	1	5/10/2022 9:40:00 PM	R87867
Carbon disulfide	ND	10		µg/L	1	5/10/2022 9:40:00 PM	R87867
Carbon Tetrachloride	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
Chlorobenzene	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
Chloroethane	ND	2.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
Chloroform	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
Chloromethane	ND	3.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
2-Chlorotoluene	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
4-Chlorotoluene	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
cis-1,2-DCE	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
Dibromochloromethane	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
Dibromomethane	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205386-008 **Matrix:** AQUEOUS

Client Sample ID: MW-78 DUP
Collection Date: 5/6/2022 2:58:00 PM
Received Date: 5/6/2022 4:01:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
1,1-Dichloroethane	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
1,1-Dichloroethene	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
1,2-Dichloropropane	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
1,3-Dichloropropane	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
2,2-Dichloropropane	ND	2.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
1,1-Dichloropropene	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
Hexachlorobutadiene	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
2-Hexanone	ND	10		µg/L	1	5/10/2022 9:40:00 PM	R87867
Isopropylbenzene	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
4-Isopropyltoluene	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
4-Methyl-2-pentanone	ND	10		µg/L	1	5/10/2022 9:40:00 PM	R87867
Methylene Chloride	ND	3.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
n-Butylbenzene	ND	3.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
n-Propylbenzene	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
sec-Butylbenzene	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
Styrene	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
tert-Butylbenzene	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
trans-1,2-DCE	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
Trichlorofluoromethane	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
Vinyl chloride	ND	1.0		µg/L	1	5/10/2022 9:40:00 PM	R87867
Xylenes, Total	ND	1.5		µg/L	1	5/10/2022 9:40:00 PM	R87867
Surr: 1,2-Dichloroethane-d4	108	70-130		%Rec	1	5/10/2022 9:40:00 PM	R87867
Surr: 4-Bromofluorobenzene	99.5	70-130		%Rec	1	5/10/2022 9:40:00 PM	R87867
Surr: Dibromofluoromethane	112	70-130		%Rec	1	5/10/2022 9:40:00 PM	R87867
Surr: Toluene-d8	95.8	70-130		%Rec	1	5/10/2022 9:40:00 PM	R87867

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton
Collection Date:
Lab ID: 2205386-009
Matrix: TRIP BLANK
Received Date: 5/6/2022 4:01:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
Toluene	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
Ethylbenzene	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
Naphthalene	ND	2.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
1-Methylnaphthalene	ND	4.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
2-Methylnaphthalene	ND	4.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
Acetone	ND	10		µg/L	1	5/10/2022 10:03:00 PM	R87867
Bromobenzene	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
Bromodichloromethane	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
Bromoform	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
Bromomethane	ND	3.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
2-Butanone	ND	10		µg/L	1	5/10/2022 10:03:00 PM	R87867
Carbon disulfide	ND	10		µg/L	1	5/10/2022 10:03:00 PM	R87867
Carbon Tetrachloride	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
Chlorobenzene	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
Chloroethane	ND	2.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
Chloroform	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
Chloromethane	ND	3.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
2-Chlorotoluene	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
4-Chlorotoluene	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
cis-1,2-DCE	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
Dibromochloromethane	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
Dibromomethane	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
1,1-Dichloroethane	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
1,1-Dichloroethene	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
1,2-Dichloropropane	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
1,3-Dichloropropane	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
2,2-Dichloropropane	ND	2.0		µg/L	1	5/10/2022 10:03:00 PM	R87867

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205386-009
Client Sample ID: Trip Blank
Collection Date:
Matrix: TRIP BLANK
Received Date: 5/6/2022 4:01:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,1-Dichloropropene	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
Hexachlorobutadiene	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
2-Hexanone	ND	10		µg/L	1	5/10/2022 10:03:00 PM	R87867
Isopropylbenzene	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
4-Isopropyltoluene	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
4-Methyl-2-pentanone	ND	10		µg/L	1	5/10/2022 10:03:00 PM	R87867
Methylene Chloride	ND	3.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
n-Butylbenzene	ND	3.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
n-Propylbenzene	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
sec-Butylbenzene	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
Styrene	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
tert-Butylbenzene	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
trans-1,2-DCE	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
Trichlorofluoromethane	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
Vinyl chloride	ND	1.0		µg/L	1	5/10/2022 10:03:00 PM	R87867
Xylenes, Total	ND	1.5		µg/L	1	5/10/2022 10:03:00 PM	R87867
Surr: 1,2-Dichloroethane-d4	109	70-130		%Rec	1	5/10/2022 10:03:00 PM	R87867
Surr: 4-Bromofluorobenzene	98.6	70-130		%Rec	1	5/10/2022 10:03:00 PM	R87867
Surr: Dibromofluoromethane	113	70-130		%Rec	1	5/10/2022 10:03:00 PM	R87867
Surr: Toluene-d8	95.8	70-130		%Rec	1	5/10/2022 10:03:00 PM	R87867

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2205386**
31-May-22

Client: EA Engineering
Project: Sparton

Sample ID: **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **B87920** RunNo: **87920**
Prep Date: Analysis Date: **5/11/2022** SeqNo: **3116299** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID: **LLLCS** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **B87920** RunNo: **87920**
Prep Date: Analysis Date: **5/11/2022** SeqNo: **3116300** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.0067	0.0060	0.006000	0	112	50	150			
Iron	0.025	0.020	0.02000	0	125	50	150			
Manganese	0.0021	0.0020	0.002000	0	103	50	150			

Sample ID: **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **B87920** RunNo: **87920**
Prep Date: Analysis Date: **5/11/2022** SeqNo: **3116301** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.50	0.0060	0.5000	0	100	85	115			
Iron	0.49	0.020	0.5000	0	97.9	85	115			
Manganese	0.49	0.0020	0.5000	0	98.4	85	115			

Sample ID: **2205386-003DMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MW-77** Batch ID: **B87920** RunNo: **87920**
Prep Date: Analysis Date: **5/11/2022** SeqNo: **3116341** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.55	0.0060	0.5000	0.03569	102	70	130			
Iron	0.50	0.020	0.5000	0	101	70	130			
Manganese	0.50	0.0020	0.5000	0	99.1	70	130			

Sample ID: **2205386-003DMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MW-77** Batch ID: **B87920** RunNo: **87920**
Prep Date: Analysis Date: **5/11/2022** SeqNo: **3116342** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.55	0.0060	0.5000	0.03569	104	70	130	1.50	20	
Iron	0.52	0.020	0.5000	0	104	70	130	3.34	20	
Manganese	0.50	0.0020	0.5000	0	99.8	70	130	0.722	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2205386**
31-May-22

Client: EA Engineering
Project: Sparton

Sample ID: **LCS-67490** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **67490** RunNo: **88058**
Prep Date: **5/16/2022** Analysis Date: **5/17/2022** SeqNo: **3121812** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.51	0.0060	0.5000	0	101	85	115			

Sample ID: **MB-67490** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **67490** RunNo: **88058**
Prep Date: **5/16/2022** Analysis Date: **5/17/2022** SeqNo: **3121852** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LLLCS-67490** SampType: **LCSLL** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC** Batch ID: **67490** RunNo: **88058**
Prep Date: Analysis Date: **5/17/2022** SeqNo: **3121854** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.0066	0.0060	0.006000	0	109	50	150			

Sample ID: **2205386-001CMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MW-57D** Batch ID: **67490** RunNo: **88058**
Prep Date: **5/16/2022** Analysis Date: **5/17/2022** SeqNo: **3121865** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.52	0.0060	0.5000	0.002814	103	70	130			

Sample ID: **2205386-001CMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MW-57D** Batch ID: **67490** RunNo: **88058**
Prep Date: **5/16/2022** Analysis Date: **5/17/2022** SeqNo: **3121867** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.53	0.0060	0.5000	0.002814	105	70	130	1.58	20	

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2205386**
31-May-22

Client: EA Engineering
Project: Sparton

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R87867** RunNo: **87867**
Prep Date: Analysis Date: **5/10/2022** SeqNo: **3114927** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	103	70	130			
Toluene	21	1.0	20.00	0	103	70	130			
Chlorobenzene	21	1.0	20.00	0	105	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	100	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	99.8	70	130			
Surr: 1,2-Dichloroethane-d4	9.9		10.00		99.1	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.3	70	130			
Surr: Dibromofluoromethane	10		10.00		100	70	130			
Surr: Toluene-d8	9.6		10.00		96.3	70	130			

Sample ID: **2205386-001ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MW-57D** Batch ID: **R87867** RunNo: **87867**
Prep Date: Analysis Date: **5/10/2022** SeqNo: **3114930** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	111	70	130			
Toluene	20	1.0	20.00	0	102	70	130			
Chlorobenzene	21	1.0	20.00	0	105	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	104	70	130			
Trichloroethene (TCE)	21	1.0	20.00	0	107	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		110	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		98.8	70	130			
Surr: Dibromofluoromethane	11		10.00		112	70	130			
Surr: Toluene-d8	9.7		10.00		97.3	70	130			

Sample ID: **2205386-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MW-57D** Batch ID: **R87867** RunNo: **87867**
Prep Date: Analysis Date: **5/10/2022** SeqNo: **3114931** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	108	70	130	2.62	20	
Toluene	20	1.0	20.00	0	101	70	130	1.75	20	
Chlorobenzene	21	1.0	20.00	0	103	70	130	1.65	20	
1,1-Dichloroethene	20	1.0	20.00	0	101	70	130	2.97	20	
Trichloroethene (TCE)	21	1.0	20.00	0	103	70	130	3.96	20	
Surr: 1,2-Dichloroethane-d4	11		10.00		107	70	130	0	0	
Surr: 4-Bromofluorobenzene	9.9		10.00		99.3	70	130	0	0	
Surr: Dibromofluoromethane	11		10.00		110	70	130	0	0	
Surr: Toluene-d8	9.6		10.00		96.3	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2205386**
31-May-22

Client: EA Engineering
Project: Sparton

Sample ID: **MB**		SampType: **MBLK**			TestCode: **EPA Method 8260B: VOLATILES**						
Client ID: **PBW**		Batch ID: **R87867**			RunNo: **87867**						
Prep Date:		Analysis Date: **5/10/2022**			SeqNo: **3114948**		Units: **µg/L**				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Benzene	ND	1.0									
Toluene	ND	1.0									
Ethylbenzene	ND	1.0									
Methyl tert-butyl ether (MTBE)	ND	1.0									
1,2,4-Trimethylbenzene	ND	1.0									
1,3,5-Trimethylbenzene	ND	1.0									
1,2-Dichloroethane (EDC)	ND	1.0									
1,2-Dibromoethane (EDB)	ND	1.0									
Naphthalene	ND	2.0									
1-Methylnaphthalene	ND	4.0									
2-Methylnaphthalene	ND	4.0									
Acetone	ND	10									
Bromobenzene	ND	1.0									
Bromodichloromethane	ND	1.0									
Bromoform	ND	1.0									
Bromomethane	ND	3.0									
2-Butanone	ND	10									
Carbon disulfide	ND	10									
Carbon Tetrachloride	ND	1.0									
Chlorobenzene	ND	1.0									
Chloroethane	ND	2.0									
Chloroform	ND	1.0									
Chloromethane	ND	3.0									
2-Chlorotoluene	ND	1.0									
4-Chlorotoluene	ND	1.0									
cis-1,2-DCE	ND	1.0									
cis-1,3-Dichloropropene	ND	1.0									
1,2-Dibromo-3-chloropropane	ND	2.0									
Dibromochloromethane	ND	1.0									
Dibromomethane	ND	1.0									
1,2-Dichlorobenzene	ND	1.0									
1,3-Dichlorobenzene	ND	1.0									
1,4-Dichlorobenzene	ND	1.0									
Dichlorodifluoromethane	ND	1.0									
1,1-Dichloroethane	ND	1.0									
1,1-Dichloroethene	ND	1.0									
1,2-Dichloropropane	ND	1.0									
1,3-Dichloropropane	ND	1.0									
2,2-Dichloropropane	ND	2.0									

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2205386**
31-May-22

Client: EA Engineering
Project: Sparton

Sample ID: **MB**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R87867**	RunNo: **87867**	
Prep Date:	Analysis Date: **5/10/2022**	SeqNo: **3114948**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		104	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.1	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	9.6		10.00		95.7	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2205386**
31-May-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb-67395** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **67395** RunNo: **88045**
Prep Date: **5/11/2022** Analysis Date: **5/17/2022** SeqNo: **3121052** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	2.8		4.000		70.5	31.6	100			
Surr: 2,4,6-Tribromophenol	5.3		8.000		66.0	22	101			
Surr: 2-Fluorobiphenyl	2.7		4.000		68.0	26.7	90.1			
Surr: 4-Terphenyl-d14	4.3		4.000		107	72.3	147			

Sample ID: **lcs-67395** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **67395** RunNo: **88045**
Prep Date: **5/11/2022** Analysis Date: **5/17/2022** SeqNo: **3121053** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.68	0.10	2.000	0	34.0	20.2	48.4			
Surr: Nitrobenzene-d5	3.8		5.000		75.2	31.6	100			
Surr: 2,4,6-Tribromophenol	6.9		10.00		68.6	22	101			
Surr: 2-Fluorobiphenyl	3.6		5.000		72.0	26.7	90.1			
Surr: 4-Terphenyl-d14	5.8		5.000		116	72.3	147			

Sample ID: **lcsd-67395** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **67395** RunNo: **88045**
Prep Date: **5/11/2022** Analysis Date: **5/17/2022** SeqNo: **3121054** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.72	0.10	2.000	0	36.0	20.2	48.4	5.71	30.1	
Surr: Nitrobenzene-d5	3.5		5.000		70.8	31.6	100	0	0	
Surr: 2,4,6-Tribromophenol	6.6		10.00		66.0	22	101	0	0	
Surr: 2-Fluorobiphenyl	2.9		5.000		57.2	26.7	90.1	0	0	
Surr: 4-Terphenyl-d14	6.0		5.000		121	72.3	147	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: EA Engineering Work Order Number: 2205386 RcptNo: 1

Received By: **Juan Rojas** 5/6/2022 4:01:00 PM

Completed By: **Sean Livingston** 5/6/2022 4:12:06 PM

Reviewed By: CMC 5/9/22

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 14
(<2 or >12 unless noted)
Adjusted? NO
Checked by: JM 5/9/22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.4	Good				
2	2.4	Good				

Chain-of-Custody Record

Client: Sparton Technologies Inc

EA Engineering, Science, and Technology, Inc., PBC

Mailing Address: 320 Gold Av SW #1300

Albuquerque, NM 87102

Phone #: 505-715-4154

email or Fax#: rmarley@eaest.com

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ **Rush** 72 Hours

Project Name: Sparton

Project #: Bills to Sparton direct

Project Manager: Bob Marley, EA Engineering

Sampler: Scott Miles

On Ice: ☐ Yes ☐ No

Sample Temperature: 3.4-0=3.4 2.4-0=2.4

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2205384	VOCs, 8260B	1,4-Dioxane, 8270SIM	Total Chromium	Dissolved Metals (Cr, Fe, Mn)	Air Bubbles (Y or N)
5-5-2022	1414	Aq	MW-57D	1x1L Amber 250 3xVOA 1xHDPE 125ml	none, HCl, HNO_3	001	X	X	X		
	1523		MW-66			002	X	X	X		
	1706		MW-77	1x1L Amber 3xVOA 2xHDPE 125ml 1xHDPE 250 ml	none, HCl, HNO_3	003	X	X	X	X	
5-6-2022	0959		MW-74			004	X	X	X	X	
	1151		MW-76			005	X	X	X	X	
	1326		MW-75			006	X	X	X	X	
	1458		MW-78			007	X	X	X	X	
	1458		MW-78 DUP			008	X	X	X	X	
			Trip Blank			009	X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
5-6-22	1601	Scott Miles	CDO	5/6/22	16:01
Date:	Time:	Relinquished by:	Received by:	Date	Time

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: Sparton Technologies Inc

EA Engineering, Science, and Technology, Inc., PBC

Mailing Address: 320 Gold Av SW #1300
Albuquerque, NM 87102

Phone #: 505-715-4154

email or Fax#: rmarley@eaest.com

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation:
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ **Rush** 72 Hours

Project Name: Sparton

Project #: Bills to Sparton direct

Project Manager: Bob Marley, EA Engineering

Sampler: Scott Miles

On Ice: ☐ Yes ☐ No

Sample Temperature: 3.4-0=3.4 2.4-0=2.4

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	VOCs, 8260B	1,4-Dioxane, 8270SIM	Total Chromium	Dissolved Metals (Cr, Fe, Mn)	Air Bubbles (Y or N)
5-5-2022	1414	Aq	MW-57D	1x1L Amber 250 3x VOA 1x HDPE 125	none, HCl, HNO_3		☒	☒	☒		
	1523		MW-66				☒	☒	☒		
	1706		MW-77	1x1L Amber 3x VOA 2x HDPE 125 ml 1x HDPE 250 ml	none, HCl, HNO_3		☒	☒	☒		
5-6-2022	0959		MW-74				☒	☒	☒		
	1151		MW-76				☒	☒	☒		
	1326		MW-75				☒	☒	☒		
	1458		MW-78				☒	☒	☒		
	1458		MW-78 DUP				☒	☒	☒		
			Trip Blank				☒				

Date:	Time:	Relinquished by:	Received by:	Date	Time
5-6-22	1601	Scott Miles	CDO	5/6/22	16:01
Date:	Time:	Relinquished by:	Received by:	Date	Time

Please remove total chromium from the analysis request specified above for MW-74, MW-75, MW-76, MW-77, and MW-78. Thanks, Bob Marley, 5/11/22

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

May 31, 2022

Bob Marley
EA Engineering
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL:
FAX:

RE: Sparton OrderNo.: 2205476

Dear Bob Marley:

Hall Environmental Analysis Laboratory received 6 sample(s) on 5/10/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2205476**
Date Reported: **5/31/2022**

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205476-001 **Matrix:** AQUEOUS

Client Sample ID: MW-79
Collection Date: 5/9/2022 1:02:00 PM
Received Date: 5/10/2022 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	ND	0.0060		mg/L	1	5/17/2022 1:09:01 PM	67490
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	5/17/2022 10:05:00 PM	67395
Surr: 2-Fluorobiphenyl	77.0	26.7-90.1		%Rec	1	5/17/2022 10:05:00 PM	67395
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
Toluene	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
Ethylbenzene	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
Naphthalene	ND	2.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
1-Methylnaphthalene	ND	4.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
2-Methylnaphthalene	ND	4.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
Acetone	ND	10		µg/L	1	5/11/2022 10:03:44 PM	R87923
Bromobenzene	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
Bromodichloromethane	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
Bromoform	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
Bromomethane	ND	3.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
2-Butanone	ND	10		µg/L	1	5/11/2022 10:03:44 PM	R87923
Carbon disulfide	ND	10		µg/L	1	5/11/2022 10:03:44 PM	R87923
Carbon Tetrachloride	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
Chlorobenzene	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
Chloroethane	ND	2.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
Chloroform	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
Chloromethane	ND	3.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
2-Chlorotoluene	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
4-Chlorotoluene	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
cis-1,2-DCE	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
Dibromochloromethane	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
Dibromomethane	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205476-001 **Matrix:** AQUEOUS

Client Sample ID: MW-79
Collection Date: 5/9/2022 1:02:00 PM
Received Date: 5/10/2022 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
1,1-Dichloroethane	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
1,1-Dichloroethene	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
1,2-Dichloropropane	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
1,3-Dichloropropane	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
2,2-Dichloropropane	ND	2.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
1,1-Dichloropropene	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
Hexachlorobutadiene	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
2-Hexanone	ND	10		µg/L	1	5/11/2022 10:03:44 PM	R87923
Isopropylbenzene	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
4-Isopropyltoluene	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
4-Methyl-2-pentanone	ND	10		µg/L	1	5/11/2022 10:03:44 PM	R87923
Methylene Chloride	ND	3.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
n-Butylbenzene	ND	3.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
n-Propylbenzene	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
sec-Butylbenzene	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
Styrene	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
tert-Butylbenzene	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
trans-1,2-DCE	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
Trichlorofluoromethane	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
Vinyl chloride	ND	1.0		µg/L	1	5/11/2022 10:03:44 PM	R87923
Xylenes, Total	ND	1.5		µg/L	1	5/11/2022 10:03:44 PM	R87923
Surr: 1,2-Dichloroethane-d4	95.6	70-130		%Rec	1	5/11/2022 10:03:44 PM	R87923
Surr: 4-Bromofluorobenzene	97.6	70-130		%Rec	1	5/11/2022 10:03:44 PM	R87923
Surr: Dibromofluoromethane	115	70-130		%Rec	1	5/11/2022 10:03:44 PM	R87923
Surr: Toluene-d8	95.6	70-130		%Rec	1	5/11/2022 10:03:44 PM	R87923

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205476-002 **Matrix:** AQUEOUS

Client Sample ID: MW-68
Collection Date: 5/9/2022 4:51:00 PM
Received Date: 5/10/2022 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	ND	0.0060		mg/L	1	5/17/2022 1:10:24 PM	67490
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	5/17/2022 10:57:00 PM	67395
Surr: 2-Fluorobiphenyl	72.5	26.7-90.1		%Rec	1	5/17/2022 10:57:00 PM	67395
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
Toluene	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
Ethylbenzene	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
Naphthalene	ND	2.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
1-Methylnaphthalene	ND	4.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
2-Methylnaphthalene	ND	4.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
Acetone	ND	10		µg/L	1	5/11/2022 11:57:54 PM	R87923
Bromobenzene	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
Bromodichloromethane	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
Bromoform	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
Bromomethane	ND	3.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
2-Butanone	ND	10		µg/L	1	5/11/2022 11:57:54 PM	R87923
Carbon disulfide	ND	10		µg/L	1	5/11/2022 11:57:54 PM	R87923
Carbon Tetrachloride	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
Chlorobenzene	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
Chloroethane	ND	2.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
Chloroform	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
Chloromethane	ND	3.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
2-Chlorotoluene	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
4-Chlorotoluene	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
cis-1,2-DCE	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
Dibromochloromethane	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
Dibromomethane	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205476-002 **Matrix:** AQUEOUS

Client Sample ID: MW-68
Collection Date: 5/9/2022 4:51:00 PM
Received Date: 5/10/2022 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
1,1-Dichloroethane	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
1,1-Dichloroethene	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
1,2-Dichloropropane	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
1,3-Dichloropropane	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
2,2-Dichloropropane	ND	2.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
1,1-Dichloropropene	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
Hexachlorobutadiene	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
2-Hexanone	ND	10		µg/L	1	5/11/2022 11:57:54 PM	R87923
Isopropylbenzene	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
4-Isopropyltoluene	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
4-Methyl-2-pentanone	ND	10		µg/L	1	5/11/2022 11:57:54 PM	R87923
Methylene Chloride	ND	3.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
n-Butylbenzene	ND	3.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
n-Propylbenzene	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
sec-Butylbenzene	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
Styrene	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
tert-Butylbenzene	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
trans-1,2-DCE	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
Trichlorofluoromethane	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
Vinyl chloride	ND	1.0		µg/L	1	5/11/2022 11:57:54 PM	R87923
Xylenes, Total	ND	1.5		µg/L	1	5/11/2022 11:57:54 PM	R87923
Surr: 1,2-Dichloroethane-d4	96.2	70-130		%Rec	1	5/11/2022 11:57:54 PM	R87923
Surr: 4-Bromofluorobenzene	96.1	70-130		%Rec	1	5/11/2022 11:57:54 PM	R87923
Surr: Dibromofluoromethane	118	70-130		%Rec	1	5/11/2022 11:57:54 PM	R87923
Surr: Toluene-d8	96.0	70-130		%Rec	1	5/11/2022 11:57:54 PM	R87923

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205476-003 **Matrix:** AQUEOUS

Client Sample ID: MW-69
Collection Date: 5/9/2022 5:15:00 PM
Received Date: 5/10/2022 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	0.012	0.0060		mg/L	1	5/17/2022 1:12:04 PM	67490
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	7.2	1.0		µg/L	1	5/17/2022 11:48:00 PM	67395
Surr: 2-Fluorobiphenyl	82.0	26.7-90.1		%Rec	1	5/17/2022 11:48:00 PM	67395
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
Toluene	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
Ethylbenzene	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
Naphthalene	ND	2.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
1-Methylnaphthalene	ND	4.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
2-Methylnaphthalene	ND	4.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
Acetone	ND	10		µg/L	1	5/12/2022 12:26:20 AM	R87923
Bromobenzene	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
Bromodichloromethane	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
Bromoform	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
Bromomethane	ND	3.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
2-Butanone	ND	10		µg/L	1	5/12/2022 12:26:20 AM	R87923
Carbon disulfide	ND	10		µg/L	1	5/12/2022 12:26:20 AM	R87923
Carbon Tetrachloride	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
Chlorobenzene	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
Chloroethane	ND	2.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
Chloroform	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
Chloromethane	ND	3.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
2-Chlorotoluene	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
4-Chlorotoluene	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
cis-1,2-DCE	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
Dibromochloromethane	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
Dibromomethane	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205476-003 **Matrix:** AQUEOUS

Client Sample ID: MW-69
Collection Date: 5/9/2022 5:15:00 PM
Received Date: 5/10/2022 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
1,1-Dichloroethane	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
1,1-Dichloroethene	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
1,2-Dichloropropane	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
1,3-Dichloropropane	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
2,2-Dichloropropane	ND	2.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
1,1-Dichloropropene	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
Hexachlorobutadiene	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
2-Hexanone	ND	10		µg/L	1	5/12/2022 12:26:20 AM	R87923
Isopropylbenzene	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
4-Isopropyltoluene	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
4-Methyl-2-pentanone	ND	10		µg/L	1	5/12/2022 12:26:20 AM	R87923
Methylene Chloride	ND	3.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
n-Butylbenzene	ND	3.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
n-Propylbenzene	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
sec-Butylbenzene	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
Styrene	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
tert-Butylbenzene	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
trans-1,2-DCE	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
Trichlorofluoromethane	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
Vinyl chloride	ND	1.0		µg/L	1	5/12/2022 12:26:20 AM	R87923
Xylenes, Total	ND	1.5		µg/L	1	5/12/2022 12:26:20 AM	R87923
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%Rec	1	5/12/2022 12:26:20 AM	R87923
Surr: 4-Bromofluorobenzene	95.2	70-130		%Rec	1	5/12/2022 12:26:20 AM	R87923
Surr: Dibromofluoromethane	116	70-130		%Rec	1	5/12/2022 12:26:20 AM	R87923
Surr: Toluene-d8	95.2	70-130		%Rec	1	5/12/2022 12:26:20 AM	R87923

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205476-004 **Matrix:** AQUEOUS

Client Sample ID: MW-80
Collection Date: 5/10/2022 10:01:00 AM
Received Date: 5/10/2022 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	0.015	0.0060		mg/L	1	5/17/2022 1:13:39 PM	67490
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	5.0	1.0		µg/L	1	5/18/2022 12:40:00 AM	67395
Surr: 2-Fluorobiphenyl	56.0	26.7-90.1		%Rec	1	5/18/2022 12:40:00 AM	67395
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
Toluene	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
Ethylbenzene	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
Naphthalene	ND	2.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
1-Methylnaphthalene	ND	4.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
2-Methylnaphthalene	ND	4.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
Acetone	ND	10		µg/L	1	5/12/2022 12:54:47 AM	R87923
Bromobenzene	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
Bromodichloromethane	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
Bromoform	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
Bromomethane	ND	3.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
2-Butanone	ND	10		µg/L	1	5/12/2022 12:54:47 AM	R87923
Carbon disulfide	ND	10		µg/L	1	5/12/2022 12:54:47 AM	R87923
Carbon Tetrachloride	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
Chlorobenzene	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
Chloroethane	ND	2.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
Chloroform	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
Chloromethane	ND	3.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
2-Chlorotoluene	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
4-Chlorotoluene	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
cis-1,2-DCE	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
Dibromochloromethane	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
Dibromomethane	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205476-004 **Matrix:** AQUEOUS

Client Sample ID: MW-80
Collection Date: 5/10/2022 10:01:00 AM
Received Date: 5/10/2022 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
1,1-Dichloroethane	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
1,1-Dichloroethene	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
1,2-Dichloropropane	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
1,3-Dichloropropane	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
2,2-Dichloropropane	ND	2.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
1,1-Dichloropropene	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
Hexachlorobutadiene	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
2-Hexanone	ND	10		µg/L	1	5/12/2022 12:54:47 AM	R87923
Isopropylbenzene	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
4-Isopropyltoluene	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
4-Methyl-2-pentanone	ND	10		µg/L	1	5/12/2022 12:54:47 AM	R87923
Methylene Chloride	ND	3.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
n-Butylbenzene	ND	3.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
n-Propylbenzene	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
sec-Butylbenzene	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
Styrene	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
tert-Butylbenzene	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
trans-1,2-DCE	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
Trichlorofluoromethane	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
Vinyl chloride	ND	1.0		µg/L	1	5/12/2022 12:54:47 AM	R87923
Xylenes, Total	ND	1.5		µg/L	1	5/12/2022 12:54:47 AM	R87923
Surr: 1,2-Dichloroethane-d4	94.9	70-130		%Rec	1	5/12/2022 12:54:47 AM	R87923
Surr: 4-Bromofluorobenzene	96.2	70-130		%Rec	1	5/12/2022 12:54:47 AM	R87923
Surr: Dibromofluoromethane	117	70-130		%Rec	1	5/12/2022 12:54:47 AM	R87923
Surr: Toluene-d8	95.0	70-130		%Rec	1	5/12/2022 12:54:47 AM	R87923

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205476-005 **Matrix:** AQUEOUS

Client Sample ID: MW-67
Collection Date: 5/10/2022 2:50:00 PM
Received Date: 5/10/2022 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	ND	0.0060		mg/L	1	5/17/2022 1:15:19 PM	67490
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	5/18/2022 2:35:00 AM	67395
Surr: 2-Fluorobiphenyl	75.0	26.7-90.1		%Rec	1	5/18/2022 2:35:00 AM	67395
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
Toluene	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
Ethylbenzene	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
Naphthalene	ND	2.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
1-Methylnaphthalene	ND	4.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
2-Methylnaphthalene	ND	4.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
Acetone	ND	10		µg/L	1	5/12/2022 1:23:13 AM	R87923
Bromobenzene	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
Bromodichloromethane	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
Bromoform	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
Bromomethane	ND	3.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
2-Butanone	ND	10		µg/L	1	5/12/2022 1:23:13 AM	R87923
Carbon disulfide	ND	10		µg/L	1	5/12/2022 1:23:13 AM	R87923
Carbon Tetrachloride	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
Chlorobenzene	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
Chloroethane	ND	2.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
Chloroform	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
Chloromethane	ND	3.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
2-Chlorotoluene	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
4-Chlorotoluene	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
cis-1,2-DCE	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
Dibromochloromethane	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
Dibromomethane	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205476-005 **Matrix:** AQUEOUS

Client Sample ID: MW-67
Collection Date: 5/10/2022 2:50:00 PM
Received Date: 5/10/2022 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
1,1-Dichloroethane	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
1,1-Dichloroethene	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
1,2-Dichloropropane	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
1,3-Dichloropropane	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
2,2-Dichloropropane	ND	2.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
1,1-Dichloropropene	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
Hexachlorobutadiene	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
2-Hexanone	ND	10		µg/L	1	5/12/2022 1:23:13 AM	R87923
Isopropylbenzene	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
4-Isopropyltoluene	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
4-Methyl-2-pentanone	ND	10		µg/L	1	5/12/2022 1:23:13 AM	R87923
Methylene Chloride	ND	3.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
n-Butylbenzene	ND	3.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
n-Propylbenzene	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
sec-Butylbenzene	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
Styrene	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
tert-Butylbenzene	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
trans-1,2-DCE	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
Trichlorofluoromethane	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
Vinyl chloride	ND	1.0		µg/L	1	5/12/2022 1:23:13 AM	R87923
Xylenes, Total	ND	1.5		µg/L	1	5/12/2022 1:23:13 AM	R87923
Surr: 1,2-Dichloroethane-d4	95.1	70-130		%Rec	1	5/12/2022 1:23:13 AM	R87923
Surr: 4-Bromofluorobenzene	94.4	70-130		%Rec	1	5/12/2022 1:23:13 AM	R87923
Surr: Dibromofluoromethane	119	70-130		%Rec	1	5/12/2022 1:23:13 AM	R87923
Surr: Toluene-d8	95.9	70-130		%Rec	1	5/12/2022 1:23:13 AM	R87923

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton
Collection Date:
Lab ID: 2205476-006
Matrix: TRIP BLANK
Received Date: 5/10/2022 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
Toluene	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
Ethylbenzene	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
Naphthalene	ND	2.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
1-Methylnaphthalene	ND	4.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
2-Methylnaphthalene	ND	4.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
Acetone	ND	10		µg/L	1	5/12/2022 1:51:37 AM	R87923
Bromobenzene	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
Bromodichloromethane	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
Bromoform	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
Bromomethane	ND	3.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
2-Butanone	ND	10		µg/L	1	5/12/2022 1:51:37 AM	R87923
Carbon disulfide	ND	10		µg/L	1	5/12/2022 1:51:37 AM	R87923
Carbon Tetrachloride	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
Chlorobenzene	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
Chloroethane	ND	2.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
Chloroform	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
Chloromethane	ND	3.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
2-Chlorotoluene	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
4-Chlorotoluene	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
cis-1,2-DCE	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
Dibromochloromethane	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
Dibromomethane	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
1,1-Dichloroethane	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
1,1-Dichloroethene	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
1,2-Dichloropropane	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
1,3-Dichloropropane	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
2,2-Dichloropropane	ND	2.0		µg/L	1	5/12/2022 1:51:37 AM	R87923

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton
Collection Date:
Lab ID: 2205476-006
Matrix: TRIP BLANK
Received Date: 5/10/2022 4:15:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,1-Dichloropropene	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
Hexachlorobutadiene	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
2-Hexanone	ND	10		µg/L	1	5/12/2022 1:51:37 AM	R87923
Isopropylbenzene	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
4-Isopropyltoluene	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
4-Methyl-2-pentanone	ND	10		µg/L	1	5/12/2022 1:51:37 AM	R87923
Methylene Chloride	ND	3.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
n-Butylbenzene	ND	3.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
n-Propylbenzene	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
sec-Butylbenzene	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
Styrene	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
tert-Butylbenzene	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
trans-1,2-DCE	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
Trichlorofluoromethane	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
Vinyl chloride	ND	1.0		µg/L	1	5/12/2022 1:51:37 AM	R87923
Xylenes, Total	ND	1.5		µg/L	1	5/12/2022 1:51:37 AM	R87923
Surr: 1,2-Dichloroethane-d4	94.1	70-130		%Rec	1	5/12/2022 1:51:37 AM	R87923
Surr: 4-Bromofluorobenzene	94.9	70-130		%Rec	1	5/12/2022 1:51:37 AM	R87923
Surr: Dibromofluoromethane	115	70-130		%Rec	1	5/12/2022 1:51:37 AM	R87923
Surr: Toluene-d8	94.5	70-130		%Rec	1	5/12/2022 1:51:37 AM	R87923

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2205476**
31-May-22

Client: EA Engineering
Project: Sparton

Sample ID: **LCS-67490** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **67490** RunNo: **88058**
Prep Date: **5/16/2022** Analysis Date: **5/17/2022** SeqNo: **3121812** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.51	0.0060	0.5000	0	101	85	115			

Sample ID: **MB-67490** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **67490** RunNo: **88058**
Prep Date: **5/16/2022** Analysis Date: **5/17/2022** SeqNo: **3121852** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LLLCS-67490** SampType: **LCSLL** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC** Batch ID: **67490** RunNo: **88058**
Prep Date: Analysis Date: **5/17/2022** SeqNo: **3121854** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.0066	0.0060	0.006000	0	109	50	150			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2205476**
31-May-22

Client: EA Engineering
Project: Sparton

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R87923** RunNo: **87923**
Prep Date: Analysis Date: **5/11/2022** SeqNo: **3116560** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.2	70	130			
Toluene	17	1.0	20.00	0	87.4	70	130			
Chlorobenzene	20	1.0	20.00	0	98.4	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	91.1	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	94.5	70	130			
Surr: 1,2-Dichloroethane-d4	9.2		10.00		91.8	70	130			
Surr: 4-Bromofluorobenzene	9.4		10.00		94.4	70	130			
Surr: Dibromofluoromethane	12		10.00		115	70	130			
Surr: Toluene-d8	9.3		10.00		92.7	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R87923** RunNo: **87923**
Prep Date: Analysis Date: **5/11/2022** SeqNo: **3116589** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2205476**
31-May-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R87923**	RunNo: **87923**	
Prep Date:	Analysis Date: **5/11/2022**	SeqNo: **3116589**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2205476**
31-May-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R87923** RunNo: **87923**
Prep Date: Analysis Date: **5/11/2022** SeqNo: **3116589** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.0		10.00		90.4	70	130			
Surr: 4-Bromofluorobenzene	9.4		10.00		94.0	70	130			
Surr: Dibromofluoromethane	11		10.00		114	70	130			
Surr: Toluene-d8	9.9		10.00		99.2	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2205476**
31-May-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb-67395** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **67395** RunNo: **88045**
Prep Date: **5/11/2022** Analysis Date: **5/17/2022** SeqNo: **3121052** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	2.8		4.000		70.5	31.6	100			
Surr: 2,4,6-Tribromophenol	5.3		8.000		66.0	22	101			
Surr: 2-Fluorobiphenyl	2.7		4.000		68.0	26.7	90.1			
Surr: 4-Terphenyl-d14	4.3		4.000		107	72.3	147			

Sample ID: **lcs-67395** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **67395** RunNo: **88045**
Prep Date: **5/11/2022** Analysis Date: **5/17/2022** SeqNo: **3121053** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.68	0.10	2.000	0	34.0	20.2	48.4			
Surr: Nitrobenzene-d5	3.8		5.000		75.2	31.6	100			
Surr: 2,4,6-Tribromophenol	6.9		10.00		68.6	22	101			
Surr: 2-Fluorobiphenyl	3.6		5.000		72.0	26.7	90.1			
Surr: 4-Terphenyl-d14	5.8		5.000		116	72.3	147			

Sample ID: **lcsd-67395** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **67395** RunNo: **88045**
Prep Date: **5/11/2022** Analysis Date: **5/17/2022** SeqNo: **3121054** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.72	0.10	2.000	0	36.0	20.2	48.4	5.71	30.1	
Surr: Nitrobenzene-d5	3.5		5.000		70.8	31.6	100	0	0	
Surr: 2,4,6-Tribromophenol	6.6		10.00		66.0	22	101	0	0	
Surr: 2-Fluorobiphenyl	2.9		5.000		57.2	26.7	90.1	0	0	
Surr: 4-Terphenyl-d14	6.0		5.000		121	72.3	147	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: EA Engineering Work Order Number: 2205476 RcptNo: 1

Received By: **Sean Livingston** 5/10/2022 4:15:00 PM S. Livingston
Completed By: **Sean Livingston** 5/10/2022 4:21:40 PM S. Livingston
Reviewed By: KPG 5.11.22

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 5 (<2 or >12 unless noted)
Adjusted? no
Checked by: CMO 5/11/22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.5	Good				
2	0.6	Good				

Chain-of-Custody Record

Client: Sparton Technologies Inc

EA Engineering, Science, and Technology, Inc., PBC

Mailing Address: 320 Gold Av SW #1300

Albuquerque, NM 87102

Phone #: 505-715-4154

email or Fax#: rmarley@eaest.com

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ **Rush** 72 Hours

Project Name: Sparton

Project #: Bills to Sparton direct

Project Manager: Bob Marley, EA Engineering

Sampler: Scott Miles

On Ice: ☑ Yes ☐ No

Sample Temperature: 1.5 ±0 = 1.5°C

0.6 ±0 = 0.6°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2205476	VOCs, 8260B	1,4-Dioxane, 8270SIM	Total Chromium	Dissolved Metals (Cr, Fe, Mn)	Air Bubbles (Y or N)
5-9-2022	1302	Aq	MW-79	1×1L Amber, 1-250ml HDPE, 3 VOAs	none, HNO_3, HCl	001	X	X	X		
	1651		MW-68			002	X	X	X		
	1715		MW-69			003	X	X	X		
5-10-2022	1001		MW-80			004	X	X	X		
	1450		MW-67			005	X	X	X		
			Trip Blank	2x VOA	HCl	006	X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
5-10-22	1614	Miles	CDD	5/10/22	16:15
Date:	Time:	Relinquished by:	Received by:	Date	Time

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

May 31, 2022

Bob Marley
EA Engineering
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL:
FAX:

RE: Sparton OrderNo.: 2205616

Dear Bob Marley:

Hall Environmental Analysis Laboratory received 6 sample(s) on 5/12/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2205616**
Date Reported: **5/31/2022**

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205616-001 **Matrix:** AQUEOUS

Client Sample ID: MW-62R
Collection Date: 5/11/2022 9:06:00 AM
Received Date: 5/12/2022 4:04:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	ND	0.0060		mg/L	1	5/17/2022 1:25:18 PM	67490
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	5/20/2022 3:33:00 PM	67515
Surr: 2-Fluorobiphenyl	68.5	26.7-90.1		%Rec	1	5/20/2022 3:33:00 PM	67515
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
Toluene	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
Ethylbenzene	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
Naphthalene	ND	2.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
1-Methylnaphthalene	ND	4.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
2-Methylnaphthalene	ND	4.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
Acetone	ND	10		µg/L	1	5/13/2022 4:43:00 PM	R87971
Bromobenzene	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
Bromodichloromethane	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
Bromoform	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
Bromomethane	ND	3.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
2-Butanone	ND	10		µg/L	1	5/13/2022 4:43:00 PM	R87971
Carbon disulfide	ND	10		µg/L	1	5/13/2022 4:43:00 PM	R87971
Carbon Tetrachloride	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
Chlorobenzene	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
Chloroethane	ND	2.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
Chloroform	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
Chloromethane	ND	3.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
2-Chlorotoluene	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
4-Chlorotoluene	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
cis-1,2-DCE	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
Dibromochloromethane	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
Dibromomethane	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205616-001 **Matrix:** AQUEOUS

Client Sample ID: MW-62R
Collection Date: 5/11/2022 9:06:00 AM
Received Date: 5/12/2022 4:04:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
1,1-Dichloroethane	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
1,1-Dichloroethene	4.9	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
1,2-Dichloropropane	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
1,3-Dichloropropane	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
2,2-Dichloropropane	ND	2.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
1,1-Dichloropropene	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
Hexachlorobutadiene	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
2-Hexanone	ND	10		µg/L	1	5/13/2022 4:43:00 PM	R87971
Isopropylbenzene	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
4-Isopropyltoluene	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
4-Methyl-2-pentanone	ND	10		µg/L	1	5/13/2022 4:43:00 PM	R87971
Methylene Chloride	ND	3.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
n-Butylbenzene	ND	3.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
n-Propylbenzene	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
sec-Butylbenzene	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
Styrene	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
tert-Butylbenzene	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
trans-1,2-DCE	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
Trichloroethene (TCE)	4.0	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
Trichlorofluoromethane	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
Vinyl chloride	ND	1.0		µg/L	1	5/13/2022 4:43:00 PM	R87971
Xylenes, Total	ND	1.5		µg/L	1	5/13/2022 4:43:00 PM	R87971
Surr: 1,2-Dichloroethane-d4	99.7	70-130		%Rec	1	5/13/2022 4:43:00 PM	R87971
Surr: 4-Bromofluorobenzene	98.6	70-130		%Rec	1	5/13/2022 4:43:00 PM	R87971
Surr: Dibromofluoromethane	104	70-130		%Rec	1	5/13/2022 4:43:00 PM	R87971
Surr: Toluene-d8	95.0	70-130		%Rec	1	5/13/2022 4:43:00 PM	R87971

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205616-002 **Matrix:** AQUEOUS

Client Sample ID: MW-52R
Collection Date: 5/11/2022 1:53:00 PM
Received Date: 5/12/2022 4:04:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	ND	0.0060		mg/L	1	5/17/2022 1:26:56 PM	67490
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	5/20/2022 4:17:00 PM	67515
Surr: 2-Fluorobiphenyl	62.5	26.7-90.1		%Rec	1	5/20/2022 4:17:00 PM	67515
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
Toluene	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
Ethylbenzene	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
Naphthalene	ND	2.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
1-Methylnaphthalene	ND	4.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
2-Methylnaphthalene	ND	4.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
Acetone	ND	10		µg/L	1	5/13/2022 5:06:00 PM	R87971
Bromobenzene	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
Bromodichloromethane	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
Bromoform	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
Bromomethane	ND	3.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
2-Butanone	ND	10		µg/L	1	5/13/2022 5:06:00 PM	R87971
Carbon disulfide	ND	10		µg/L	1	5/13/2022 5:06:00 PM	R87971
Carbon Tetrachloride	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
Chlorobenzene	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
Chloroethane	ND	2.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
Chloroform	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
Chloromethane	ND	3.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
2-Chlorotoluene	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
4-Chlorotoluene	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
cis-1,2-DCE	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
Dibromochloromethane	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
Dibromomethane	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205616-002 **Matrix:** AQUEOUS

Client Sample ID: MW-52R
Collection Date: 5/11/2022 1:53:00 PM
Received Date: 5/12/2022 4:04:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
1,1-Dichloroethane	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
1,1-Dichloroethene	17	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
1,2-Dichloropropane	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
1,3-Dichloropropane	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
2,2-Dichloropropane	ND	2.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
1,1-Dichloropropene	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
Hexachlorobutadiene	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
2-Hexanone	ND	10		µg/L	1	5/13/2022 5:06:00 PM	R87971
Isopropylbenzene	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
4-Isopropyltoluene	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
4-Methyl-2-pentanone	ND	10		µg/L	1	5/13/2022 5:06:00 PM	R87971
Methylene Chloride	ND	3.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
n-Butylbenzene	ND	3.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
n-Propylbenzene	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
sec-Butylbenzene	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
Styrene	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
tert-Butylbenzene	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
trans-1,2-DCE	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
Trichloroethene (TCE)	8.3	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
Trichlorofluoromethane	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
Vinyl chloride	ND	1.0		µg/L	1	5/13/2022 5:06:00 PM	R87971
Xylenes, Total	ND	1.5		µg/L	1	5/13/2022 5:06:00 PM	R87971
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	5/13/2022 5:06:00 PM	R87971
Surr: 4-Bromofluorobenzene	98.6	70-130		%Rec	1	5/13/2022 5:06:00 PM	R87971
Surr: Dibromofluoromethane	103	70-130		%Rec	1	5/13/2022 5:06:00 PM	R87971
Surr: Toluene-d8	96.5	70-130		%Rec	1	5/13/2022 5:06:00 PM	R87971

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205616-003 **Matrix:** AQUEOUS

Client Sample ID: MW-71R
Collection Date: 5/11/2022 4:01:00 PM
Received Date: 5/12/2022 4:04:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	ND	0.0060		mg/L	1	5/17/2022 1:28:36 PM	67490
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	5/20/2022 5:02:00 PM	67515
Surr: 2-Fluorobiphenyl	63.0	26.7-90.1		%Rec	1	5/20/2022 5:02:00 PM	67515
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
Toluene	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
Ethylbenzene	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
Naphthalene	ND	2.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
1-Methylnaphthalene	ND	4.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
2-Methylnaphthalene	ND	4.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
Acetone	ND	10		µg/L	1	5/13/2022 5:30:00 PM	R87971
Bromobenzene	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
Bromodichloromethane	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
Bromoform	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
Bromomethane	ND	3.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
2-Butanone	ND	10		µg/L	1	5/13/2022 5:30:00 PM	R87971
Carbon disulfide	ND	10		µg/L	1	5/13/2022 5:30:00 PM	R87971
Carbon Tetrachloride	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
Chlorobenzene	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
Chloroethane	ND	2.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
Chloroform	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
Chloromethane	ND	3.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
2-Chlorotoluene	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
4-Chlorotoluene	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
cis-1,2-DCE	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
Dibromochloromethane	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
Dibromomethane	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205616-003 **Matrix:** AQUEOUS

Client Sample ID: MW-71R
Collection Date: 5/11/2022 4:01:00 PM
Received Date: 5/12/2022 4:04:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
1,1-Dichloroethane	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
1,1-Dichloroethene	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
1,2-Dichloropropane	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
1,3-Dichloropropane	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
2,2-Dichloropropane	ND	2.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
1,1-Dichloropropene	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
Hexachlorobutadiene	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
2-Hexanone	ND	10		µg/L	1	5/13/2022 5:30:00 PM	R87971
Isopropylbenzene	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
4-Isopropyltoluene	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
4-Methyl-2-pentanone	ND	10		µg/L	1	5/13/2022 5:30:00 PM	R87971
Methylene Chloride	ND	3.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
n-Butylbenzene	ND	3.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
n-Propylbenzene	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
sec-Butylbenzene	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
Styrene	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
tert-Butylbenzene	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
trans-1,2-DCE	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
Trichloroethene (TCE)	8.0	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
Trichlorofluoromethane	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
Vinyl chloride	ND	1.0		µg/L	1	5/13/2022 5:30:00 PM	R87971
Xylenes, Total	ND	1.5		µg/L	1	5/13/2022 5:30:00 PM	R87971
Surr: 1,2-Dichloroethane-d4	99.7	70-130		%Rec	1	5/13/2022 5:30:00 PM	R87971
Surr: 4-Bromofluorobenzene	99.4	70-130		%Rec	1	5/13/2022 5:30:00 PM	R87971
Surr: Dibromofluoromethane	102	70-130		%Rec	1	5/13/2022 5:30:00 PM	R87971
Surr: Toluene-d8	96.4	70-130		%Rec	1	5/13/2022 5:30:00 PM	R87971

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205616-004 **Matrix:** AQUEOUS

Client Sample ID: MW-65
Collection Date: 5/12/2022 12:51:00 PM
Received Date: 5/12/2022 4:04:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	ND	0.0060		mg/L	1	5/17/2022 1:30:12 PM	67490
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	5/20/2022 5:47:00 PM	67515
Surr: 2-Fluorobiphenyl	53.5	26.7-90.1		%Rec	1	5/20/2022 5:47:00 PM	67515
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
Toluene	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
Ethylbenzene	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
Naphthalene	ND	2.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
1-Methylnaphthalene	ND	4.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
2-Methylnaphthalene	ND	4.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
Acetone	ND	10		µg/L	1	5/13/2022 5:53:00 PM	R87971
Bromobenzene	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
Bromodichloromethane	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
Bromoform	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
Bromomethane	ND	3.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
2-Butanone	ND	10		µg/L	1	5/13/2022 5:53:00 PM	R87971
Carbon disulfide	ND	10		µg/L	1	5/13/2022 5:53:00 PM	R87971
Carbon Tetrachloride	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
Chlorobenzene	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
Chloroethane	ND	2.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
Chloroform	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
Chloromethane	ND	3.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
2-Chlorotoluene	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
4-Chlorotoluene	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
cis-1,2-DCE	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
Dibromochloromethane	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
Dibromomethane	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205616-004 **Matrix:** AQUEOUS

Client Sample ID: MW-65
Collection Date: 5/12/2022 12:51:00 PM
Received Date: 5/12/2022 4:04:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
1,1-Dichloroethane	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
1,1-Dichloroethene	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
1,2-Dichloropropane	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
1,3-Dichloropropane	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
2,2-Dichloropropane	ND	2.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
1,1-Dichloropropene	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
Hexachlorobutadiene	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
2-Hexanone	ND	10		µg/L	1	5/13/2022 5:53:00 PM	R87971
Isopropylbenzene	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
4-Isopropyltoluene	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
4-Methyl-2-pentanone	ND	10		µg/L	1	5/13/2022 5:53:00 PM	R87971
Methylene Chloride	ND	3.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
n-Butylbenzene	ND	3.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
n-Propylbenzene	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
sec-Butylbenzene	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
Styrene	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
tert-Butylbenzene	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
trans-1,2-DCE	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
Trichlorofluoromethane	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
Vinyl chloride	ND	1.0		µg/L	1	5/13/2022 5:53:00 PM	R87971
Xylenes, Total	ND	1.5		µg/L	1	5/13/2022 5:53:00 PM	R87971
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	5/13/2022 5:53:00 PM	R87971
Surr: 4-Bromofluorobenzene	94.7	70-130		%Rec	1	5/13/2022 5:53:00 PM	R87971
Surr: Dibromofluoromethane	104	70-130		%Rec	1	5/13/2022 5:53:00 PM	R87971
Surr: Toluene-d8	97.1	70-130		%Rec	1	5/13/2022 5:53:00 PM	R87971

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205616-005 **Matrix:** AQUEOUS

Client Sample ID: MW-17
Collection Date: 5/12/2022 2:33:00 PM
Received Date: 5/12/2022 4:04:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**ELS**
Chromium	0.042	0.0060		mg/L	1	5/16/2022 12:57:00 PM	D88018
Iron	ND	0.020		mg/L	1	5/16/2022 12:57:00 PM	D88018
Manganese	ND	0.0020		mg/L	1	5/16/2022 12:57:00 PM	D88018
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	0.045	0.0060		mg/L	1	5/17/2022 1:31:49 PM	67490
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	1.9	1.0		µg/L	1	5/20/2022 6:40:00 PM	67515
Surr: 2-Fluorobiphenyl	36.5	26.7-90.1		%Rec	1	5/20/2022 6:40:00 PM	67515
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
Toluene	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
Ethylbenzene	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
Naphthalene	ND	2.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
1-Methylnaphthalene	ND	4.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
2-Methylnaphthalene	ND	4.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
Acetone	ND	10		µg/L	1	5/13/2022 6:16:00 PM	R87971
Bromobenzene	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
Bromodichloromethane	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
Bromoform	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
Bromomethane	ND	3.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
2-Butanone	ND	10		µg/L	1	5/13/2022 6:16:00 PM	R87971
Carbon disulfide	ND	10		µg/L	1	5/13/2022 6:16:00 PM	R87971
Carbon Tetrachloride	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
Chlorobenzene	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
Chloroethane	ND	2.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
Chloroform	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
Chloromethane	ND	3.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
2-Chlorotoluene	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
4-Chlorotoluene	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
cis-1,2-DCE	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
Dibromochloromethane	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205616-005 **Matrix:** AQUEOUS

Client Sample ID: MW-17
Collection Date: 5/12/2022 2:33:00 PM
Received Date: 5/12/2022 4:04:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dibromomethane	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
1,1-Dichloroethane	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
1,1-Dichloroethene	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
1,2-Dichloropropane	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
1,3-Dichloropropane	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
2,2-Dichloropropane	ND	2.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
1,1-Dichloropropene	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
Hexachlorobutadiene	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
2-Hexanone	ND	10		µg/L	1	5/13/2022 6:16:00 PM	R87971
Isopropylbenzene	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
4-Isopropyltoluene	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
4-Methyl-2-pentanone	ND	10		µg/L	1	5/13/2022 6:16:00 PM	R87971
Methylene Chloride	ND	3.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
n-Butylbenzene	ND	3.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
n-Propylbenzene	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
sec-Butylbenzene	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
Styrene	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
tert-Butylbenzene	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
trans-1,2-DCE	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
Trichlorofluoromethane	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
Vinyl chloride	ND	1.0		µg/L	1	5/13/2022 6:16:00 PM	R87971
Xylenes, Total	ND	1.5		µg/L	1	5/13/2022 6:16:00 PM	R87971
Surr: 1,2-Dichloroethane-d4	91.9	70-130		%Rec	1	5/13/2022 6:16:00 PM	R87971
Surr: 4-Bromofluorobenzene	94.6	70-130		%Rec	1	5/13/2022 6:16:00 PM	R87971
Surr: Dibromofluoromethane	99.6	70-130		%Rec	1	5/13/2022 6:16:00 PM	R87971

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205616-005 **Matrix:** AQUEOUS

Client Sample ID: MW-17
Collection Date: 5/12/2022 2:33:00 PM
Received Date: 5/12/2022 4:04:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Surr: Toluene-d8	97.1	70-130		%Rec	1	5/13/2022 6:16:00 PM	R87971

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205616-006 **Matrix:** AQUEOUS

Client Sample ID: MW-17 DUP
Collection Date: 5/12/2022 2:33:00 PM
Received Date: 5/12/2022 4:04:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**ELS**
Chromium	0.042	0.0060		mg/L	1	5/16/2022 1:05:34 PM	D88018
Iron	ND	0.020		mg/L	1	5/16/2022 1:05:34 PM	D88018
Manganese	ND	0.0020		mg/L	1	5/16/2022 1:05:34 PM	D88018
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	0.046	0.0060		mg/L	1	5/17/2022 1:33:12 PM	67490
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	1.7	1.0		µg/L	1	5/20/2022 7:39:00 PM	67515
Surr: 2-Fluorobiphenyl	46.0	26.7-90.1		%Rec	1	5/20/2022 7:39:00 PM	67515
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
Toluene	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
Ethylbenzene	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
Naphthalene	ND	2.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
1-Methylnaphthalene	ND	4.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
2-Methylnaphthalene	ND	4.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
Acetone	ND	10		µg/L	1	5/13/2022 6:39:00 PM	R87971
Bromobenzene	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
Bromodichloromethane	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
Bromoform	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
Bromomethane	ND	3.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
2-Butanone	ND	10		µg/L	1	5/13/2022 6:39:00 PM	R87971
Carbon disulfide	ND	10		µg/L	1	5/13/2022 6:39:00 PM	R87971
Carbon Tetrachloride	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
Chlorobenzene	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
Chloroethane	ND	2.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
Chloroform	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
Chloromethane	ND	3.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
2-Chlorotoluene	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
4-Chlorotoluene	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
cis-1,2-DCE	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
Dibromochloromethane	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205616-006 **Matrix:** AQUEOUS

Client Sample ID: MW-17 DUP
Collection Date: 5/12/2022 2:33:00 PM
Received Date: 5/12/2022 4:04:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dibromomethane	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
1,1-Dichloroethane	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
1,1-Dichloroethene	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
1,2-Dichloropropane	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
1,3-Dichloropropane	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
2,2-Dichloropropane	ND	2.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
1,1-Dichloropropene	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
Hexachlorobutadiene	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
2-Hexanone	ND	10		µg/L	1	5/13/2022 6:39:00 PM	R87971
Isopropylbenzene	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
4-Isopropyltoluene	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
4-Methyl-2-pentanone	ND	10		µg/L	1	5/13/2022 6:39:00 PM	R87971
Methylene Chloride	ND	3.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
n-Butylbenzene	ND	3.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
n-Propylbenzene	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
sec-Butylbenzene	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
Styrene	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
tert-Butylbenzene	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
trans-1,2-DCE	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
Trichlorofluoromethane	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
Vinyl chloride	ND	1.0		µg/L	1	5/13/2022 6:39:00 PM	R87971
Xylenes, Total	ND	1.5		µg/L	1	5/13/2022 6:39:00 PM	R87971
Surr: 1,2-Dichloroethane-d4	91.0	70-130		%Rec	1	5/13/2022 6:39:00 PM	R87971
Surr: 4-Bromofluorobenzene	93.0	70-130		%Rec	1	5/13/2022 6:39:00 PM	R87971
Surr: Dibromofluoromethane	99.9	70-130		%Rec	1	5/13/2022 6:39:00 PM	R87971

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2205616-006 **Matrix:** AQUEOUS

Client Sample ID: MW-17 DUP
Collection Date: 5/12/2022 2:33:00 PM
Received Date: 5/12/2022 4:04:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Surr: Toluene-d8	97.8	70-130		%Rec	1	5/13/2022 6:39:00 PM	R87971

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2205616**
31-May-22

Client: EA Engineering
Project: Sparton

Sample ID: **MB** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **D88018** RunNo: **88018**
Prep Date: Analysis Date: **5/16/2022** SeqNo: **3120338** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID: **LLLCS** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **D88018** RunNo: **88018**
Prep Date: Analysis Date: **5/16/2022** SeqNo: **3120340** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.0067	0.0060	0.006000	0	111	50	150			
Iron	0.025	0.020	0.02000	0	125	50	150			
Manganese	0.0023	0.0020	0.002000	0	117	50	150			

Sample ID: **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **D88018** RunNo: **88018**
Prep Date: Analysis Date: **5/16/2022** SeqNo: **3120342** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.52	0.0060	0.5000	0	104	85	115			
Iron	0.51	0.020	0.5000	0	103	85	115			
Manganese	0.51	0.0020	0.5000	0	102	85	115			

Sample ID: **2205616-005DMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MW-17** Batch ID: **D88018** RunNo: **88018**
Prep Date: Analysis Date: **5/16/2022** SeqNo: **3120389** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.57	0.0060	0.5000	0.04189	106	70	130			
Iron	0.52	0.020	0.5000	0	104	70	130			
Manganese	0.52	0.0020	0.5000	0.0005955	103	70	130			

Sample ID: **2205616-005DMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MW-17** Batch ID: **D88018** RunNo: **88018**
Prep Date: Analysis Date: **5/16/2022** SeqNo: **3120390** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.57	0.0060	0.5000	0.04189	105	70	130	1.50	20	
Iron	0.51	0.020	0.5000	0	102	70	130	1.97	20	
Manganese	0.52	0.0020	0.5000	0.0005955	104	70	130	0.354	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2205616**
31-May-22

Client: EA Engineering
Project: Sparton

Sample ID: **LCS-67490** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **67490** RunNo: **88058**
Prep Date: **5/16/2022** Analysis Date: **5/17/2022** SeqNo: **3121812** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.51	0.0060	0.5000	0	101	85	115			

Sample ID: **MB-67490** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **67490** RunNo: **88058**
Prep Date: **5/16/2022** Analysis Date: **5/17/2022** SeqNo: **3121852** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LLLCS-67490** SampType: **LCSLL** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC** Batch ID: **67490** RunNo: **88058**
Prep Date: Analysis Date: **5/17/2022** SeqNo: **3121854** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.0066	0.0060	0.006000	0	109	50	150			

Sample ID: **2205616-006CMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MW-17 DUP** Batch ID: **67490** RunNo: **88058**
Prep Date: **5/16/2022** Analysis Date: **5/17/2022** SeqNo: **3121907** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.57	0.0060	0.5000	0.04604	104	70	130			

Sample ID: **2205616-006CMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MW-17 DUP** Batch ID: **67490** RunNo: **88058**
Prep Date: **5/16/2022** Analysis Date: **5/17/2022** SeqNo: **3121909** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.57	0.0060	0.5000	0.04604	105	70	130	1.37	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2205616**
31-May-22

Client: EA Engineering
Project: Sparton

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R87971** RunNo: **87971**
Prep Date: Analysis Date: **5/13/2022** SeqNo: **3118486** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	70	130			
Toluene	20	1.0	20.00	0	98.7	70	130			
Chlorobenzene	20	1.0	20.00	0	100	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	96.5	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	97.1	70	130			
Surr: 1,2-Dichloroethane-d4	9.9		10.00		98.9	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.7		10.00		97.0	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R87971** RunNo: **87971**
Prep Date: Analysis Date: **5/13/2022** SeqNo: **3118729** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2205616**
31-May-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R87971**	RunNo: **87971**	
Prep Date:	Analysis Date: **5/13/2022**	SeqNo: **3118729**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2205616**
31-May-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb**		SampType: **MBLK**			TestCode: **EPA Method 8260B: VOLATILES**					
Client ID: **PBW**		Batch ID: **R87971**			RunNo: **87971**					
Prep Date:		Analysis Date: **5/13/2022**			SeqNo: **3118729**		Units: **µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		100	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	9.5		10.00		94.7	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2205616**
31-May-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb-67515** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **67515** RunNo: **88154**
Prep Date: **5/17/2022** Analysis Date: **5/20/2022** SeqNo: **3126173** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	2.2		4.000		56.0	31.6	100			
Surr: 2,4,6-Tribromophenol	3.8		8.000		47.0	22	101			
Surr: 2-Fluorobiphenyl	2.2		4.000		54.0	26.7	90.1			
Surr: 4-Terphenyl-d14	4.4		4.000		111	72.3	147			

Sample ID: **lcs-67515** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **67515** RunNo: **88154**
Prep Date: **5/17/2022** Analysis Date: **5/20/2022** SeqNo: **3126174** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.80	0.10	2.000	0	40.0	20.2	48.4			
Surr: Nitrobenzene-d5	3.9		5.000		78.8	31.6	100			
Surr: 2,4,6-Tribromophenol	6.8		10.00		68.4	22	101			
Surr: 2-Fluorobiphenyl	3.5		5.000		70.0	26.7	90.1			
Surr: 4-Terphenyl-d14	6.7		5.000		134	72.3	147			

Sample ID: **lcsd-67515** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **67515** RunNo: **88154**
Prep Date: **5/17/2022** Analysis Date: **5/20/2022** SeqNo: **3126175** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.80	0.10	2.000	0	40.0	20.2	48.4	0	30.1	
Surr: Nitrobenzene-d5	3.9		5.000		77.2	31.6	100	0	0	
Surr: 2,4,6-Tribromophenol	6.3		10.00		62.6	22	101	0	0	
Surr: 2-Fluorobiphenyl	3.3		5.000		66.0	26.7	90.1	0	0	
Surr: 4-Terphenyl-d14	6.2		5.000		123	72.3	147	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: EA Engineering Work Order Number: 2205616 RcptNo: 1

Received By: Kasandra Payan 5/12/2022 4:04:00 PM
Completed By: Sean Livingston 5/12/2022 4:36:13 PM
Reviewed By: CMC 5/13/22

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☑ NA ☐
   Samples were collected the same day.
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 8 (<2 or >12 unless noted)
Adjusted? NO
Checked by: JM 5/13/22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	9.2	Good				
2	1.7	Good				

Chain-of-Custody Record

Client: Sparton Technologies Inc

EA Engineering, Science, and Technology, Inc., PBC

Mailing Address: 320 Gold Av SW #1300

Albuquerque, NM 87102

Phone #: 505-715-4154

email or Fax#: rmarley@eaest.com

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ **Rush** 72 Hours

Project Name: Sparton

Project #: Bills to Sparton direct

Project Manager: Bob Marley, EA Engineering

Sampler: Scott Miles

On Ice: ☑ Yes ☐ No

Sample Temperature: See Remarks

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2205616	VOCs, 8260B	1,4-Dioxane, 8270SIM	Total Chromium	Dissolved Metals (Cr, Fe, Mn)	Air Bubbles (Y or N)
5-11-2022	0906	Aq	MW-62R	3x VOA, 1x 250ml HDPE 1x 1L Amber	HCl, HNO3, none	001	X	X	X		
	1353		MW-52R			002	X	X	X		
	1601		MW-71R			003	X	X	X		
5-12-2022	1251		MW-65			004	X	X	X		
	1433		MW-17			005	X	X	X	X	
	1433		MW-17 DUP			006	X	X	X	X	
			~~Trip Blank~~	2x VOA	HCl	007	X				
			Did not receive	on 5/13/22							

Date:	Time:	Relinquished by:	Received by:	Date	Time
5-12-22	1603	Mike	[signature]	5.12.22	16:04
Date:	Time:	Relinquished by:	Received by:	Date	Time

9.1 + 0.1 = 9.2

1.6 + 0.1 = 1.7

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

June 16, 2022

Bob Marley
EA Engineering
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL:
FAX:

RE: Sparton Coors Rd OrderNo.: 2206071

Dear Bob Marley:

Hall Environmental Analysis Laboratory received 7 sample(s) on 5/19/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2206071**
Date Reported: **6/16/2022**

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2206071-001 **Matrix:**

Client Sample ID: CW-1 Influent
Collection Date: 6/1/2022 9:24:00 AM
Received Date: 6/1/2022 1:25:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Chromium	ND	0.0060		mg/L	1	6/9/2022 7:53:06 PM	A88639
Iron	ND	0.020		mg/L	1	6/9/2022 7:53:06 PM	A88639
Manganese	ND	0.0020		mg/L	1	6/9/2022 7:53:06 PM	A88639
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Chromium	ND	0.0060		mg/L	1	6/6/2022 11:44:43 AM	67866
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.1	1.0		µg/L	1	6/9/2022 12:58:00 PM	67933
Surr: 2-Fluorobiphenyl	64.5	26.7-90.1		%Rec	1	6/9/2022 12:58:00 PM	67933
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
Toluene	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
Ethylbenzene	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
Naphthalene	ND	2.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
1-Methylnaphthalene	ND	4.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
2-Methylnaphthalene	ND	4.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
Acetone	ND	10		µg/L	1	6/2/2022 7:43:00 PM	R88431
Bromobenzene	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
Bromodichloromethane	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
Bromoform	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
Bromomethane	ND	3.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
2-Butanone	ND	10		µg/L	1	6/2/2022 7:43:00 PM	R88431
Carbon disulfide	ND	10		µg/L	1	6/2/2022 7:43:00 PM	R88431
Carbon Tetrachloride	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
Chlorobenzene	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
Chloroethane	ND	2.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
Chloroform	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
Chloromethane	ND	3.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
2-Chlorotoluene	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
4-Chlorotoluene	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
cis-1,2-DCE	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
Dibromochloromethane	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2206071-001 **Matrix:**

Client Sample ID: CW-1 Influent
Collection Date: 6/1/2022 9:24:00 AM
Received Date: 6/1/2022 1:25:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dibromomethane	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
1,1-Dichloroethane	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
1,1-Dichloroethene	15	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
1,2-Dichloropropane	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
1,3-Dichloropropane	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
2,2-Dichloropropane	ND	2.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
1,1-Dichloropropene	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
Hexachlorobutadiene	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
2-Hexanone	ND	10		µg/L	1	6/2/2022 7:43:00 PM	R88431
Isopropylbenzene	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
4-Isopropyltoluene	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
4-Methyl-2-pentanone	ND	10		µg/L	1	6/2/2022 7:43:00 PM	R88431
Methylene Chloride	ND	3.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
n-Butylbenzene	ND	3.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
n-Propylbenzene	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
sec-Butylbenzene	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
Styrene	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
tert-Butylbenzene	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
Tetrachloroethene (PCE)	1.0	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
trans-1,2-DCE	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
Trichloroethene (TCE)	120	10		µg/L	10	6/2/2022 7:20:00 PM	R88431
Trichlorofluoromethane	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
Vinyl chloride	ND	1.0		µg/L	1	6/2/2022 7:43:00 PM	R88431
Xylenes, Total	ND	1.5		µg/L	1	6/2/2022 7:43:00 PM	R88431
Surr: 1,2-Dichloroethane-d4	90.6	70-130		%Rec	1	6/2/2022 7:43:00 PM	R88431
Surr: 4-Bromofluorobenzene	97.4	70-130		%Rec	1	6/2/2022 7:43:00 PM	R88431
Surr: Dibromofluoromethane	96.7	70-130		%Rec	1	6/2/2022 7:43:00 PM	R88431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2206071-001 **Matrix:**

Client Sample ID: CW-1 Influent
Collection Date: 6/1/2022 9:24:00 AM
Received Date: 6/1/2022 1:25:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Surr: Toluene-d8	100	70-130		%Rec	1	6/2/2022 7:43:00 PM	R88431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2206071-002 **Matrix:**

Client Sample ID: CW-1 Effluent
Collection Date: 6/1/2022 9:31:00 AM
Received Date: 6/1/2022 1:25:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Chromium	ND	0.0060		mg/L	1	6/9/2022 7:57:41 PM	A88639
Iron	ND	0.020		mg/L	1	6/9/2022 7:57:41 PM	A88639
Manganese	ND	0.0020		mg/L	1	6/9/2022 7:57:41 PM	A88639
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Chromium	ND	0.0060		mg/L	1	6/6/2022 11:49:38 AM	67866
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.6	1.0		µg/L	1	6/9/2022 1:45:00 PM	67933
Surr: 2-Fluorobiphenyl	75.5	26.7-90.1		%Rec	1	6/9/2022 1:45:00 PM	67933
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
Toluene	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
Ethylbenzene	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
Naphthalene	ND	2.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
1-Methylnaphthalene	ND	4.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
2-Methylnaphthalene	ND	4.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
Acetone	ND	10		µg/L	1	6/2/2022 8:06:00 PM	R88431
Bromobenzene	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
Bromodichloromethane	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
Bromoform	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
Bromomethane	ND	3.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
2-Butanone	ND	10		µg/L	1	6/2/2022 8:06:00 PM	R88431
Carbon disulfide	ND	10		µg/L	1	6/2/2022 8:06:00 PM	R88431
Carbon Tetrachloride	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
Chlorobenzene	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
Chloroethane	ND	2.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
Chloroform	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
Chloromethane	ND	3.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
2-Chlorotoluene	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
4-Chlorotoluene	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
cis-1,2-DCE	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
Dibromochloromethane	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2206071-002 **Matrix:**

Client Sample ID: CW-1 Effluent
Collection Date: 6/1/2022 9:31:00 AM
Received Date: 6/1/2022 1:25:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dibromomethane	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
1,1-Dichloroethane	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
1,1-Dichloroethene	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
1,2-Dichloropropane	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
1,3-Dichloropropane	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
2,2-Dichloropropane	ND	2.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
1,1-Dichloropropene	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
Hexachlorobutadiene	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
2-Hexanone	ND	10		µg/L	1	6/2/2022 8:06:00 PM	R88431
Isopropylbenzene	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
4-Isopropyltoluene	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
4-Methyl-2-pentanone	ND	10		µg/L	1	6/2/2022 8:06:00 PM	R88431
Methylene Chloride	ND	3.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
n-Butylbenzene	ND	3.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
n-Propylbenzene	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
sec-Butylbenzene	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
Styrene	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
tert-Butylbenzene	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
trans-1,2-DCE	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
Trichlorofluoromethane	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
Vinyl chloride	ND	1.0		µg/L	1	6/2/2022 8:06:00 PM	R88431
Xylenes, Total	ND	1.5		µg/L	1	6/2/2022 8:06:00 PM	R88431
Surr: 1,2-Dichloroethane-d4	92.8	70-130		%Rec	1	6/2/2022 8:06:00 PM	R88431
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	6/2/2022 8:06:00 PM	R88431
Surr: Dibromofluoromethane	101	70-130		%Rec	1	6/2/2022 8:06:00 PM	R88431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2206071-002 **Matrix:**

Client Sample ID: CW-1 Effluent
Collection Date: 6/1/2022 9:31:00 AM
Received Date: 6/1/2022 1:25:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Surr: Toluene-d8	101	70-130		%Rec	1	6/2/2022 8:06:00 PM	R88431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2206071-003 **Matrix:**

Client Sample ID: CW-1 Effluent Duplicate
Collection Date: 6/1/2022 9:39:00 AM
Received Date: 6/1/2022 1:25:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst: **DAM**	
1,4-Dioxane	2.6	1.0		µg/L	1	6/9/2022 2:32:00 PM	67933
Surr: 2-Fluorobiphenyl	83.5	26.7-90.1		%Rec	1	6/9/2022 2:32:00 PM	67933

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2206071-004 **Matrix:**

Client Sample ID: CW-2 Influent
Collection Date: 6/1/2022 10:37:00 AM
Received Date: 6/1/2022 1:25:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Chromium	0.042	0.0060		mg/L	1	6/9/2022 8:11:12 PM	A88639
Iron	ND	0.020		mg/L	1	6/9/2022 8:11:12 PM	A88639
Manganese	0.041	0.0020		mg/L	1	6/9/2022 8:11:12 PM	A88639
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Chromium	0.044	0.0060		mg/L	1	6/6/2022 11:56:18 AM	67866
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.8	1.0		µg/L	1	6/9/2022 3:20:00 PM	67933
Surr: 2-Fluorobiphenyl	74.0	26.7-90.1		%Rec	1	6/9/2022 3:20:00 PM	67933
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
Toluene	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
Ethylbenzene	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
Naphthalene	ND	2.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
1-Methylnaphthalene	ND	4.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
2-Methylnaphthalene	ND	4.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
Acetone	ND	10		µg/L	1	6/2/2022 9:15:00 PM	R88431
Bromobenzene	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
Bromodichloromethane	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
Bromoform	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
Bromomethane	ND	3.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
2-Butanone	ND	10		µg/L	1	6/2/2022 9:15:00 PM	R88431
Carbon disulfide	ND	10		µg/L	1	6/2/2022 9:15:00 PM	R88431
Carbon Tetrachloride	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
Chlorobenzene	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
Chloroethane	ND	2.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
Chloroform	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
Chloromethane	ND	3.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
2-Chlorotoluene	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
4-Chlorotoluene	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
cis-1,2-DCE	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
Dibromochloromethane	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2206071-004 **Matrix:**

Client Sample ID: CW-2 Influent
Collection Date: 6/1/2022 10:37:00 AM
Received Date: 6/1/2022 1:25:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dibromomethane	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
1,1-Dichloroethane	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
1,1-Dichloroethene	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
1,2-Dichloropropane	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
1,3-Dichloropropane	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
2,2-Dichloropropane	ND	2.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
1,1-Dichloropropene	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
Hexachlorobutadiene	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
2-Hexanone	ND	10		µg/L	1	6/2/2022 9:15:00 PM	R88431
Isopropylbenzene	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
4-Isopropyltoluene	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
4-Methyl-2-pentanone	ND	10		µg/L	1	6/2/2022 9:15:00 PM	R88431
Methylene Chloride	ND	3.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
n-Butylbenzene	ND	3.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
n-Propylbenzene	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
sec-Butylbenzene	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
Styrene	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
tert-Butylbenzene	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
trans-1,2-DCE	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
Trichloroethene (TCE)	4.5	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
Trichlorofluoromethane	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
Vinyl chloride	ND	1.0		µg/L	1	6/2/2022 9:15:00 PM	R88431
Xylenes, Total	ND	1.5		µg/L	1	6/2/2022 9:15:00 PM	R88431
Surr: 1,2-Dichloroethane-d4	94.3	70-130		%Rec	1	6/2/2022 9:15:00 PM	R88431
Surr: 4-Bromofluorobenzene	98.5	70-130		%Rec	1	6/2/2022 9:15:00 PM	R88431
Surr: Dibromofluoromethane	102	70-130		%Rec	1	6/2/2022 9:15:00 PM	R88431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2206071-004 **Matrix:**

Client Sample ID: CW-2 Influent
Collection Date: 6/1/2022 10:37:00 AM
Received Date: 6/1/2022 1:25:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Surr: Toluene-d8	99.6	70-130		%Rec	1	6/2/2022 9:15:00 PM	R88431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2206071-005 **Matrix:**

Client Sample ID: CW-2 Effluent
Collection Date: 6/1/2022 10:43:00 AM
Received Date: 6/1/2022 1:25:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Chromium	0.041	0.0060		mg/L	1	6/9/2022 8:15:37 PM	A88639
Iron	ND	0.020		mg/L	1	6/9/2022 8:15:37 PM	A88639
Manganese	0.033	0.0020		mg/L	1	6/9/2022 8:15:37 PM	A88639
EPA METHOD 200.7: TOTAL METALS						Analyst:	**JLF**
Chromium	0.042	0.0060		mg/L	1	6/6/2022 11:57:58 AM	67866
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.3	1.0		µg/L	1	6/9/2022 4:08:00 PM	67933
Surr: 2-Fluorobiphenyl	64.0	26.7-90.1		%Rec	1	6/9/2022 4:08:00 PM	67933
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
Toluene	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
Ethylbenzene	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
Naphthalene	ND	2.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
1-Methylnaphthalene	ND	4.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
2-Methylnaphthalene	ND	4.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
Acetone	ND	10		µg/L	1	6/2/2022 9:38:00 PM	R88431
Bromobenzene	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
Bromodichloromethane	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
Bromoform	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
Bromomethane	ND	3.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
2-Butanone	ND	10		µg/L	1	6/2/2022 9:38:00 PM	R88431
Carbon disulfide	ND	10		µg/L	1	6/2/2022 9:38:00 PM	R88431
Carbon Tetrachloride	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
Chlorobenzene	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
Chloroethane	ND	2.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
Chloroform	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
Chloromethane	ND	3.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
2-Chlorotoluene	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
4-Chlorotoluene	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
cis-1,2-DCE	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
Dibromochloromethane	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2206071-005 **Matrix:**

Client Sample ID: CW-2 Effluent
Collection Date: 6/1/2022 10:43:00 AM
Received Date: 6/1/2022 1:25:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dibromomethane	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
1,1-Dichloroethane	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
1,1-Dichloroethene	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
1,2-Dichloropropane	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
1,3-Dichloropropane	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
2,2-Dichloropropane	ND	2.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
1,1-Dichloropropene	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
Hexachlorobutadiene	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
2-Hexanone	ND	10		µg/L	1	6/2/2022 9:38:00 PM	R88431
Isopropylbenzene	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
4-Isopropyltoluene	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
4-Methyl-2-pentanone	ND	10		µg/L	1	6/2/2022 9:38:00 PM	R88431
Methylene Chloride	ND	3.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
n-Butylbenzene	ND	3.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
n-Propylbenzene	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
sec-Butylbenzene	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
Styrene	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
tert-Butylbenzene	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
trans-1,2-DCE	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
Trichlorofluoromethane	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
Vinyl chloride	ND	1.0		µg/L	1	6/2/2022 9:38:00 PM	R88431
Xylenes, Total	ND	1.5		µg/L	1	6/2/2022 9:38:00 PM	R88431
Surr: 1,2-Dichloroethane-d4	93.2	70-130		%Rec	1	6/2/2022 9:38:00 PM	R88431
Surr: 4-Bromofluorobenzene	97.8	70-130		%Rec	1	6/2/2022 9:38:00 PM	R88431
Surr: Dibromofluoromethane	102	70-130		%Rec	1	6/2/2022 9:38:00 PM	R88431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2206071-005 **Matrix:**

Client Sample ID: CW-2 Effluent
Collection Date: 6/1/2022 10:43:00 AM
Received Date: 6/1/2022 1:25:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Surr: Toluene-d8	99.5	70-130		%Rec	1	6/2/2022 9:38:00 PM	R88431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2206071-006 **Matrix:**

Client Sample ID: CW-2 Effluent Duplicate
Collection Date: 6/1/2022 10:45:00 AM
Received Date: 6/1/2022 1:25:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst: **DAM**	
1,4-Dioxane	2.8	1.0		µg/L	1	6/9/2022 4:56:00 PM	67933
Surr: 2-Fluorobiphenyl	79.5	26.7-90.1		%Rec	1	6/9/2022 4:56:00 PM	67933

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2206071-007
Matrix: TRIP BLANK
Client Sample ID: Trip Blank
Collection Date:
Received Date: 6/1/2022 1:25:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
Toluene	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
Ethylbenzene	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
Naphthalene	ND	2.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
1-Methylnaphthalene	ND	4.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
2-Methylnaphthalene	ND	4.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
Acetone	ND	10		µg/L	1	6/2/2022 10:01:00 PM	R88431
Bromobenzene	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
Bromodichloromethane	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
Bromoform	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
Bromomethane	ND	3.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
2-Butanone	ND	10		µg/L	1	6/2/2022 10:01:00 PM	R88431
Carbon disulfide	ND	10		µg/L	1	6/2/2022 10:01:00 PM	R88431
Carbon Tetrachloride	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
Chlorobenzene	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
Chloroethane	ND	2.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
Chloroform	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
Chloromethane	ND	3.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
2-Chlorotoluene	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
4-Chlorotoluene	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
cis-1,2-DCE	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
Dibromochloromethane	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
Dibromomethane	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
1,1-Dichloroethane	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
1,1-Dichloroethene	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
1,2-Dichloropropane	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
1,3-Dichloropropane	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
2,2-Dichloropropane	ND	2.0		µg/L	1	6/2/2022 10:01:00 PM	R88431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton Coors Rd
Collection Date:
Lab ID: 2206071-007
Matrix: TRIP BLANK
Received Date: 6/1/2022 1:25:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,1-Dichloropropene	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
Hexachlorobutadiene	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
2-Hexanone	ND	10		µg/L	1	6/2/2022 10:01:00 PM	R88431
Isopropylbenzene	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
4-Isopropyltoluene	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
4-Methyl-2-pentanone	ND	10		µg/L	1	6/2/2022 10:01:00 PM	R88431
Methylene Chloride	ND	3.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
n-Butylbenzene	ND	3.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
n-Propylbenzene	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
sec-Butylbenzene	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
Styrene	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
tert-Butylbenzene	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
trans-1,2-DCE	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
Trichlorofluoromethane	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
Vinyl chloride	ND	1.0		µg/L	1	6/2/2022 10:01:00 PM	R88431
Xylenes, Total	ND	1.5		µg/L	1	6/2/2022 10:01:00 PM	R88431
Surr: 1,2-Dichloroethane-d4	92.8	70-130		%Rec	1	6/2/2022 10:01:00 PM	R88431
Surr: 4-Bromofluorobenzene	96.5	70-130		%Rec	1	6/2/2022 10:01:00 PM	R88431
Surr: Dibromofluoromethane	100	70-130		%Rec	1	6/2/2022 10:01:00 PM	R88431
Surr: Toluene-d8	98.1	70-130		%Rec	1	6/2/2022 10:01:00 PM	R88431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2206071**
16-Jun-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **MB-A** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **A88639** RunNo: **88639**
Prep Date: Analysis Date: **6/9/2022** SeqNo: **3146364** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID: **LLLCS-A** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **A88639** RunNo: **88639**
Prep Date: Analysis Date: **6/9/2022** SeqNo: **3146365** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060	0.006000	0	76.9	50	150			
Iron	ND	0.020	0.02000	0	99.1	50	150			
Manganese	ND	0.0020	0.002000	0	93.6	50	150			

Sample ID: **LCS-A** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **A88639** RunNo: **88639**
Prep Date: Analysis Date: **6/9/2022** SeqNo: **3146366** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.51	0.0060	0.5000	0	102	85	115			
Iron	0.50	0.020	0.5000	0	101	85	115			
Manganese	0.51	0.0020	0.5000	0	102	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2206071**
16-Jun-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **MB-67866** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **67866** RunNo: **88502**
Prep Date: **6/2/2022** Analysis Date: **6/6/2022** SeqNo: **3140127** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LCSLL-67866** SampType: **LCSLL** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC** Batch ID: **67866** RunNo: **88502**
Prep Date: **6/2/2022** Analysis Date: **6/6/2022** SeqNo: **3140128** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060	0.006000	0	96.0	50	150			

Sample ID: **LCS-67866** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **67866** RunNo: **88502**
Prep Date: **6/2/2022** Analysis Date: **6/6/2022** SeqNo: **3140129** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.52	0.0060	0.5000	0	103	85	115			

Sample ID: **2206071-001DMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **CW-1 Influent** Batch ID: **67866** RunNo: **88502**
Prep Date: **6/2/2022** Analysis Date: **6/6/2022** SeqNo: **3140131** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.53	0.0060	0.5000	0.003392	106	70	130			

Sample ID: **2206071-001DMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **CW-1 Influent** Batch ID: **67866** RunNo: **88502**
Prep Date: **6/2/2022** Analysis Date: **6/6/2022** SeqNo: **3140132** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.52	0.0060	0.5000	0.003392	103	70	130	3.13	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2206071**
16-Jun-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R88431** RunNo: **88431**
Prep Date: Analysis Date: **6/2/2022** SeqNo: **3137999** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	97.6	70	130			
Toluene	21	1.0	20.00	0	104	70	130			
Chlorobenzene	22	1.0	20.00	0	108	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	94.7	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	95.1	70	130			
Surr: 1,2-Dichloroethane-d4	9.1		10.00		90.9	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	9.7		10.00		97.3	70	130			
Surr: Toluene-d8	9.9		10.00		99.4	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R88431** RunNo: **88431**
Prep Date: Analysis Date: **6/2/2022** SeqNo: **3138000** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2206071**
16-Jun-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R88431**	RunNo: **88431**			
Prep Date:	Analysis Date: **6/2/2022**	SeqNo: **3138000**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2206071**
16-Jun-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R88431** RunNo: **88431**
Prep Date: Analysis Date: **6/2/2022** SeqNo: **3138000** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.0		10.00		89.8	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		97.6	70	130			
Surr: Dibromofluoromethane	9.7		10.00		97.1	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID: **2206071-002ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **CW-1 Effluent** Batch ID: **R88431** RunNo: **88431**
Prep Date: Analysis Date: **6/2/2022** SeqNo: **3138004** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	70	130			
Toluene	22	1.0	20.00	0	108	70	130			
Chlorobenzene	22	1.0	20.00	0	112	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	98.9	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0.5060	98.4	70	130			
Surr: 1,2-Dichloroethane-d4	9.2		10.00		91.9	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	9.9		10.00		99.3	70	130			
Surr: Toluene-d8	9.8		10.00		97.6	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2206071**
16-Jun-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb-67933** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **67933** RunNo: **88624**
Prep Date: **6/7/2022** Analysis Date: **6/9/2022** SeqNo: **3145605** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	3.4		4.000		86.0	31.6	100			
Surr: 2,4,6-Tribromophenol	7.4		8.000		92.0	22	101			
Surr: 2-Fluorobiphenyl	2.9		4.000		73.0	26.7	90.1			
Surr: 4-Terphenyl-d14	3.9		4.000		98.0	72.3	147			

Sample ID: **lcs-67933** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **67933** RunNo: **88624**
Prep Date: **6/7/2022** Analysis Date: **6/9/2022** SeqNo: **3145606** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.80	0.10	2.000	0	40.0	20.2	48.4			
Surr: Nitrobenzene-d5	5.0		5.000		99.6	31.6	100			
Surr: 2,4,6-Tribromophenol	10		10.00		102	22	101			S
Surr: 2-Fluorobiphenyl	3.2		5.000		64.4	26.7	90.1			
Surr: 4-Terphenyl-d14	5.8		5.000		116	72.3	147			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **EA Engineering** Work Order Number: **2206071** RcptNo: **1**

Received By: **Cheyenne Cason** **5/19/2022 3:50:00 PM** Chel

Completed By: **Cheyenne Cason** **6/1/2022 3:35:16 PM** Chel

Reviewed By: JH 6-1-22

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☑ NA ☐
   Samples were collected the same day and chilled.
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☐ No ☐ NA ☑
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 8
(<2 or >12 unless noted)
Adjusted? NO
Checked by: DAD 6.1.22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	11.5	Good	Not Present			

Chain-of-Custody Record

Client: Sparton Technologies Inc

EA Engineering, Science, and Technology, Inc., PBC

Mailing Address: 320 Gold Av SW #1300

Albuquerque, NM 87102

Phone #: 505-715-4154

email or Fax#: rmarley@eaest.com

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation:

☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ **Rush** 72 Hours

Project Name:

Sparton Coors Rd

Project #: Bills to Sparton direct

Project Manager:

Bob Marley, EA Engineering

Sampler: Scott Miles

On Ice: ☒ Yes ☐ No

Sample Temperature: 11.4 +0.1 = 11.5

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2206071	VOCs, 8260B	1,4-Dioxane, 8270SIM	Total Chromium	Dissolved Metals (Cr, Fe, Mn)										Air Bubbles (Y or N)
6-1-22	0924	Water	CW-1 Influent	3x VOA, 1x1L Amber, 1x250ml HDPE, 1x125ml HDPE	HCl, none, HNO3	001	X	X	X	X										
	0931	Water	CW-1 Effluent			002	X	X	X	X										
	0939	Water	CW-1 Effluent Duplicate	1 L Amber	none	003		X												
	1037	Water	CW-2 Influent	3x VOA, 1x1L Amber, 1x250ml HDPE, 1x125ml HDPE	HCl, none, HNO3	004	X	X	X	X										
	1043	Water	CW-2 Effluent			005	X	X	X	X										
	1045	Water	CW-2 Effluent Duplicate	1 L Amber	none	006		X												
		Water	Trip Blank	2x VOA	HCl	007	X													

Date:	Time:	Relinquished by:	Received by:	Date	Time
6-1-2022	1325	[signature]	[signature] CDO	6/1/22	1325
Date:	Time:	Relinquished by:	Received by:	Date	Time

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

July 20, 2022

Bob Marley
EA Engineering
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL:
FAX:

RE: Sparton Coors Rd OrderNo.: 2207049

Dear Bob Marley:

Hall Environmental Analysis Laboratory received 7 sample(s) on 7/1/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2207049**
Date Reported: **7/20/2022**

CLIENT: EA Engineering
Client Sample ID: CW-1 Influent
Project: Sparton Coors Rd
Collection Date: 7/1/2022 10:42:00 AM
Lab ID: 2207049-001
Matrix: AQUEOUS
Received Date: 7/1/2022 11:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	7/5/2022 3:56:47 PM	B89290
Iron	ND	0.020		mg/L	1	7/5/2022 3:56:47 PM	B89290
Manganese	ND	0.0020		mg/L	1	7/5/2022 3:56:47 PM	B89290
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	ND	0.0060		mg/L	1	7/12/2022 4:54:02 PM	68660
EPA METHOD 8270SIM						Analyst:	**TOM**
1,4-Dioxane	1.7	1.0		µg/L	1	7/13/2022 10:29:00 AM	68515
Surr: 2-Fluorobiphenyl	45.5	26.7-90.1		%Rec	1	7/13/2022 10:29:00 AM	68515
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
Toluene	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
Ethylbenzene	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
Naphthalene	ND	2.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
1-Methylnaphthalene	ND	4.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
2-Methylnaphthalene	ND	4.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
Acetone	ND	10		µg/L	1	7/9/2022 8:51:00 AM	R89347
Bromobenzene	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
Bromodichloromethane	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
Bromoform	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
Bromomethane	ND	3.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
2-Butanone	ND	10		µg/L	1	7/9/2022 8:51:00 AM	R89347
Carbon disulfide	ND	10		µg/L	1	7/9/2022 8:51:00 AM	R89347
Carbon Tetrachloride	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
Chlorobenzene	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
Chloroethane	ND	2.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
Chloroform	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
Chloromethane	ND	3.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
2-Chlorotoluene	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
4-Chlorotoluene	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
cis-1,2-DCE	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
Dibromochloromethane	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2207049-001 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Influent
Collection Date: 7/1/2022 10:42:00 AM
Received Date: 7/1/2022 11:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dibromomethane	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
1,1-Dichloroethane	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
1,1-Dichloroethene	15	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
1,2-Dichloropropane	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
1,3-Dichloropropane	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
2,2-Dichloropropane	ND	2.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
1,1-Dichloropropene	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
Hexachlorobutadiene	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
2-Hexanone	ND	10		µg/L	1	7/9/2022 8:51:00 AM	R89347
Isopropylbenzene	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
4-Isopropyltoluene	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
4-Methyl-2-pentanone	ND	10		µg/L	1	7/9/2022 8:51:00 AM	R89347
Methylene Chloride	ND	3.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
n-Butylbenzene	ND	3.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
n-Propylbenzene	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
sec-Butylbenzene	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
Styrene	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
tert-Butylbenzene	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
trans-1,2-DCE	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
Trichloroethene (TCE)	120	10		µg/L	10	7/9/2022 8:28:00 AM	R89347
Trichlorofluoromethane	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
Vinyl chloride	ND	1.0		µg/L	1	7/9/2022 8:51:00 AM	R89347
Xylenes, Total	ND	1.5		µg/L	1	7/9/2022 8:51:00 AM	R89347
Surr: 1,2-Dichloroethane-d4	113	70-130		%Rec	1	7/9/2022 8:51:00 AM	R89347
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	7/9/2022 8:51:00 AM	R89347
Surr: Dibromofluoromethane	107	70-130		%Rec	1	7/9/2022 8:51:00 AM	R89347

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2207049-001 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Influent
Collection Date: 7/1/2022 10:42:00 AM
Received Date: 7/1/2022 11:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Surr: Toluene-d8	96.7	70-130		%Rec	1	7/9/2022 8:51:00 AM	R89347

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2207049-002 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Effluent
Collection Date: 7/1/2022 10:51:00 AM
Received Date: 7/1/2022 11:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	7/5/2022 4:04:59 PM	B89290
Iron	ND	0.020		mg/L	1	7/5/2022 4:04:59 PM	B89290
Manganese	ND	0.0020		mg/L	1	7/5/2022 4:04:59 PM	B89290
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	ND	0.0060		mg/L	1	7/12/2022 4:57:16 PM	68660
EPA METHOD 8270SIM						Analyst:	**TOM**
1,4-Dioxane	1.4	1.0		µg/L	1	7/13/2022 11:12:00 AM	68515
Surr: 2-Fluorobiphenyl	31.5	26.7-90.1		%Rec	1	7/13/2022 11:12:00 AM	68515
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
Toluene	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
Ethylbenzene	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
Naphthalene	ND	2.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
1-Methylnaphthalene	ND	4.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
2-Methylnaphthalene	ND	4.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
Acetone	ND	10		µg/L	1	7/9/2022 9:14:00 AM	R89347
Bromobenzene	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
Bromodichloromethane	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
Bromoform	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
Bromomethane	ND	3.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
2-Butanone	ND	10		µg/L	1	7/9/2022 9:14:00 AM	R89347
Carbon disulfide	ND	10		µg/L	1	7/9/2022 9:14:00 AM	R89347
Carbon Tetrachloride	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
Chlorobenzene	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
Chloroethane	ND	2.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
Chloroform	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
Chloromethane	ND	3.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
2-Chlorotoluene	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
4-Chlorotoluene	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
cis-1,2-DCE	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
Dibromochloromethane	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2207049-002 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Effluent
Collection Date: 7/1/2022 10:51:00 AM
Received Date: 7/1/2022 11:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dibromomethane	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
1,1-Dichloroethane	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
1,1-Dichloroethene	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
1,2-Dichloropropane	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
1,3-Dichloropropane	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
2,2-Dichloropropane	ND	2.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
1,1-Dichloropropene	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
Hexachlorobutadiene	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
2-Hexanone	ND	10		µg/L	1	7/9/2022 9:14:00 AM	R89347
Isopropylbenzene	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
4-Isopropyltoluene	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
4-Methyl-2-pentanone	ND	10		µg/L	1	7/9/2022 9:14:00 AM	R89347
Methylene Chloride	ND	3.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
n-Butylbenzene	ND	3.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
n-Propylbenzene	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
sec-Butylbenzene	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
Styrene	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
tert-Butylbenzene	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
trans-1,2-DCE	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
Trichlorofluoromethane	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
Vinyl chloride	ND	1.0		µg/L	1	7/9/2022 9:14:00 AM	R89347
Xylenes, Total	ND	1.5		µg/L	1	7/9/2022 9:14:00 AM	R89347
Surr: 1,2-Dichloroethane-d4	112	70-130		%Rec	1	7/9/2022 9:14:00 AM	R89347
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	7/9/2022 9:14:00 AM	R89347
Surr: Dibromofluoromethane	107	70-130		%Rec	1	7/9/2022 9:14:00 AM	R89347

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2207049-002 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Effluent
Collection Date: 7/1/2022 10:51:00 AM
Received Date: 7/1/2022 11:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Surr: Toluene-d8	95.4	70-130		%Rec	1	7/9/2022 9:14:00 AM	R89347

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2207049-003 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Effluent Duplicate
Collection Date: 7/1/2022 10:58:00 AM
Received Date: 7/1/2022 11:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst: **TOM**	
1,4-Dioxane	2.5	1.0		µg/L	1	7/13/2022 11:55:00 AM	68515
Surr: 2-Fluorobiphenyl	73.5	26.7-90.1		%Rec	1	7/13/2022 11:55:00 AM	68515

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2207049-004 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Influent
Collection Date: 7/1/2022 8:51:00 AM
Received Date: 7/1/2022 11:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.046	0.0060		mg/L	1	7/5/2022 4:11:22 PM	B89290
Iron	ND	0.020		mg/L	1	7/5/2022 4:11:22 PM	B89290
Manganese	0.050	0.0020		mg/L	1	7/5/2022 4:11:22 PM	B89290
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	0.041	0.0060		mg/L	1	7/12/2022 5:08:41 PM	68660
EPA METHOD 8270SIM						Analyst:	**TOM**
1,4-Dioxane	1.7	1.0		µg/L	1	7/13/2022 12:39:00 PM	68515
Surr: 2-Fluorobiphenyl	37.5	26.7-90.1		%Rec	1	7/13/2022 12:39:00 PM	68515
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
Toluene	2.3	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
Ethylbenzene	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
Naphthalene	ND	2.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
1-Methylnaphthalene	ND	4.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
2-Methylnaphthalene	ND	4.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
Acetone	ND	10		µg/L	1	7/9/2022 9:37:00 AM	R89347
Bromobenzene	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
Bromodichloromethane	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
Bromoform	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
Bromomethane	ND	3.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
2-Butanone	ND	10		µg/L	1	7/9/2022 9:37:00 AM	R89347
Carbon disulfide	ND	10		µg/L	1	7/9/2022 9:37:00 AM	R89347
Carbon Tetrachloride	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
Chlorobenzene	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
Chloroethane	ND	2.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
Chloroform	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
Chloromethane	ND	3.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
2-Chlorotoluene	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
4-Chlorotoluene	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
cis-1,2-DCE	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
Dibromochloromethane	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2207049-004 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Influent
Collection Date: 7/1/2022 8:51:00 AM
Received Date: 7/1/2022 11:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dibromomethane	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
1,1-Dichloroethane	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
1,1-Dichloroethene	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
1,2-Dichloropropane	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
1,3-Dichloropropane	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
2,2-Dichloropropane	ND	2.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
1,1-Dichloropropene	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
Hexachlorobutadiene	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
2-Hexanone	ND	10		µg/L	1	7/9/2022 9:37:00 AM	R89347
Isopropylbenzene	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
4-Isopropyltoluene	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
4-Methyl-2-pentanone	ND	10		µg/L	1	7/9/2022 9:37:00 AM	R89347
Methylene Chloride	ND	3.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
n-Butylbenzene	ND	3.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
n-Propylbenzene	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
sec-Butylbenzene	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
Styrene	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
tert-Butylbenzene	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
trans-1,2-DCE	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
Trichloroethene (TCE)	4.5	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
Trichlorofluoromethane	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
Vinyl chloride	ND	1.0		µg/L	1	7/9/2022 9:37:00 AM	R89347
Xylenes, Total	ND	1.5		µg/L	1	7/9/2022 9:37:00 AM	R89347
Surr: 1,2-Dichloroethane-d4	111	70-130		%Rec	1	7/9/2022 9:37:00 AM	R89347
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	7/9/2022 9:37:00 AM	R89347
Surr: Dibromofluoromethane	107	70-130		%Rec	1	7/9/2022 9:37:00 AM	R89347

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2207049-004
Matrix: AQUEOUS
Client Sample ID: CW-2 Influent
Collection Date: 7/1/2022 8:51:00 AM
Received Date: 7/1/2022 11:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Surr: Toluene-d8	96.5	70-130		%Rec	1	7/9/2022 9:37:00 AM	R89347

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2207049-005 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent
Collection Date: 7/1/2022 9:01:00 AM
Received Date: 7/1/2022 11:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.047	0.0060		mg/L	1	7/5/2022 4:14:37 PM	B89290
Iron	ND	0.020		mg/L	1	7/5/2022 4:14:37 PM	B89290
Manganese	0.041	0.0020		mg/L	1	7/5/2022 4:14:37 PM	B89290
EPA METHOD 200.7: TOTAL METALS						Analyst:	**ELS**
Chromium	0.044	0.0060		mg/L	1	7/12/2022 5:12:00 PM	68660
EPA METHOD 8270SIM						Analyst:	**TOM**
1,4-Dioxane	2.9	1.0		µg/L	1	7/13/2022 1:22:00 PM	68515
Surr: 2-Fluorobiphenyl	76.0	26.7-90.1		%Rec	1	7/13/2022 1:22:00 PM	68515
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
Toluene	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
Ethylbenzene	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
Naphthalene	ND	2.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
1-Methylnaphthalene	ND	4.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
2-Methylnaphthalene	ND	4.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
Acetone	ND	10		µg/L	1	7/9/2022 10:00:00 AM	R89347
Bromobenzene	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
Bromodichloromethane	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
Bromoform	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
Bromomethane	ND	3.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
2-Butanone	ND	10		µg/L	1	7/9/2022 10:00:00 AM	R89347
Carbon disulfide	ND	10		µg/L	1	7/9/2022 10:00:00 AM	R89347
Carbon Tetrachloride	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
Chlorobenzene	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
Chloroethane	ND	2.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
Chloroform	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
Chloromethane	ND	3.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
2-Chlorotoluene	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
4-Chlorotoluene	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
cis-1,2-DCE	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
Dibromochloromethane	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2207049-005 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent
Collection Date: 7/1/2022 9:01:00 AM
Received Date: 7/1/2022 11:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dibromomethane	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
1,1-Dichloroethane	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
1,1-Dichloroethene	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
1,2-Dichloropropane	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
1,3-Dichloropropane	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
2,2-Dichloropropane	ND	2.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
1,1-Dichloropropene	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
Hexachlorobutadiene	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
2-Hexanone	ND	10		µg/L	1	7/9/2022 10:00:00 AM	R89347
Isopropylbenzene	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
4-Isopropyltoluene	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
4-Methyl-2-pentanone	ND	10		µg/L	1	7/9/2022 10:00:00 AM	R89347
Methylene Chloride	ND	3.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
n-Butylbenzene	ND	3.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
n-Propylbenzene	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
sec-Butylbenzene	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
Styrene	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
tert-Butylbenzene	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
trans-1,2-DCE	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
Trichlorofluoromethane	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
Vinyl chloride	ND	1.0		µg/L	1	7/9/2022 10:00:00 AM	R89347
Xylenes, Total	ND	1.5		µg/L	1	7/9/2022 10:00:00 AM	R89347
Surr: 1,2-Dichloroethane-d4	111	70-130		%Rec	1	7/9/2022 10:00:00 AM	R89347
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	7/9/2022 10:00:00 AM	R89347
Surr: Dibromofluoromethane	106	70-130		%Rec	1	7/9/2022 10:00:00 AM	R89347

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2207049-005 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent
Collection Date: 7/1/2022 9:01:00 AM
Received Date: 7/1/2022 11:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Surr: Toluene-d8	95.3	70-130		%Rec	1	7/9/2022 10:00:00 AM	R89347

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2207049-006 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent Duplicate
Collection Date: 7/1/2022 9:08:00 AM
Received Date: 7/1/2022 11:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst: **TOM**	
1,4-Dioxane	2.0	1.0		µg/L	1	7/13/2022 2:06:00 PM	68515
Surr: 2-Fluorobiphenyl	50.0	26.7-90.1		%Rec	1	7/13/2022 2:06:00 PM	68515

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton Coors Rd
Collection Date:
Lab ID: 2207049-007
Matrix: TRIP BLANK
Received Date: 7/1/2022 11:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
Toluene	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
Ethylbenzene	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
Naphthalene	ND	2.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
1-Methylnaphthalene	ND	4.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
2-Methylnaphthalene	ND	4.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
Acetone	ND	10		µg/L	1	7/9/2022 10:23:00 AM	R89347
Bromobenzene	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
Bromodichloromethane	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
Bromoform	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
Bromomethane	ND	3.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
2-Butanone	ND	10		µg/L	1	7/9/2022 10:23:00 AM	R89347
Carbon disulfide	ND	10		µg/L	1	7/9/2022 10:23:00 AM	R89347
Carbon Tetrachloride	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
Chlorobenzene	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
Chloroethane	ND	2.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
Chloroform	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
Chloromethane	ND	3.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
2-Chlorotoluene	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
4-Chlorotoluene	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
cis-1,2-DCE	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
Dibromochloromethane	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
Dibromomethane	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
1,1-Dichloroethane	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
1,1-Dichloroethene	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
1,2-Dichloropropane	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
1,3-Dichloropropane	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
2,2-Dichloropropane	ND	2.0		µg/L	1	7/9/2022 10:23:00 AM	R89347

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton Coors Rd
Collection Date:
Lab ID: 2207049-007
Matrix: TRIP BLANK
Received Date: 7/1/2022 11:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,1-Dichloropropene	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
Hexachlorobutadiene	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
2-Hexanone	ND	10		µg/L	1	7/9/2022 10:23:00 AM	R89347
Isopropylbenzene	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
4-Isopropyltoluene	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
4-Methyl-2-pentanone	ND	10		µg/L	1	7/9/2022 10:23:00 AM	R89347
Methylene Chloride	ND	3.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
n-Butylbenzene	ND	3.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
n-Propylbenzene	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
sec-Butylbenzene	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
Styrene	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
tert-Butylbenzene	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
trans-1,2-DCE	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
Trichlorofluoromethane	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
Vinyl chloride	ND	1.0		µg/L	1	7/9/2022 10:23:00 AM	R89347
Xylenes, Total	ND	1.5		µg/L	1	7/9/2022 10:23:00 AM	R89347
Surr: 1,2-Dichloroethane-d4	112	70-130		%Rec	1	7/9/2022 10:23:00 AM	R89347
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	7/9/2022 10:23:00 AM	R89347
Surr: Dibromofluoromethane	105	70-130		%Rec	1	7/9/2022 10:23:00 AM	R89347
Surr: Toluene-d8	94.2	70-130		%Rec	1	7/9/2022 10:23:00 AM	R89347

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2207049**
20-Jul-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **MB-B** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **B89290** RunNo: **89290**
Prep Date: Analysis Date: **7/5/2022** SeqNo: **3175460** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID: **LLLCS-B** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **B89290** RunNo: **89290**
Prep Date: Analysis Date: **7/5/2022** SeqNo: **3175461** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.0063	0.0060	0.006000	0	104	50	150			
Iron	ND	0.020	0.02000	0	93.8	50	150			
Manganese	ND	0.0020	0.002000	0	93.8	50	150			

Sample ID: **LCS-B** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **B89290** RunNo: **89290**
Prep Date: Analysis Date: **7/5/2022** SeqNo: **3175462** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.51	0.0060	0.5000	0	102	85	115			
Iron	0.49	0.020	0.5000	0	98.3	85	115			
Manganese	0.49	0.0020	0.5000	0	98.4	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2207049**
20-Jul-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **MB-68660** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **68660** RunNo: **89421**
Prep Date: **7/10/2022** Analysis Date: **7/12/2022** SeqNo: **3184406** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LCSLL-68660** SampType: **LCSLL** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC** Batch ID: **68660** RunNo: **89421**
Prep Date: **7/10/2022** Analysis Date: **7/12/2022** SeqNo: **3184407** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060	0.006000	0	94.0	50	150			

Sample ID: **LCS-68660** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **68660** RunNo: **89421**
Prep Date: **7/10/2022** Analysis Date: **7/12/2022** SeqNo: **3184408** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.48	0.0060	0.5000	0	95.4	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2207049**
20-Jul-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R89347** RunNo: **89347**
Prep Date: Analysis Date: **7/8/2022** SeqNo: **3178063** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.8	70	130			
Toluene	20	1.0	20.00	0	99.0	70	130			
Chlorobenzene	20	1.0	20.00	0	100	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	90.3	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	95.0	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		108	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.7		10.00		97.3	70	130			

Sample ID: **100ng lcs 2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R89347** RunNo: **89347**
Prep Date: Analysis Date: **7/8/2022** SeqNo: **3178064** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.2	70	130			
Toluene	20	1.0	20.00	0	98.3	70	130			
Chlorobenzene	20	1.0	20.00	0	101	70	130			
1,1-Dichloroethene	17	1.0	20.00	0	87.2	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	93.5	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		107	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	9.8		10.00		97.9	70	130			

Sample ID: **MB** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R89347** RunNo: **89347**
Prep Date: Analysis Date: **7/8/2022** SeqNo: **3178065** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2207049**
20-Jul-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **MB**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R89347**	RunNo: **89347**	
Prep Date:	Analysis Date: **7/8/2022**	SeqNo: **3178065**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2207049**
20-Jul-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **MB** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R89347** RunNo: **89347**
Prep Date: Analysis Date: **7/8/2022** SeqNo: **3178065** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	11		10.00		110	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	11		10.00		106	70	130			
Surr: Toluene-d8	9.6		10.00		96.0	70	130			

Sample ID: **mb 2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R89347** RunNo: **89347**
Prep Date: Analysis Date: **7/8/2022** SeqNo: **3178066** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2207049**
20-Jul-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb 2**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R89347**	RunNo: **89347**	
Prep Date:	Analysis Date: **7/8/2022**	SeqNo: **3178066**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2207049**
20-Jul-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb 2**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R89347**	RunNo: **89347**			
Prep Date:	Analysis Date: **7/8/2022**	SeqNo: **3178066**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	11		10.00		107	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.7		10.00		96.5	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2207049**
20-Jul-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **lcs-68515** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **68515** RunNo: **89437**
Prep Date: **7/1/2022** Analysis Date: **7/13/2022** SeqNo: **3187425** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.84	0.10	2.000	0	42.0	20.2	48.4			
Surr: Nitrobenzene-d5	4.1		5.000		82.0	31.6	100			
Surr: 2,4,6-Tribromophenol	6.5		10.00		64.8	22	101			
Surr: 2-Fluorobiphenyl	3.7		5.000		73.2	26.7	90.1			
Surr: 4-Terphenyl-d14	6.1		5.000		123	72.3	147			

Sample ID: **mb-68515** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **68515** RunNo: **89584**
Prep Date: **7/1/2022** Analysis Date: **7/18/2022** SeqNo: **3189018** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	2.3		4.000		56.5	31.6	100			
Surr: 2,4,6-Tribromophenol	3.8		8.000		48.0	22	101			
Surr: 2-Fluorobiphenyl	2.1		4.000		51.5	26.7	90.1			
Surr: 4-Terphenyl-d14	4.1		4.000		102	72.3	147			

Sample ID: **lcsd-68515** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **68515** RunNo: **89584**
Prep Date: **7/1/2022** Analysis Date: **7/18/2022** SeqNo: **3189019** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.58	0.10	2.000	0	29.0	20.2	48.4	36.6	30.1	R
Surr: Nitrobenzene-d5	2.9		5.000		58.8	31.6	100	0	0	
Surr: 2,4,6-Tribromophenol	4.4		10.00		44.4	22	101	0	0	
Surr: 2-Fluorobiphenyl	2.3		5.000		46.4	26.7	90.1	0	0	
Surr: 4-Terphenyl-d14	4.5		5.000		90.8	72.3	147	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: EA Engineering Work Order Number: 2207049 RcptNo: 1

Received By: **Andy Freeman** 7/1/2022 11:45:00 AM

Completed By: **Isaiah Ortiz** 7/1/2022 1:19:51 PM

Reviewed By: JN 7/1/22

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 8
(<2 or >12 unless noted)
Adjusted? No
Checked by: SCL 7/1/22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	13.1	Good	Not Present			
2	14.0	Good	Not Present			

Chain-of-Custody Record

Client: Sparton Technologies Inc

EA Engineering, Science, and Technology, Inc., PBC

Mailing Address: 320 Gold Av SW #1300
Albuquerque, NM 87102

Phone #: 505-715-4154

email or Fax#: rmarley@eaest.com

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation:
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ **Rush** 72 Hours

Project Name: Sparton Coors Rd

Project #: Bills to Sparton direct

Project Manager: Bob Marley, EA Engineering

Sampler: Scott Miles

On Ice: ☒ Yes ☐ No

Sample Temperature: 13.2 -0.1 = 13.1 / 14.1 -0.1 = 14C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2207049	VOCs, 8260B	1,4-Dioxane, 8270SIM	Total Chromium	Dissolved Metals (Cr, Fe, Mn)	Air Bubbles (Y or N)
7-1-22	1042	Water	CW-1 Influent	1x 1L Amber, 3x VOA, 1x HDPE 125ml, 1x HDPE 250ml	none, HNO_3, HCl	001	X	X	X	X	
	1051	Water	CW-1 Effluent			002	X	X	X	X	
	1058	Water	CW-1 Effluent Duplicate	1x 1L Amber	none	003		X			
	0851	Water	CW-2 Influent	1x 1L Amber, 3x VOA, 1x HDPE 125ml, 1x HDPE 250ml	none, HNO_3, HCl	004	X	X	X	X	
	0901	Water	CW-2 Effluent			005	X	X	X	X	
	0908	Water	CW-2 Effluent Duplicate	1x 1L Amber	none	006		X			
		Water	Trip Blank	2x VOA	HCl	007	X				

Date	Time	Relinquished by	Received by	Date	Time
7/1/22	1145	Scott Miles	[signature]	7/1/22	1145
Date:	Time:	Relinquished by:	Received by:	Date	Time

2 coolers

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

September 02, 2022

Bob Marley
EA Engineering
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL: (505) 224-9013
FAX:

RE: Sparton OrderNo.: 2208222

Dear Bob Marley:

Hall Environmental Analysis Laboratory received 10 sample(s) on 8/3/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2208222**
Date Reported: **9/2/2022**

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208222-001 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Influent
Collection Date: 8/2/2022 2:10:00 PM
Received Date: 8/3/2022 3:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	8/23/2022 11:27:55 AM	A90525
Iron	ND	0.020		mg/L	1	8/23/2022 11:27:55 AM	A90525
Manganese	ND	0.0020		mg/L	1	8/23/2022 11:27:55 AM	A90525
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	8/10/2022 4:03:59 PM	69356
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	3.0	1.0		µg/L	1	8/10/2022 9:37:00 PM	69293
Surr: 2-Fluorobiphenyl	87.0	26.7-90.1		%Rec	1	8/10/2022 9:37:00 PM	69293
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
Toluene	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
Ethylbenzene	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
Naphthalene	ND	2.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
1-Methylnaphthalene	ND	4.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
2-Methylnaphthalene	ND	4.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
Acetone	ND	10		µg/L	1	8/5/2022 5:17:31 PM	R90072
Bromobenzene	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
Bromodichloromethane	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
Bromoform	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
Bromomethane	ND	3.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
2-Butanone	ND	10		µg/L	1	8/5/2022 5:17:31 PM	R90072
Carbon disulfide	ND	10		µg/L	1	8/5/2022 5:17:31 PM	R90072
Carbon Tetrachloride	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
Chlorobenzene	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
Chloroethane	ND	2.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
Chloroform	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
Chloromethane	ND	3.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
2-Chlorotoluene	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
4-Chlorotoluene	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
cis-1,2-DCE	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
Dibromochloromethane	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208222-001 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Influent
Collection Date: 8/2/2022 2:10:00 PM
Received Date: 8/3/2022 3:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dibromomethane	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
1,1-Dichloroethane	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
1,1-Dichloroethene	16	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
1,2-Dichloropropane	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
1,3-Dichloropropane	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
2,2-Dichloropropane	ND	2.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
1,1-Dichloropropene	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
Hexachlorobutadiene	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
2-Hexanone	ND	10		µg/L	1	8/5/2022 5:17:31 PM	R90072
Isopropylbenzene	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
4-Isopropyltoluene	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
4-Methyl-2-pentanone	ND	10		µg/L	1	8/5/2022 5:17:31 PM	R90072
Methylene Chloride	ND	3.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
n-Butylbenzene	ND	3.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
n-Propylbenzene	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
sec-Butylbenzene	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
Styrene	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
tert-Butylbenzene	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
Tetrachloroethene (PCE)	1.0	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
trans-1,2-DCE	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
Trichloroethene (TCE)	120	10		µg/L	10	8/8/2022 11:43:00 AM	R90093
Trichlorofluoromethane	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
Vinyl chloride	ND	1.0		µg/L	1	8/5/2022 5:17:31 PM	R90072
Xylenes, Total	ND	1.5		µg/L	1	8/5/2022 5:17:31 PM	R90072
Surr: 1,2-Dichloroethane-d4	89.4	70-130		%Rec	1	8/5/2022 5:17:31 PM	R90072
Surr: 4-Bromofluorobenzene	107	70-130		%Rec	1	8/5/2022 5:17:31 PM	R90072
Surr: Dibromofluoromethane	123	70-130		%Rec	1	8/5/2022 5:17:31 PM	R90072

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208222-001
Matrix: AQUEOUS
Client Sample ID: CW-1 Influent
Collection Date: 8/2/2022 2:10:00 PM
Received Date: 8/3/2022 3:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Surr: Toluene-d8	102	70-130		%Rec	1	8/5/2022 5:17:31 PM	R90072

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208222-002 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Effluent
Collection Date: 8/2/2022 2:20:00 PM
Received Date: 8/3/2022 3:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	8/23/2022 11:40:19 AM	A90525
Iron	ND	0.020		mg/L	1	8/23/2022 11:40:19 AM	A90525
Manganese	ND	0.0020		mg/L	1	8/23/2022 11:40:19 AM	A90525
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	8/10/2022 4:07:20 PM	69356
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	1.0	1.0		µg/L	1	8/10/2022 10:27:00 PM	69293
Surr: 2-Fluorobiphenyl	34.5	26.7-90.1		%Rec	1	8/10/2022 10:27:00 PM	69293
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
Toluene	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
Ethylbenzene	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
Naphthalene	ND	2.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
1-Methylnaphthalene	ND	4.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
2-Methylnaphthalene	ND	4.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
Acetone	ND	10		µg/L	1	8/5/2022 5:46:21 PM	R90072
Bromobenzene	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
Bromodichloromethane	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
Bromoform	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
Bromomethane	ND	3.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
2-Butanone	ND	10		µg/L	1	8/5/2022 5:46:21 PM	R90072
Carbon disulfide	ND	10		µg/L	1	8/5/2022 5:46:21 PM	R90072
Carbon Tetrachloride	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
Chlorobenzene	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
Chloroethane	ND	2.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
Chloroform	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
Chloromethane	ND	3.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
2-Chlorotoluene	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
4-Chlorotoluene	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
cis-1,2-DCE	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
Dibromochloromethane	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208222-002 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Effluent
Collection Date: 8/2/2022 2:20:00 PM
Received Date: 8/3/2022 3:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dibromomethane	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
1,1-Dichloroethane	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
1,1-Dichloroethene	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
1,2-Dichloropropane	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
1,3-Dichloropropane	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
2,2-Dichloropropane	ND	2.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
1,1-Dichloropropene	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
Hexachlorobutadiene	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
2-Hexanone	ND	10		µg/L	1	8/5/2022 5:46:21 PM	R90072
Isopropylbenzene	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
4-Isopropyltoluene	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
4-Methyl-2-pentanone	ND	10		µg/L	1	8/5/2022 5:46:21 PM	R90072
Methylene Chloride	ND	3.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
n-Butylbenzene	ND	3.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
n-Propylbenzene	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
sec-Butylbenzene	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
Styrene	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
tert-Butylbenzene	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
trans-1,2-DCE	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
Trichlorofluoromethane	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
Vinyl chloride	ND	1.0		µg/L	1	8/5/2022 5:46:21 PM	R90072
Xylenes, Total	ND	1.5		µg/L	1	8/5/2022 5:46:21 PM	R90072
Surr: 1,2-Dichloroethane-d4	115	70-130		%Rec	1	8/5/2022 5:46:21 PM	R90072
Surr: 4-Bromofluorobenzene	108	70-130		%Rec	1	8/5/2022 5:46:21 PM	R90072
Surr: Dibromofluoromethane	126	70-130		%Rec	1	8/5/2022 5:46:21 PM	R90072

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208222-002
Matrix: AQUEOUS
Client Sample ID: CW-1 Effluent
Collection Date: 8/2/2022 2:20:00 PM
Received Date: 8/3/2022 3:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Surr: Toluene-d8	103	70-130		%Rec	1	8/5/2022 5:46:21 PM	R90072

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208222-003
Matrix: AQUEOUS
Client Sample ID: CW-1 Effluent Duplicate
Collection Date: 8/2/2022 2:23:00 PM
Received Date: 8/3/2022 3:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst: **DAM**	
1,4-Dioxane	1.6	1.0		µg/L	1	8/10/2022 11:17:00 PM	69293
Surr: 2-Fluorobiphenyl	49.5	26.7-90.1		%Rec	1	8/10/2022 11:17:00 PM	69293

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208222-004 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Influent
Collection Date: 8/2/2022 3:17:00 PM
Received Date: 8/3/2022 3:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.046	0.0060		mg/L	1	8/23/2022 11:50:50 AM	A90525
Iron	ND	0.020		mg/L	1	8/23/2022 11:50:50 AM	A90525
Manganese	0.040	0.0020		mg/L	1	8/23/2022 11:50:50 AM	A90525
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.046	0.0060		mg/L	1	8/10/2022 4:10:41 PM	69356
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.0	1.0		µg/L	1	8/11/2022 12:06:00 AM	69293
Surr: 2-Fluorobiphenyl	59.0	26.7-90.1		%Rec	1	8/11/2022 12:06:00 AM	69293
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
Toluene	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
Ethylbenzene	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
Naphthalene	ND	2.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
1-Methylnaphthalene	ND	4.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
2-Methylnaphthalene	ND	4.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
Acetone	ND	10		µg/L	1	8/5/2022 6:15:10 PM	R90072
Bromobenzene	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
Bromodichloromethane	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
Bromoform	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
Bromomethane	ND	3.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
2-Butanone	ND	10		µg/L	1	8/5/2022 6:15:10 PM	R90072
Carbon disulfide	ND	10		µg/L	1	8/5/2022 6:15:10 PM	R90072
Carbon Tetrachloride	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
Chlorobenzene	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
Chloroethane	ND	2.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
Chloroform	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
Chloromethane	ND	3.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
2-Chlorotoluene	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
4-Chlorotoluene	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
cis-1,2-DCE	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
Dibromochloromethane	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208222-004 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Influent
Collection Date: 8/2/2022 3:17:00 PM
Received Date: 8/3/2022 3:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dibromomethane	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
1,1-Dichloroethane	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
1,1-Dichloroethene	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
1,2-Dichloropropane	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
1,3-Dichloropropane	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
2,2-Dichloropropane	ND	2.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
1,1-Dichloropropene	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
Hexachlorobutadiene	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
2-Hexanone	ND	10		µg/L	1	8/5/2022 6:15:10 PM	R90072
Isopropylbenzene	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
4-Isopropyltoluene	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
4-Methyl-2-pentanone	ND	10		µg/L	1	8/5/2022 6:15:10 PM	R90072
Methylene Chloride	ND	3.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
n-Butylbenzene	ND	3.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
n-Propylbenzene	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
sec-Butylbenzene	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
Styrene	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
tert-Butylbenzene	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
trans-1,2-DCE	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
Trichloroethene (TCE)	4.7	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
Trichlorofluoromethane	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
Vinyl chloride	ND	1.0		µg/L	1	8/5/2022 6:15:10 PM	R90072
Xylenes, Total	ND	1.5		µg/L	1	8/5/2022 6:15:10 PM	R90072
Surr: 1,2-Dichloroethane-d4	114	70-130		%Rec	1	8/5/2022 6:15:10 PM	R90072
Surr: 4-Bromofluorobenzene	107	70-130		%Rec	1	8/5/2022 6:15:10 PM	R90072
Surr: Dibromofluoromethane	121	70-130		%Rec	1	8/5/2022 6:15:10 PM	R90072

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208222-004
Matrix: AQUEOUS
Client Sample ID: CW-2 Influent
Collection Date: 8/2/2022 3:17:00 PM
Received Date: 8/3/2022 3:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Surr: Toluene-d8	99.4	70-130		%Rec	1	8/5/2022 6:15:10 PM	R90072

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208222-005 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent
Collection Date: 8/2/2022 3:31:00 PM
Received Date: 8/3/2022 3:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.045	0.0060		mg/L	1	8/23/2022 11:54:54 AM	A90525
Iron	ND	0.020		mg/L	1	8/23/2022 11:54:54 AM	A90525
Manganese	0.036	0.0020		mg/L	1	8/23/2022 11:54:54 AM	A90525
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.045	0.0060		mg/L	1	8/10/2022 4:19:08 PM	69356
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.9	1.0		µg/L	1	8/11/2022 12:53:00 AM	69293
Surr: 2-Fluorobiphenyl	89.0	26.7-90.1		%Rec	1	8/11/2022 12:53:00 AM	69293
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
Toluene	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
Ethylbenzene	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
Naphthalene	ND	2.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
1-Methylnaphthalene	ND	4.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
2-Methylnaphthalene	ND	4.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
Acetone	ND	10		µg/L	1	8/5/2022 6:44:01 PM	R90072
Bromobenzene	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
Bromodichloromethane	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
Bromoform	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
Bromomethane	ND	3.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
2-Butanone	ND	10		µg/L	1	8/5/2022 6:44:01 PM	R90072
Carbon disulfide	ND	10		µg/L	1	8/5/2022 6:44:01 PM	R90072
Carbon Tetrachloride	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
Chlorobenzene	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
Chloroethane	ND	2.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
Chloroform	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
Chloromethane	ND	3.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
2-Chlorotoluene	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
4-Chlorotoluene	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
cis-1,2-DCE	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
Dibromochloromethane	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208222-005 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent
Collection Date: 8/2/2022 3:31:00 PM
Received Date: 8/3/2022 3:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dibromomethane	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
1,1-Dichloroethane	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
1,1-Dichloroethene	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
1,2-Dichloropropane	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
1,3-Dichloropropane	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
2,2-Dichloropropane	ND	2.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
1,1-Dichloropropene	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
Hexachlorobutadiene	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
2-Hexanone	ND	10		µg/L	1	8/5/2022 6:44:01 PM	R90072
Isopropylbenzene	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
4-Isopropyltoluene	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
4-Methyl-2-pentanone	ND	10		µg/L	1	8/5/2022 6:44:01 PM	R90072
Methylene Chloride	ND	3.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
n-Butylbenzene	ND	3.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
n-Propylbenzene	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
sec-Butylbenzene	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
Styrene	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
tert-Butylbenzene	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
trans-1,2-DCE	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
Trichlorofluoromethane	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
Vinyl chloride	ND	1.0		µg/L	1	8/5/2022 6:44:01 PM	R90072
Xylenes, Total	ND	1.5		µg/L	1	8/5/2022 6:44:01 PM	R90072
Surr: 1,2-Dichloroethane-d4	112	70-130		%Rec	1	8/5/2022 6:44:01 PM	R90072
Surr: 4-Bromofluorobenzene	108	70-130		%Rec	1	8/5/2022 6:44:01 PM	R90072
Surr: Dibromofluoromethane	124	70-130		%Rec	1	8/5/2022 6:44:01 PM	R90072

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208222-005
Matrix: AQUEOUS
Client Sample ID: CW-2 Effluent
Collection Date: 8/2/2022 3:31:00 PM
Received Date: 8/3/2022 3:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Surr: Toluene-d8	99.2	70-130		%Rec	1	8/5/2022 6:44:01 PM	R90072

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208222-006
Matrix: AQUEOUS
Client Sample ID: CW-2 Effluent Duplicate
Collection Date: 8/2/2022 3:36:00 PM
Received Date: 8/3/2022 3:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst: **DAM**	
1,4-Dioxane	2.9	1.0		µg/L	1	8/11/2022 1:43:00 AM	69293
Surr: 2-Fluorobiphenyl	82.0	26.7-90.1		%Rec	1	8/11/2022 1:43:00 AM	69293

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208222-007 **Matrix:** AQUEOUS

Client Sample ID: MW-57D
Collection Date: 8/3/2022 10:39:00 AM
Received Date: 8/3/2022 3:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	8/10/2022 4:28:51 PM	69356
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	8/11/2022 2:32:00 AM	69293
Surr: 2-Fluorobiphenyl	88.0	26.7-90.1		%Rec	1	8/11/2022 2:32:00 AM	69293
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
Toluene	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
Ethylbenzene	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
Naphthalene	ND	2.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
1-Methylnaphthalene	ND	4.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
2-Methylnaphthalene	ND	4.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
Acetone	ND	10		µg/L	1	8/5/2022 7:12:47 PM	R90072
Bromobenzene	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
Bromodichloromethane	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
Bromoform	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
Bromomethane	ND	3.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
2-Butanone	ND	10		µg/L	1	8/5/2022 7:12:47 PM	R90072
Carbon disulfide	ND	10		µg/L	1	8/5/2022 7:12:47 PM	R90072
Carbon Tetrachloride	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
Chlorobenzene	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
Chloroethane	ND	2.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
Chloroform	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
Chloromethane	ND	3.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
2-Chlorotoluene	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
4-Chlorotoluene	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
cis-1,2-DCE	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
Dibromochloromethane	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
Dibromomethane	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208222-007 **Matrix:** AQUEOUS

Client Sample ID: MW-57D
Collection Date: 8/3/2022 10:39:00 AM
Received Date: 8/3/2022 3:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
1,1-Dichloroethane	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
1,1-Dichloroethene	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
1,2-Dichloropropane	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
1,3-Dichloropropane	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
2,2-Dichloropropane	ND	2.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
1,1-Dichloropropene	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
Hexachlorobutadiene	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
2-Hexanone	ND	10		µg/L	1	8/5/2022 7:12:47 PM	R90072
Isopropylbenzene	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
4-Isopropyltoluene	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
4-Methyl-2-pentanone	ND	10		µg/L	1	8/5/2022 7:12:47 PM	R90072
Methylene Chloride	ND	3.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
n-Butylbenzene	ND	3.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
n-Propylbenzene	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
sec-Butylbenzene	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
Styrene	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
tert-Butylbenzene	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
trans-1,2-DCE	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
Trichlorofluoromethane	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
Vinyl chloride	ND	1.0		µg/L	1	8/5/2022 7:12:47 PM	R90072
Xylenes, Total	ND	1.5		µg/L	1	8/5/2022 7:12:47 PM	R90072
Surr: 1,2-Dichloroethane-d4	114	70-130		%Rec	1	8/5/2022 7:12:47 PM	R90072
Surr: 4-Bromofluorobenzene	109	70-130		%Rec	1	8/5/2022 7:12:47 PM	R90072
Surr: Dibromofluoromethane	121	70-130		%Rec	1	8/5/2022 7:12:47 PM	R90072
Surr: Toluene-d8	103	70-130		%Rec	1	8/5/2022 7:12:47 PM	R90072

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208222-008 **Matrix:** AQUEOUS

Client Sample ID: MW-66
Collection Date: 8/3/2022 12:31:00 PM
Received Date: 8/3/2022 3:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	8/10/2022 4:32:11 PM	69356
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	8/11/2022 3:17:00 AM	69293
Surr: 2-Fluorobiphenyl	84.0	26.7-90.1		%Rec	1	8/11/2022 3:17:00 AM	69293
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
Toluene	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
Ethylbenzene	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
Naphthalene	ND	2.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
1-Methylnaphthalene	ND	4.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
2-Methylnaphthalene	ND	4.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
Acetone	ND	10		µg/L	1	8/5/2022 7:41:34 PM	R90072
Bromobenzene	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
Bromodichloromethane	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
Bromoform	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
Bromomethane	ND	3.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
2-Butanone	ND	10		µg/L	1	8/5/2022 7:41:34 PM	R90072
Carbon disulfide	ND	10		µg/L	1	8/5/2022 7:41:34 PM	R90072
Carbon Tetrachloride	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
Chlorobenzene	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
Chloroethane	ND	2.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
Chloroform	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
Chloromethane	ND	3.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
2-Chlorotoluene	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
4-Chlorotoluene	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
cis-1,2-DCE	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
Dibromochloromethane	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
Dibromomethane	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208222-008 **Matrix:** AQUEOUS

Client Sample ID: MW-66
Collection Date: 8/3/2022 12:31:00 PM
Received Date: 8/3/2022 3:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
1,1-Dichloroethane	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
1,1-Dichloroethene	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
1,2-Dichloropropane	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
1,3-Dichloropropane	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
2,2-Dichloropropane	ND	2.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
1,1-Dichloropropene	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
Hexachlorobutadiene	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
2-Hexanone	ND	10		µg/L	1	8/5/2022 7:41:34 PM	R90072
Isopropylbenzene	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
4-Isopropyltoluene	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
4-Methyl-2-pentanone	ND	10		µg/L	1	8/5/2022 7:41:34 PM	R90072
Methylene Chloride	ND	3.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
n-Butylbenzene	ND	3.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
n-Propylbenzene	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
sec-Butylbenzene	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
Styrene	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
tert-Butylbenzene	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
trans-1,2-DCE	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
Trichlorofluoromethane	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
Vinyl chloride	ND	1.0		µg/L	1	8/5/2022 7:41:34 PM	R90072
Xylenes, Total	ND	1.5		µg/L	1	8/5/2022 7:41:34 PM	R90072
Surr: 1,2-Dichloroethane-d4	111	70-130		%Rec	1	8/5/2022 7:41:34 PM	R90072
Surr: 4-Bromofluorobenzene	108	70-130		%Rec	1	8/5/2022 7:41:34 PM	R90072
Surr: Dibromofluoromethane	123	70-130		%Rec	1	8/5/2022 7:41:34 PM	R90072
Surr: Toluene-d8	104	70-130		%Rec	1	8/5/2022 7:41:34 PM	R90072

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208222-009 **Matrix:** AQUEOUS

Client Sample ID: MW-62R
Collection Date: 8/3/2022 2:01:00 PM
Received Date: 8/3/2022 3:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	8/10/2022 4:40:39 PM	69356
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	8/11/2022 4:01:00 AM	69293
Surr: 2-Fluorobiphenyl	61.0	26.7-90.1		%Rec	1	8/11/2022 4:01:00 AM	69293
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
Toluene	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
Ethylbenzene	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
Naphthalene	ND	2.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
1-Methylnaphthalene	ND	4.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
2-Methylnaphthalene	ND	4.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
Acetone	ND	10		µg/L	1	8/5/2022 8:10:16 PM	R90072
Bromobenzene	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
Bromodichloromethane	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
Bromoform	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
Bromomethane	ND	3.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
2-Butanone	ND	10		µg/L	1	8/5/2022 8:10:16 PM	R90072
Carbon disulfide	ND	10		µg/L	1	8/5/2022 8:10:16 PM	R90072
Carbon Tetrachloride	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
Chlorobenzene	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
Chloroethane	ND	2.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
Chloroform	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
Chloromethane	ND	3.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
2-Chlorotoluene	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
4-Chlorotoluene	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
cis-1,2-DCE	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
Dibromochloromethane	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
Dibromomethane	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208222-009 **Matrix:** AQUEOUS

Client Sample ID: MW-62R
Collection Date: 8/3/2022 2:01:00 PM
Received Date: 8/3/2022 3:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
1,1-Dichloroethane	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
1,1-Dichloroethene	4.7	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
1,2-Dichloropropane	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
1,3-Dichloropropane	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
2,2-Dichloropropane	ND	2.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
1,1-Dichloropropene	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
Hexachlorobutadiene	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
2-Hexanone	ND	10		µg/L	1	8/5/2022 8:10:16 PM	R90072
Isopropylbenzene	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
4-Isopropyltoluene	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
4-Methyl-2-pentanone	ND	10		µg/L	1	8/5/2022 8:10:16 PM	R90072
Methylene Chloride	ND	3.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
n-Butylbenzene	ND	3.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
n-Propylbenzene	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
sec-Butylbenzene	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
Styrene	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
tert-Butylbenzene	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
trans-1,2-DCE	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
Trichloroethene (TCE)	4.3	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
Trichlorofluoromethane	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
Vinyl chloride	ND	1.0		µg/L	1	8/5/2022 8:10:16 PM	R90072
Xylenes, Total	ND	1.5		µg/L	1	8/5/2022 8:10:16 PM	R90072
Surr: 1,2-Dichloroethane-d4	114	70-130		%Rec	1	8/5/2022 8:10:16 PM	R90072
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	8/5/2022 8:10:16 PM	R90072
Surr: Dibromofluoromethane	124	70-130		%Rec	1	8/5/2022 8:10:16 PM	R90072
Surr: Toluene-d8	103	70-130		%Rec	1	8/5/2022 8:10:16 PM	R90072

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton
Collection Date:
Lab ID: 2208222-010
Matrix: TRIP BLANK
Received Date: 8/3/2022 3:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
Toluene	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
Ethylbenzene	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
Naphthalene	ND	2.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
1-Methylnaphthalene	ND	4.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
2-Methylnaphthalene	ND	4.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
Acetone	ND	10		µg/L	1	8/5/2022 8:39:04 PM	R90072
Bromobenzene	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
Bromodichloromethane	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
Bromoform	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
Bromomethane	ND	3.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
2-Butanone	ND	10		µg/L	1	8/5/2022 8:39:04 PM	R90072
Carbon disulfide	ND	10		µg/L	1	8/5/2022 8:39:04 PM	R90072
Carbon Tetrachloride	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
Chlorobenzene	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
Chloroethane	ND	2.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
Chloroform	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
Chloromethane	ND	3.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
2-Chlorotoluene	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
4-Chlorotoluene	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
cis-1,2-DCE	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
Dibromochloromethane	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
Dibromomethane	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
1,1-Dichloroethane	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
1,1-Dichloroethene	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
1,2-Dichloropropane	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
1,3-Dichloropropane	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
2,2-Dichloropropane	ND	2.0		µg/L	1	8/5/2022 8:39:04 PM	R90072

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton
Collection Date:
Lab ID: 2208222-010
Matrix: TRIP BLANK
Received Date: 8/3/2022 3:14:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,1-Dichloropropene	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
Hexachlorobutadiene	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
2-Hexanone	ND	10		µg/L	1	8/5/2022 8:39:04 PM	R90072
Isopropylbenzene	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
4-Isopropyltoluene	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
4-Methyl-2-pentanone	ND	10		µg/L	1	8/5/2022 8:39:04 PM	R90072
Methylene Chloride	ND	3.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
n-Butylbenzene	ND	3.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
n-Propylbenzene	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
sec-Butylbenzene	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
Styrene	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
tert-Butylbenzene	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
trans-1,2-DCE	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
Trichlorofluoromethane	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
Vinyl chloride	ND	1.0		µg/L	1	8/5/2022 8:39:04 PM	R90072
Xylenes, Total	ND	1.5		µg/L	1	8/5/2022 8:39:04 PM	R90072
Surr: 1,2-Dichloroethane-d4	110	70-130		%Rec	1	8/5/2022 8:39:04 PM	R90072
Surr: 4-Bromofluorobenzene	108	70-130		%Rec	1	8/5/2022 8:39:04 PM	R90072
Surr: Dibromofluoromethane	121	70-130		%Rec	1	8/5/2022 8:39:04 PM	R90072
Surr: Toluene-d8	107	70-130		%Rec	1	8/5/2022 8:39:04 PM	R90072

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2208222**
02-Sep-22

Client: EA Engineering
Project: Sparton

Sample ID: **MB-A** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **A90525** RunNo: **90525**
Prep Date: Analysis Date: **8/23/2022** SeqNo: **3232956** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID: **LCSLL-A** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **A90525** RunNo: **90525**
Prep Date: Analysis Date: **8/23/2022** SeqNo: **3232957** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060	0.006000	0	85.1	50	150			
Iron	ND	0.020	0.02000	0	99.8	50	150			
Manganese	ND	0.0020	0.002000	0	97.4	50	150			

Sample ID: **LCS-A** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **A90525** RunNo: **90525**
Prep Date: Analysis Date: **8/23/2022** SeqNo: **3232958** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.50	0.0060	0.5000	0	100	85	115			
Iron	0.50	0.020	0.5000	0	100	85	115			
Manganese	0.49	0.0020	0.5000	0	97.3	85	115			

Sample ID: **2208222-001DMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **CW-1 Influent** Batch ID: **A90525** RunNo: **90525**
Prep Date: Analysis Date: **8/23/2022** SeqNo: **3232997** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.50	0.0060	0.5000	0.004268	98.2	70	130			
Iron	0.49	0.020	0.5000	0	97.8	70	130			
Manganese	0.48	0.0020	0.5000	0	96.3	70	130			

Sample ID: **2208222-001DMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **CW-1 Influent** Batch ID: **A90525** RunNo: **90525**
Prep Date: Analysis Date: **8/23/2022** SeqNo: **3232998** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.51	0.0060	0.5000	0.004268	101	70	130	3.09	20	
Iron	0.50	0.020	0.5000	0	100	70	130	2.14	20	
Manganese	0.50	0.0020	0.5000	0	99.2	70	130	3.00	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2208222**
02-Sep-22

Client: EA Engineering
Project: Sparton

Sample ID: **MB-69356** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **69356** RunNo: **90172**
Prep Date: **8/9/2022** Analysis Date: **8/10/2022** SeqNo: **3215311** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LCSLL-69356** SampType: **LCSLL** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC** Batch ID: **69356** RunNo: **90172**
Prep Date: **8/9/2022** Analysis Date: **8/10/2022** SeqNo: **3215312** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.0067	0.0060	0.006000	0	111	50	150			

Sample ID: **LCS-69356** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **69356** RunNo: **90172**
Prep Date: **8/9/2022** Analysis Date: **8/10/2022** SeqNo: **3215313** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.47	0.0060	0.5000	0	94.6	85	115			

Sample ID: **2208222-005CMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **CW-2 Effluent** Batch ID: **69356** RunNo: **90172**
Prep Date: **8/9/2022** Analysis Date: **8/10/2022** SeqNo: **3215322** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.55	0.0060	0.5000	0.04527	101	70	130			

Sample ID: **2208222-005CMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **CW-2 Effluent** Batch ID: **69356** RunNo: **90172**
Prep Date: **8/9/2022** Analysis Date: **8/10/2022** SeqNo: **3215323** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.55	0.0060	0.5000	0.04527	101	70	130	0.0983	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2208222**
02-Sep-22

Client: EA Engineering
Project: Sparton

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R90072** RunNo: **90072**
Prep Date: Analysis Date: **8/5/2022** SeqNo: **3210595** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	70	130			
Toluene	19	1.0	20.00	0	97.2	70	130			
Chlorobenzene	20	1.0	20.00	0	99.9	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	94.6	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	95.1	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		104	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		106	70	130			
Surr: Dibromofluoromethane	12		10.00		118	70	130			
Surr: Toluene-d8	11		10.00		105	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R90072** RunNo: **90072**
Prep Date: Analysis Date: **8/5/2022** SeqNo: **3210622** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2208222**
02-Sep-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R90072**	RunNo: **90072**	
Prep Date:	Analysis Date: **8/5/2022**	SeqNo: **3210622**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2208222**
02-Sep-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R90072** RunNo: **90072**
Prep Date: Analysis Date: **8/5/2022** SeqNo: **3210622** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	11		10.00		113	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		109	70	130			
Surr: Dibromofluoromethane	12		10.00		118	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R90093** RunNo: **90093**
Prep Date: Analysis Date: **8/8/2022** SeqNo: **3211920** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	18	1.0	20.00	0	91.7	70	130			
Surr: 1,2-Dichloroethane-d4	9.8		10.00		98.1	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	12		10.00		115	70	130			
Surr: Toluene-d8	11		10.00		105	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R90093** RunNo: **90093**
Prep Date: Analysis Date: **8/8/2022** SeqNo: **3211943** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	ND	1.0								
Surr: 1,2-Dichloroethane-d4	11		10.00		108	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		112	70	130			
Surr: Dibromofluoromethane	12		10.00		120	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2208222**
02-Sep-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb-69293** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **69293** RunNo: **90175**
Prep Date: **8/5/2022** Analysis Date: **8/10/2022** SeqNo: **3215472** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	2.5		4.000		62.0	31.6	100			
Surr: 2,4,6-Tribromophenol	5.0		8.000		62.0	22	101			
Surr: 2-Fluorobiphenyl	2.3		4.000		57.0	26.7	90.1			
Surr: 4-Terphenyl-d14	4.2		4.000		106	72.3	147			

Sample ID: **lcs-69293** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **69293** RunNo: **90175**
Prep Date: **8/5/2022** Analysis Date: **8/10/2022** SeqNo: **3215474** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.86	0.10	2.000	0	43.0	20.2	48.4			
Surr: Nitrobenzene-d5	4.1		5.000		82.4	31.6	100			
Surr: 2,4,6-Tribromophenol	7.1		10.00		70.6	22	101			
Surr: 2-Fluorobiphenyl	3.3		5.000		66.0	26.7	90.1			
Surr: 4-Terphenyl-d14	5.2		5.000		103	72.3	147			

Sample ID: **lcsd-69293** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **69293** RunNo: **90175**
Prep Date: **8/5/2022** Analysis Date: **8/10/2022** SeqNo: **3215477** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.90	0.10	2.000	0	45.0	20.2	48.4	4.55	30.1	
Surr: Nitrobenzene-d5	4.3		5.000		86.4	31.6	100	0	0	
Surr: 2,4,6-Tribromophenol	7.2		10.00		72.4	22	101	0	0	
Surr: 2-Fluorobiphenyl	3.8		5.000		76.4	26.7	90.1	0	0	
Surr: 4-Terphenyl-d14	5.6		5.000		112	72.3	147	0	0	

Qualifiers:

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ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
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HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **EA Engineering** Work Order Number: **2208222** RcptNo: 1

Received By: **Sean Livingston** **8/3/2022 3:14:00 PM** S Livingston

Completed By: **Tracy Casarrubias** **8/3/2022 3:33:18 PM**

Reviewed By: JR 8/4/22

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 11 (<2 or >12 unless noted)
Adjusted? NO
Checked by: CMe 8/3/22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.8	Good	Not Present			
2	5.0	Good	Not Present			

Chain-of-Custody Record

Client: Sparton Technologies Inc

EA Engineering, Science, and Technology, Inc., PBC

Mailing Address: 320 Gold Av SW #1300
Albuquerque, NM 87102

Phone #: 505-715-4154

email or Fax#: rmarley@eaest.com

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation:
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush 72 Hours

Project Name: Sparton

Project #: Bills to Sparton direct

Project Manager: Bob Marley, EA Engineering

Sampler: Scott Miles

On Ice: ☑ Yes ☐ No

Sample Temperature: 3.8 ±0=3.8°C 5.0±0=5.0°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2208222	VOCs, 8260B	1,4-Dioxane, 8270SIM	Total Chromium	Dissolved Metals (Cr, Fe, Mn)	Air Bubbles (Y or N)
8-2-22	1410	Aq	CW-1 Influent	3x VOA, 1x1L Amber 1x125ml HDPE, 1x250ml HDPE	HCl, none HDPE HNO3	1	X	X	X	X	
	1420		CW-1 Effluent			2	X	X	X	X	
	1423		CW-1 Effluent Duplicate	1x1L Amber	none	3		X			
	1517		CW-2 Influent	3x VOA 1x1L Amber 1x125ml HDPE 1x250 HDPE	HCl, none HNO3	4	X	X	X	X	
	1531		CW-2 Effluent			5	X	X	X	X	
	1536		CW-2 Effluent Duplicate	1x1L Amber	none	6		X			
8-3-22	1039		MW-57D	3x VOA, 1x1L Amber 1x250ml HDPE	HCl, none HNO3	7	X	X	X		
	1231		MW-66			8	X	X	X		
	1401		MW-62R			9	X	X	X		
			Trip Blank	2x VOAs	HCl	10	X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
8-3-22	1512			8/3/22	15:14
Date:	Time:	Relinquished by:	Received by:	Date	Time

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

September 06, 2022

Bob Marley
EA Engineering
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL:
FAX:

RE: Sparton OrderNo.: 2208404

Dear Bob Marley:

Hall Environmental Analysis Laboratory received 7 sample(s) on 8/5/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2208404**
Date Reported: **9/6/2022**

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208404-001 **Matrix:** AQUEOUS

Client Sample ID: MW-68
Collection Date: 8/4/2022 1:31:00 PM
Received Date: 8/5/2022 3:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	8/15/2022 3:22:21 PM	69471
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	8/17/2022 1:32:00 PM	69416
Surr: 2-Fluorobiphenyl	61.5	26.7-90.1		%Rec	1	8/17/2022 1:32:00 PM	69416
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
Toluene	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
Ethylbenzene	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
Naphthalene	ND	2.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
1-Methylnaphthalene	ND	4.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
2-Methylnaphthalene	ND	4.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
Acetone	ND	10		µg/L	1	8/10/2022 4:19:02 PM	R90169
Bromobenzene	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
Bromodichloromethane	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
Bromoform	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
Bromomethane	ND	3.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
2-Butanone	ND	10		µg/L	1	8/10/2022 4:19:02 PM	R90169
Carbon disulfide	ND	10		µg/L	1	8/10/2022 4:19:02 PM	R90169
Carbon Tetrachloride	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
Chlorobenzene	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
Chloroethane	ND	2.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
Chloroform	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
Chloromethane	ND	3.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
2-Chlorotoluene	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
4-Chlorotoluene	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
cis-1,2-DCE	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
Dibromochloromethane	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
Dibromomethane	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208404-001 **Matrix:** AQUEOUS

Client Sample ID: MW-68
Collection Date: 8/4/2022 1:31:00 PM
Received Date: 8/5/2022 3:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
1,1-Dichloroethane	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
1,1-Dichloroethene	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
1,2-Dichloropropane	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
1,3-Dichloropropane	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
2,2-Dichloropropane	ND	2.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
1,1-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
Hexachlorobutadiene	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
2-Hexanone	ND	10		µg/L	1	8/10/2022 4:19:02 PM	R90169
Isopropylbenzene	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
4-Isopropyltoluene	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
4-Methyl-2-pentanone	ND	10		µg/L	1	8/10/2022 4:19:02 PM	R90169
Methylene Chloride	ND	3.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
n-Butylbenzene	ND	3.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
n-Propylbenzene	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
sec-Butylbenzene	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
Styrene	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
tert-Butylbenzene	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
trans-1,2-DCE	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
Trichlorofluoromethane	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
Vinyl chloride	ND	1.0		µg/L	1	8/10/2022 4:19:02 PM	R90169
Xylenes, Total	ND	1.5		µg/L	1	8/10/2022 4:19:02 PM	R90169
Surr: 1,2-Dichloroethane-d4	110	70-130		%Rec	1	8/10/2022 4:19:02 PM	R90169
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	1	8/10/2022 4:19:02 PM	R90169
Surr: Dibromofluoromethane	118	70-130		%Rec	1	8/10/2022 4:19:02 PM	R90169
Surr: Toluene-d8	106	70-130		%Rec	1	8/10/2022 4:19:02 PM	R90169

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208404-002 **Matrix:** AQUEOUS

Client Sample ID: MW-69
Collection Date: 8/4/2022 2:51:00 PM
Received Date: 8/5/2022 3:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.012	0.0060		mg/L	1	8/15/2022 3:25:41 PM	69471
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.7	1.0		µg/L	1	8/17/2022 2:16:00 PM	69416
Surr: 2-Fluorobiphenyl	29.0	26.7-90.1		%Rec	1	8/17/2022 2:16:00 PM	69416
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
Toluene	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
Ethylbenzene	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
Naphthalene	ND	2.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
1-Methylnaphthalene	ND	4.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
2-Methylnaphthalene	ND	4.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
Acetone	ND	10		µg/L	1	8/10/2022 5:44:59 PM	R90169
Bromobenzene	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
Bromodichloromethane	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
Bromoform	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
Bromomethane	ND	3.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
2-Butanone	ND	10		µg/L	1	8/10/2022 5:44:59 PM	R90169
Carbon disulfide	ND	10		µg/L	1	8/10/2022 5:44:59 PM	R90169
Carbon Tetrachloride	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
Chlorobenzene	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
Chloroethane	ND	2.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
Chloroform	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
Chloromethane	ND	3.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
2-Chlorotoluene	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
4-Chlorotoluene	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
cis-1,2-DCE	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
Dibromochloromethane	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
Dibromomethane	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208404-002 **Matrix:** AQUEOUS

Client Sample ID: MW-69
Collection Date: 8/4/2022 2:51:00 PM
Received Date: 8/5/2022 3:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
1,1-Dichloroethane	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
1,1-Dichloroethene	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
1,2-Dichloropropane	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
1,3-Dichloropropane	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
2,2-Dichloropropane	ND	2.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
1,1-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
Hexachlorobutadiene	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
2-Hexanone	ND	10		µg/L	1	8/10/2022 5:44:59 PM	R90169
Isopropylbenzene	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
4-Isopropyltoluene	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
4-Methyl-2-pentanone	ND	10		µg/L	1	8/10/2022 5:44:59 PM	R90169
Methylene Chloride	ND	3.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
n-Butylbenzene	ND	3.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
n-Propylbenzene	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
sec-Butylbenzene	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
Styrene	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
tert-Butylbenzene	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
trans-1,2-DCE	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
Trichlorofluoromethane	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
Vinyl chloride	ND	1.0		µg/L	1	8/10/2022 5:44:59 PM	R90169
Xylenes, Total	ND	1.5		µg/L	1	8/10/2022 5:44:59 PM	R90169
Surr: 1,2-Dichloroethane-d4	111	70-130		%Rec	1	8/10/2022 5:44:59 PM	R90169
Surr: 4-Bromofluorobenzene	109	70-130		%Rec	1	8/10/2022 5:44:59 PM	R90169
Surr: Dibromofluoromethane	119	70-130		%Rec	1	8/10/2022 5:44:59 PM	R90169
Surr: Toluene-d8	103	70-130		%Rec	1	8/10/2022 5:44:59 PM	R90169

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208404-003 **Matrix:** AQUEOUS

Client Sample ID: MW-69 Dup
Collection Date: 8/4/2022 2:51:00 PM
Received Date: 8/5/2022 3:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.011	0.0060		mg/L	1	8/15/2022 3:28:57 PM	69471
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	4.1	1.0		µg/L	1	8/17/2022 3:01:00 PM	69416
Surr: 2-Fluorobiphenyl	45.0	26.7-90.1		%Rec	1	8/17/2022 3:01:00 PM	69416
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
Toluene	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
Ethylbenzene	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
Naphthalene	ND	2.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
1-Methylnaphthalene	ND	4.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
2-Methylnaphthalene	ND	4.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
Acetone	ND	10		µg/L	1	8/10/2022 6:13:42 PM	R90169
Bromobenzene	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
Bromodichloromethane	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
Bromoform	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
Bromomethane	ND	3.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
2-Butanone	ND	10		µg/L	1	8/10/2022 6:13:42 PM	R90169
Carbon disulfide	ND	10		µg/L	1	8/10/2022 6:13:42 PM	R90169
Carbon Tetrachloride	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
Chlorobenzene	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
Chloroethane	ND	2.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
Chloroform	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
Chloromethane	ND	3.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
2-Chlorotoluene	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
4-Chlorotoluene	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
cis-1,2-DCE	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
Dibromochloromethane	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
Dibromomethane	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208404-003 **Matrix:** AQUEOUS

Client Sample ID: MW-69 Dup
Collection Date: 8/4/2022 2:51:00 PM
Received Date: 8/5/2022 3:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
1,1-Dichloroethane	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
1,1-Dichloroethene	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
1,2-Dichloropropane	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
1,3-Dichloropropane	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
2,2-Dichloropropane	ND	2.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
1,1-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
Hexachlorobutadiene	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
2-Hexanone	ND	10		µg/L	1	8/10/2022 6:13:42 PM	R90169
Isopropylbenzene	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
4-Isopropyltoluene	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
4-Methyl-2-pentanone	ND	10		µg/L	1	8/10/2022 6:13:42 PM	R90169
Methylene Chloride	ND	3.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
n-Butylbenzene	ND	3.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
n-Propylbenzene	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
sec-Butylbenzene	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
Styrene	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
tert-Butylbenzene	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
trans-1,2-DCE	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
Trichlorofluoromethane	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
Vinyl chloride	ND	1.0		µg/L	1	8/10/2022 6:13:42 PM	R90169
Xylenes, Total	ND	1.5		µg/L	1	8/10/2022 6:13:42 PM	R90169
Surr: 1,2-Dichloroethane-d4	112	70-130		%Rec	1	8/10/2022 6:13:42 PM	R90169
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	1	8/10/2022 6:13:42 PM	R90169
Surr: Dibromofluoromethane	124	70-130		%Rec	1	8/10/2022 6:13:42 PM	R90169
Surr: Toluene-d8	102	70-130		%Rec	1	8/10/2022 6:13:42 PM	R90169

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208404-004 **Matrix:** AQUEOUS

Client Sample ID: MW-74
Collection Date: 8/5/2022 11:03:00 AM
Received Date: 8/5/2022 3:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.0060	0.0060		mg/L	1	8/26/2022 3:40:08 PM	B90627
Iron	ND	0.020		mg/L	1	8/26/2022 3:40:08 PM	B90627
Manganese	ND	0.0020		mg/L	1	8/26/2022 3:40:08 PM	B90627
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	1.3	1.0		µg/L	1	8/17/2022 3:45:00 PM	69416
Surr: 2-Fluorobiphenyl	42.5	26.7-90.1		%Rec	1	8/17/2022 3:45:00 PM	69416
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
Toluene	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
Ethylbenzene	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
Naphthalene	ND	2.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
1-Methylnaphthalene	ND	4.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
2-Methylnaphthalene	ND	4.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
Acetone	ND	10		µg/L	1	8/10/2022 6:42:20 PM	R90169
Bromobenzene	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
Bromodichloromethane	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
Bromoform	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
Bromomethane	ND	3.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
2-Butanone	ND	10		µg/L	1	8/10/2022 6:42:20 PM	R90169
Carbon disulfide	ND	10		µg/L	1	8/10/2022 6:42:20 PM	R90169
Carbon Tetrachloride	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
Chlorobenzene	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
Chloroethane	ND	2.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
Chloroform	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
Chloromethane	ND	3.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
2-Chlorotoluene	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
4-Chlorotoluene	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
cis-1,2-DCE	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
Dibromochloromethane	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
Dibromomethane	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208404-004 **Matrix:** AQUEOUS

Client Sample ID: MW-74
Collection Date: 8/5/2022 11:03:00 AM
Received Date: 8/5/2022 3:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
1,1-Dichloroethane	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
1,1-Dichloroethene	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
1,2-Dichloropropane	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
1,3-Dichloropropane	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
2,2-Dichloropropane	ND	2.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
1,1-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
Hexachlorobutadiene	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
2-Hexanone	ND	10		µg/L	1	8/10/2022 6:42:20 PM	R90169
Isopropylbenzene	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
4-Isopropyltoluene	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
4-Methyl-2-pentanone	ND	10		µg/L	1	8/10/2022 6:42:20 PM	R90169
Methylene Chloride	ND	3.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
n-Butylbenzene	ND	3.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
n-Propylbenzene	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
sec-Butylbenzene	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
Styrene	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
tert-Butylbenzene	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
trans-1,2-DCE	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
Trichlorofluoromethane	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
Vinyl chloride	ND	1.0		µg/L	1	8/10/2022 6:42:20 PM	R90169
Xylenes, Total	ND	1.5		µg/L	1	8/10/2022 6:42:20 PM	R90169
Surr: 1,2-Dichloroethane-d4	111	70-130		%Rec	1	8/10/2022 6:42:20 PM	R90169
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	8/10/2022 6:42:20 PM	R90169
Surr: Dibromofluoromethane	123	70-130		%Rec	1	8/10/2022 6:42:20 PM	R90169
Surr: Toluene-d8	102	70-130		%Rec	1	8/10/2022 6:42:20 PM	R90169

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208404-005 **Matrix:** AQUEOUS

Client Sample ID: MW-76
Collection Date: 8/5/2022 12:45:00 PM
Received Date: 8/5/2022 3:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	8/26/2022 3:42:16 PM	B90627
Iron	ND	0.020		mg/L	1	8/26/2022 3:42:16 PM	B90627
Manganese	ND	0.0020		mg/L	1	8/26/2022 3:42:16 PM	B90627
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	1.5	1.0		µg/L	1	8/17/2022 4:30:00 PM	69416
Surr: 2-Fluorobiphenyl	44.0	26.7-90.1		%Rec	1	8/17/2022 4:30:00 PM	69416
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
Toluene	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
Ethylbenzene	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
Naphthalene	ND	2.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
1-Methylnaphthalene	ND	4.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
2-Methylnaphthalene	ND	4.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
Acetone	ND	10		µg/L	1	8/10/2022 7:10:59 PM	R90169
Bromobenzene	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
Bromodichloromethane	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
Bromoform	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
Bromomethane	ND	3.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
2-Butanone	ND	10		µg/L	1	8/10/2022 7:10:59 PM	R90169
Carbon disulfide	ND	10		µg/L	1	8/10/2022 7:10:59 PM	R90169
Carbon Tetrachloride	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
Chlorobenzene	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
Chloroethane	ND	2.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
Chloroform	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
Chloromethane	ND	3.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
2-Chlorotoluene	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
4-Chlorotoluene	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
cis-1,2-DCE	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
Dibromochloromethane	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
Dibromomethane	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208404-005 **Matrix:** AQUEOUS

Client Sample ID: MW-76
Collection Date: 8/5/2022 12:45:00 PM
Received Date: 8/5/2022 3:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
1,1-Dichloroethane	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
1,1-Dichloroethene	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
1,2-Dichloropropane	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
1,3-Dichloropropane	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
2,2-Dichloropropane	ND	2.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
1,1-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
Hexachlorobutadiene	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
2-Hexanone	ND	10		µg/L	1	8/10/2022 7:10:59 PM	R90169
Isopropylbenzene	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
4-Isopropyltoluene	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
4-Methyl-2-pentanone	ND	10		µg/L	1	8/10/2022 7:10:59 PM	R90169
Methylene Chloride	ND	3.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
n-Butylbenzene	ND	3.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
n-Propylbenzene	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
sec-Butylbenzene	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
Styrene	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
tert-Butylbenzene	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
trans-1,2-DCE	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
Trichlorofluoromethane	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
Vinyl chloride	ND	1.0		µg/L	1	8/10/2022 7:10:59 PM	R90169
Xylenes, Total	ND	1.5		µg/L	1	8/10/2022 7:10:59 PM	R90169
Surr: 1,2-Dichloroethane-d4	109	70-130		%Rec	1	8/10/2022 7:10:59 PM	R90169
Surr: 4-Bromofluorobenzene	109	70-130		%Rec	1	8/10/2022 7:10:59 PM	R90169
Surr: Dibromofluoromethane	122	70-130		%Rec	1	8/10/2022 7:10:59 PM	R90169
Surr: Toluene-d8	103	70-130		%Rec	1	8/10/2022 7:10:59 PM	R90169

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208404-006 **Matrix:** AQUEOUS

Client Sample ID: MW-75
Collection Date: 8/5/2022 2:21:00 PM
Received Date: 8/5/2022 3:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	8/26/2022 3:44:21 PM	B90627
Iron	ND	0.020		mg/L	1	8/26/2022 3:44:21 PM	B90627
Manganese	ND	0.0020		mg/L	1	8/26/2022 3:44:21 PM	B90627
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.1	1.0		µg/L	1	8/17/2022 5:14:00 PM	69416
Surr: 2-Fluorobiphenyl	65.0	26.7-90.1		%Rec	1	8/17/2022 5:14:00 PM	69416
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
Toluene	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
Ethylbenzene	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
Naphthalene	ND	2.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
1-Methylnaphthalene	ND	4.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
2-Methylnaphthalene	ND	4.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
Acetone	ND	10		µg/L	1	8/10/2022 7:39:38 PM	R90169
Bromobenzene	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
Bromodichloromethane	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
Bromoform	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
Bromomethane	ND	3.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
2-Butanone	ND	10		µg/L	1	8/10/2022 7:39:38 PM	R90169
Carbon disulfide	ND	10		µg/L	1	8/10/2022 7:39:38 PM	R90169
Carbon Tetrachloride	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
Chlorobenzene	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
Chloroethane	ND	2.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
Chloroform	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
Chloromethane	ND	3.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
2-Chlorotoluene	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
4-Chlorotoluene	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
cis-1,2-DCE	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
Dibromochloromethane	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
Dibromomethane	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208404-006 **Matrix:** AQUEOUS

Client Sample ID: MW-75
Collection Date: 8/5/2022 2:21:00 PM
Received Date: 8/5/2022 3:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
1,1-Dichloroethane	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
1,1-Dichloroethene	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
1,2-Dichloropropane	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
1,3-Dichloropropane	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
2,2-Dichloropropane	ND	2.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
1,1-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
Hexachlorobutadiene	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
2-Hexanone	ND	10		µg/L	1	8/10/2022 7:39:38 PM	R90169
Isopropylbenzene	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
4-Isopropyltoluene	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
4-Methyl-2-pentanone	ND	10		µg/L	1	8/10/2022 7:39:38 PM	R90169
Methylene Chloride	ND	3.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
n-Butylbenzene	ND	3.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
n-Propylbenzene	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
sec-Butylbenzene	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
Styrene	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
tert-Butylbenzene	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
trans-1,2-DCE	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
Trichlorofluoromethane	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
Vinyl chloride	ND	1.0		µg/L	1	8/10/2022 7:39:38 PM	R90169
Xylenes, Total	ND	1.5		µg/L	1	8/10/2022 7:39:38 PM	R90169
Surr: 1,2-Dichloroethane-d4	111	70-130		%Rec	1	8/10/2022 7:39:38 PM	R90169
Surr: 4-Bromofluorobenzene	109	70-130		%Rec	1	8/10/2022 7:39:38 PM	R90169
Surr: Dibromofluoromethane	125	70-130		%Rec	1	8/10/2022 7:39:38 PM	R90169
Surr: Toluene-d8	104	70-130		%Rec	1	8/10/2022 7:39:38 PM	R90169

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton
Collection Date:
Lab ID: 2208404-007
Matrix: TRIP BLANK
Received Date: 8/5/2022 3:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
Toluene	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
Ethylbenzene	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
Naphthalene	ND	2.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
1-Methylnaphthalene	ND	4.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
2-Methylnaphthalene	ND	4.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
Acetone	ND	10		µg/L	1	8/10/2022 8:08:18 PM	R90169
Bromobenzene	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
Bromodichloromethane	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
Bromoform	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
Bromomethane	ND	3.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
2-Butanone	ND	10		µg/L	1	8/10/2022 8:08:18 PM	R90169
Carbon disulfide	ND	10		µg/L	1	8/10/2022 8:08:18 PM	R90169
Carbon Tetrachloride	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
Chlorobenzene	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
Chloroethane	ND	2.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
Chloroform	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
Chloromethane	ND	3.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
2-Chlorotoluene	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
4-Chlorotoluene	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
cis-1,2-DCE	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
Dibromochloromethane	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
Dibromomethane	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
1,1-Dichloroethane	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
1,1-Dichloroethene	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
1,2-Dichloropropane	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
1,3-Dichloropropane	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
2,2-Dichloropropane	ND	2.0		µg/L	1	8/10/2022 8:08:18 PM	R90169

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
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S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton
Collection Date:
Lab ID: 2208404-007
Matrix: TRIP BLANK
Received Date: 8/5/2022 3:20:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,1-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
Hexachlorobutadiene	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
2-Hexanone	ND	10		µg/L	1	8/10/2022 8:08:18 PM	R90169
Isopropylbenzene	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
4-Isopropyltoluene	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
4-Methyl-2-pentanone	ND	10		µg/L	1	8/10/2022 8:08:18 PM	R90169
Methylene Chloride	ND	3.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
n-Butylbenzene	ND	3.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
n-Propylbenzene	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
sec-Butylbenzene	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
Styrene	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
tert-Butylbenzene	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
trans-1,2-DCE	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
Trichlorofluoromethane	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
Vinyl chloride	ND	1.0		µg/L	1	8/10/2022 8:08:18 PM	R90169
Xylenes, Total	ND	1.5		µg/L	1	8/10/2022 8:08:18 PM	R90169
Surr: 1,2-Dichloroethane-d4	109	70-130		%Rec	1	8/10/2022 8:08:18 PM	R90169
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	1	8/10/2022 8:08:18 PM	R90169
Surr: Dibromofluoromethane	123	70-130		%Rec	1	8/10/2022 8:08:18 PM	R90169
Surr: Toluene-d8	103	70-130		%Rec	1	8/10/2022 8:08:18 PM	R90169

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2208404**
06-Sep-22

Client: EA Engineering
Project: Sparton

Sample ID: **MB-B** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **B90627** RunNo: **90627**
Prep Date: Analysis Date: **8/26/2022** SeqNo: **3238164** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID: **LLLCS-B** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **B90627** RunNo: **90627**
Prep Date: Analysis Date: **8/26/2022** SeqNo: **3238165** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060	0.006000	0	99.8	50	150			
Iron	0.020	0.020	0.02000	0	102	50	150			
Manganese	0.0021	0.0020	0.002000	0	107	50	150			

Sample ID: **LCS-B** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **B90627** RunNo: **90627**
Prep Date: Analysis Date: **8/26/2022** SeqNo: **3238166** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.52	0.0060	0.5000	0	103	85	115			
Iron	0.52	0.020	0.5000	0	105	85	115			
Manganese	0.51	0.0020	0.5000	0	103	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2208404**
06-Sep-22

Client: EA Engineering
Project: Sparton

Sample ID: **MB-69471** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **69471** RunNo: **90323**
Prep Date: **8/12/2022** Analysis Date: **8/15/2022** SeqNo: **3222014** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LCS-69471** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **69471** RunNo: **90323**
Prep Date: **8/12/2022** Analysis Date: **8/15/2022** SeqNo: **3222016** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.51	0.0060	0.5000	0	101	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2208404**
06-Sep-22

Client: EA Engineering
Project: Sparton

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R90169** RunNo: **90169**
Prep Date: Analysis Date: **8/10/2022** SeqNo: **3214999** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	91.4	70	130			
Toluene	18	1.0	20.00	0	91.6	70	130			
Chlorobenzene	19	1.0	20.00	0	94.2	70	130			
1,1-Dichloroethene	16	1.0	20.00	0	82.1	70	130			
Trichloroethene (TCE)	17	1.0	20.00	0	86.0	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	11		10.00		114	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Sample ID: **2208404-001ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MW-68** Batch ID: **R90169** RunNo: **90169**
Prep Date: Analysis Date: **8/10/2022** SeqNo: **3215011** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0.2574	95.1	70	130			
Toluene	18	1.0	20.00	0	88.3	70	130			
Chlorobenzene	19	1.0	20.00	0	93.4	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	87.6	70	130			
Trichloroethene (TCE)	17	1.0	20.00	0	86.8	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		102	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		105	70	130			
Surr: Dibromofluoromethane	12		10.00		120	70	130			
Surr: Toluene-d8	9.8		10.00		97.5	70	130			

Sample ID: **2208404-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MW-68** Batch ID: **R90169** RunNo: **90169**
Prep Date: Analysis Date: **8/10/2022** SeqNo: **3215012** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0.2574	90.1	70	130	5.38	20	
Toluene	18	1.0	20.00	0	88.4	70	130	0.104	20	
Chlorobenzene	18	1.0	20.00	0	88.4	70	130	5.52	20	
1,1-Dichloroethene	16	1.0	20.00	0	80.5	70	130	8.43	20	
Trichloroethene (TCE)	16	1.0	20.00	0	82.3	70	130	5.24	20	
Surr: 1,2-Dichloroethane-d4	10		10.00		103	70	130	0	0	
Surr: 4-Bromofluorobenzene	11		10.00		107	70	130	0	0	
Surr: Dibromofluoromethane	12		10.00		120	70	130	0	0	
Surr: Toluene-d8	10		10.00		104	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2208404**
06-Sep-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R90169**	RunNo: **90169**	
Prep Date:	Analysis Date: **8/10/2022**	SeqNo: **3215025**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2208404**
06-Sep-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R90169**	RunNo: **90169**	
Prep Date:	Analysis Date: **8/10/2022**	SeqNo: **3215025**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	11		10.00		106	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		112	70	130			
Surr: Dibromofluoromethane	12		10.00		119	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2208404**
06-Sep-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb-69416** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **69416** RunNo: **90362**
Prep Date: **8/11/2022** Analysis Date: **8/17/2022** SeqNo: **3223753** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	3.0		4.000		76.0	31.6	100			
Surr: 2,4,6-Tribromophenol	6.0		8.000		74.8	22	101			
Surr: 2-Fluorobiphenyl	2.8		4.000		71.0	26.7	90.1			
Surr: 4-Terphenyl-d14	4.1		4.000		103	72.3	147			

Sample ID: **lcs-69416** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **69416** RunNo: **90362**
Prep Date: **8/11/2022** Analysis Date: **8/17/2022** SeqNo: **3223754** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.80	0.10	2.000	0	40.0	20.2	48.4			
Surr: Nitrobenzene-d5	4.0		5.000		79.6	31.6	100			
Surr: 2,4,6-Tribromophenol	7.1		10.00		71.0	22	101			
Surr: 2-Fluorobiphenyl	3.4		5.000		67.2	26.7	90.1			
Surr: 4-Terphenyl-d14	5.0		5.000		99.6	72.3	147			

Sample ID: **lcsd-69416** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **69416** RunNo: **90362**
Prep Date: **8/11/2022** Analysis Date: **8/17/2022** SeqNo: **3223755** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.56	0.10	2.000	0	28.0	20.2	48.4	35.3	30.1	R
Surr: Nitrobenzene-d5	3.0		5.000		60.0	31.6	100	0	0	
Surr: 2,4,6-Tribromophenol	5.3		10.00		52.8	22	101	0	0	
Surr: 2-Fluorobiphenyl	2.5		5.000		50.0	26.7	90.1	0	0	
Surr: 4-Terphenyl-d14	4.8		5.000		95.2	72.3	147	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: EA Engineering Work Order Number: 2208404 RcptNo: 1

Received By: **Sean Livingston** 8/5/2022 3:20:00 PM S Livingston
Completed By: **Sean Livingston** 8/5/2022 3:23:27 PM S Livingston
Reviewed By: TMC 8/5/22

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 6
(<2 or >12 unless noted)
Adjusted? NO
Checked by: JM 8/5/22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.8	Good				
2	2.4	Good				

Chain-of-Custody Record

Client: Sparton Technologies Inc

EA Engineering, Science, and Technology, Inc., PBC

Mailing Address: 320 Gold Av SW #1300
Albuquerque, NM 87102

Phone #: 505-715-4154

email or Fax#: rmarley@eaest.com

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation:
☐ NELAP ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush 72 Hours

Project Name: Sparton

Project #: Bills to Sparton direct

Project Manager: Bob Marley, EA Engineering

Sampler: Scott Miles

On Ice: ☒ Yes ☐ No

Sample Temperature: 3.9 ±0=3.8°C
2.4 ±0=2.4°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2208404	VOCs, 8260B	1,4-Dioxane, 8270SIM	Total Chromium	Dissolved Metals (Cr, Fe, Mn)										Air Bubbles (Y or N)
8-4-22	1331	Aq	MW-68	3x VOA, 1x1L Amber 1x250ml HDPE	HCl, none HNO3	001	X	X	X											
	~~1451~~ 1451		MW-69			002	X	X	X											
	1451		MW-69 duplicate			003	X	X	X											
8-5-22	1103		MW-74	3x VOA 1x1L Amber 1x125ml HDPE		004	X	X		X										
	1245		MW-76			005	X	X		X										
	1421		MW-75			006	X	X		X										
			Trip Blank	2x VOA	HCl	007	X													

Date:	Time:	Relinquished by:	Received by:	Date	Time
8-5-22	1518	[signature]	[signature]	8/5/22	15:20
Date:	Time:	Relinquished by:	Received by:	Date	Time

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

September 06, 2022

Bob Marley
EA Engineering
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL:
FAX:

RE: Sparton OrderNo.: 2208557

Dear Bob Marley:

Hall Environmental Analysis Laboratory received 6 sample(s) on 8/9/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2208557**
Date Reported: **9/6/2022**

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208557-001 **Matrix:** AQUEOUS

Client Sample ID: MW-80
Collection Date: 8/8/2022 12:51:00 PM
Received Date: 8/9/2022 3:24:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.015	0.0060		mg/L	1	8/19/2022 12:41:17 PM	69471
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.7	1.0		µg/L	1	8/17/2022 6:00:00 PM	69416
Surr: 2-Fluorobiphenyl	28.0	26.7-90.1		%Rec	1	8/17/2022 6:00:00 PM	69416
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
Toluene	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
Ethylbenzene	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
Naphthalene	ND	2.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
1-Methylnaphthalene	ND	4.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
2-Methylnaphthalene	ND	4.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
Acetone	ND	10		µg/L	1	8/11/2022 9:26:00 PM	R90200
Bromobenzene	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
Bromodichloromethane	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
Bromoform	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
Bromomethane	ND	3.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
2-Butanone	ND	10		µg/L	1	8/11/2022 9:26:00 PM	R90200
Carbon disulfide	ND	10		µg/L	1	8/11/2022 9:26:00 PM	R90200
Carbon Tetrachloride	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
Chlorobenzene	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
Chloroethane	ND	2.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
Chloroform	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
Chloromethane	ND	3.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
2-Chlorotoluene	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
4-Chlorotoluene	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
cis-1,2-DCE	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
Dibromochloromethane	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
Dibromomethane	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208557-001 **Matrix:** AQUEOUS

Client Sample ID: MW-80
Collection Date: 8/8/2022 12:51:00 PM
Received Date: 8/9/2022 3:24:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
1,1-Dichloroethane	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
1,1-Dichloroethene	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
1,2-Dichloropropane	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
1,3-Dichloropropane	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
2,2-Dichloropropane	ND	2.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
1,1-Dichloropropene	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
Hexachlorobutadiene	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
2-Hexanone	ND	10		µg/L	1	8/11/2022 9:26:00 PM	R90200
Isopropylbenzene	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
4-Isopropyltoluene	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
4-Methyl-2-pentanone	ND	10		µg/L	1	8/11/2022 9:26:00 PM	R90200
Methylene Chloride	ND	3.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
n-Butylbenzene	ND	3.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
n-Propylbenzene	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
sec-Butylbenzene	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
Styrene	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
tert-Butylbenzene	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
trans-1,2-DCE	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
Trichlorofluoromethane	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
Vinyl chloride	ND	1.0		µg/L	1	8/11/2022 9:26:00 PM	R90200
Xylenes, Total	ND	1.5		µg/L	1	8/11/2022 9:26:00 PM	R90200
Surr: 1,2-Dichloroethane-d4	118	70-130		%Rec	1	8/11/2022 9:26:00 PM	R90200
Surr: 4-Bromofluorobenzene	96.1	70-130		%Rec	1	8/11/2022 9:26:00 PM	R90200
Surr: Dibromofluoromethane	112	70-130		%Rec	1	8/11/2022 9:26:00 PM	R90200
Surr: Toluene-d8	91.7	70-130		%Rec	1	8/11/2022 9:26:00 PM	R90200

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208557-002 **Matrix:** AQUEOUS

Client Sample ID: MW-80 Duplicate
Collection Date: 8/8/2022 12:51:00 PM
Received Date: 8/9/2022 3:24:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.014	0.0060		mg/L	1	8/19/2022 12:42:58 PM	69471
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	3.0	1.0		µg/L	1	8/17/2022 6:51:00 PM	69416
Surr: 2-Fluorobiphenyl	36.0	26.7-90.1		%Rec	1	8/17/2022 6:51:00 PM	69416
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
Toluene	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
Ethylbenzene	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
Naphthalene	ND	2.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
1-Methylnaphthalene	ND	4.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
2-Methylnaphthalene	ND	4.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
Acetone	ND	10		µg/L	1	8/11/2022 10:35:00 PM	R90200
Bromobenzene	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
Bromodichloromethane	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
Bromoform	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
Bromomethane	ND	3.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
2-Butanone	ND	10		µg/L	1	8/11/2022 10:35:00 PM	R90200
Carbon disulfide	ND	10		µg/L	1	8/11/2022 10:35:00 PM	R90200
Carbon Tetrachloride	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
Chlorobenzene	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
Chloroethane	ND	2.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
Chloroform	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
Chloromethane	ND	3.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
2-Chlorotoluene	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
4-Chlorotoluene	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
cis-1,2-DCE	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
Dibromochloromethane	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
Dibromomethane	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208557-002 **Matrix:** AQUEOUS

Client Sample ID: MW-80 Duplicate
Collection Date: 8/8/2022 12:51:00 PM
Received Date: 8/9/2022 3:24:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
1,1-Dichloroethane	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
1,1-Dichloroethene	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
1,2-Dichloropropane	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
1,3-Dichloropropane	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
2,2-Dichloropropane	ND	2.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
1,1-Dichloropropene	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
Hexachlorobutadiene	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
2-Hexanone	ND	10		µg/L	1	8/11/2022 10:35:00 PM	R90200
Isopropylbenzene	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
4-Isopropyltoluene	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
4-Methyl-2-pentanone	ND	10		µg/L	1	8/11/2022 10:35:00 PM	R90200
Methylene Chloride	ND	3.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
n-Butylbenzene	ND	3.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
n-Propylbenzene	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
sec-Butylbenzene	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
Styrene	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
tert-Butylbenzene	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
trans-1,2-DCE	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
Trichlorofluoromethane	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
Vinyl chloride	ND	1.0		µg/L	1	8/11/2022 10:35:00 PM	R90200
Xylenes, Total	ND	1.5		µg/L	1	8/11/2022 10:35:00 PM	R90200
Surr: 1,2-Dichloroethane-d4	116	70-130		%Rec	1	8/11/2022 10:35:00 PM	R90200
Surr: 4-Bromofluorobenzene	97.0	70-130		%Rec	1	8/11/2022 10:35:00 PM	R90200
Surr: Dibromofluoromethane	113	70-130		%Rec	1	8/11/2022 10:35:00 PM	R90200
Surr: Toluene-d8	92.0	70-130		%Rec	1	8/11/2022 10:35:00 PM	R90200

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208557-003 **Matrix:** AQUEOUS

Client Sample ID: MW-77
Collection Date: 8/9/2022 9:55:00 AM
Received Date: 8/9/2022 3:24:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.034	0.0060		mg/L	1	8/26/2022 3:46:27 PM	B90627
Iron	ND	0.020		mg/L	1	8/26/2022 3:46:27 PM	B90627
Manganese	ND	0.0020		mg/L	1	8/26/2022 3:46:27 PM	B90627
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	1.6	1.0		µg/L	1	8/17/2022 7:44:00 PM	69416
Surr: 2-Fluorobiphenyl	52.0	26.7-90.1		%Rec	1	8/17/2022 7:44:00 PM	69416
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
Toluene	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
Ethylbenzene	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
Naphthalene	ND	2.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
1-Methylnaphthalene	ND	4.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
2-Methylnaphthalene	ND	4.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
Acetone	ND	10		µg/L	1	8/11/2022 10:58:00 PM	R90200
Bromobenzene	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
Bromodichloromethane	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
Bromoform	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
Bromomethane	ND	3.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
2-Butanone	ND	10		µg/L	1	8/11/2022 10:58:00 PM	R90200
Carbon disulfide	ND	10		µg/L	1	8/11/2022 10:58:00 PM	R90200
Carbon Tetrachloride	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
Chlorobenzene	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
Chloroethane	ND	2.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
Chloroform	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
Chloromethane	ND	3.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
2-Chlorotoluene	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
4-Chlorotoluene	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
cis-1,2-DCE	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
Dibromochloromethane	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
Dibromomethane	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208557-003 **Matrix:** AQUEOUS

Client Sample ID: MW-77
Collection Date: 8/9/2022 9:55:00 AM
Received Date: 8/9/2022 3:24:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
1,1-Dichloroethane	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
1,1-Dichloroethene	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
1,2-Dichloropropane	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
1,3-Dichloropropane	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
2,2-Dichloropropane	ND	2.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
1,1-Dichloropropene	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
Hexachlorobutadiene	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
2-Hexanone	ND	10		µg/L	1	8/11/2022 10:58:00 PM	R90200
Isopropylbenzene	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
4-Isopropyltoluene	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
4-Methyl-2-pentanone	ND	10		µg/L	1	8/11/2022 10:58:00 PM	R90200
Methylene Chloride	ND	3.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
n-Butylbenzene	ND	3.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
n-Propylbenzene	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
sec-Butylbenzene	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
Styrene	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
tert-Butylbenzene	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
trans-1,2-DCE	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
Trichloroethene (TCE)	2.1	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
Trichlorofluoromethane	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
Vinyl chloride	ND	1.0		µg/L	1	8/11/2022 10:58:00 PM	R90200
Xylenes, Total	ND	1.5		µg/L	1	8/11/2022 10:58:00 PM	R90200
Surr: 1,2-Dichloroethane-d4	116	70-130		%Rec	1	8/11/2022 10:58:00 PM	R90200
Surr: 4-Bromofluorobenzene	93.5	70-130		%Rec	1	8/11/2022 10:58:00 PM	R90200
Surr: Dibromofluoromethane	112	70-130		%Rec	1	8/11/2022 10:58:00 PM	R90200
Surr: Toluene-d8	90.2	70-130		%Rec	1	8/11/2022 10:58:00 PM	R90200

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208557-004 **Matrix:** AQUEOUS

Client Sample ID: MW-71R
Collection Date: 8/9/2022 12:31:00 PM
Received Date: 8/9/2022 3:24:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	8/18/2022 3:32:27 PM	69471
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	8/17/2022 8:36:00 PM	69416
Surr: 2-Fluorobiphenyl	43.5	26.7-90.1		%Rec	1	8/17/2022 8:36:00 PM	69416
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
Toluene	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
Ethylbenzene	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
Naphthalene	ND	2.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
1-Methylnaphthalene	ND	4.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
2-Methylnaphthalene	ND	4.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
Acetone	ND	10		µg/L	1	8/11/2022 11:22:00 PM	R90200
Bromobenzene	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
Bromodichloromethane	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
Bromoform	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
Bromomethane	ND	3.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
2-Butanone	ND	10		µg/L	1	8/11/2022 11:22:00 PM	R90200
Carbon disulfide	ND	10		µg/L	1	8/11/2022 11:22:00 PM	R90200
Carbon Tetrachloride	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
Chlorobenzene	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
Chloroethane	ND	2.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
Chloroform	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
Chloromethane	ND	3.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
2-Chlorotoluene	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
4-Chlorotoluene	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
cis-1,2-DCE	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
Dibromochloromethane	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
Dibromomethane	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208557-004 **Matrix:** AQUEOUS

Client Sample ID: MW-71R
Collection Date: 8/9/2022 12:31:00 PM
Received Date: 8/9/2022 3:24:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
1,1-Dichloroethane	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
1,1-Dichloroethene	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
1,2-Dichloropropane	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
1,3-Dichloropropane	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
2,2-Dichloropropane	ND	2.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
1,1-Dichloropropene	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
Hexachlorobutadiene	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
2-Hexanone	ND	10		µg/L	1	8/11/2022 11:22:00 PM	R90200
Isopropylbenzene	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
4-Isopropyltoluene	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
4-Methyl-2-pentanone	ND	10		µg/L	1	8/11/2022 11:22:00 PM	R90200
Methylene Chloride	ND	3.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
n-Butylbenzene	ND	3.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
n-Propylbenzene	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
sec-Butylbenzene	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
Styrene	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
tert-Butylbenzene	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
trans-1,2-DCE	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
Trichloroethene (TCE)	10	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
Trichlorofluoromethane	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
Vinyl chloride	ND	1.0		µg/L	1	8/11/2022 11:22:00 PM	R90200
Xylenes, Total	ND	1.5		µg/L	1	8/11/2022 11:22:00 PM	R90200
Surr: 1,2-Dichloroethane-d4	117	70-130		%Rec	1	8/11/2022 11:22:00 PM	R90200
Surr: 4-Bromofluorobenzene	95.1	70-130		%Rec	1	8/11/2022 11:22:00 PM	R90200
Surr: Dibromofluoromethane	114	70-130		%Rec	1	8/11/2022 11:22:00 PM	R90200
Surr: Toluene-d8	90.6	70-130		%Rec	1	8/11/2022 11:22:00 PM	R90200

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208557-005 **Matrix:** AQUEOUS

Client Sample ID: MW-17
Collection Date: 8/9/2022 1:52:00 PM
Received Date: 8/9/2022 3:24:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.039	0.0060		mg/L	1	8/26/2022 3:48:33 PM	B90627
Iron	ND	0.020		mg/L	1	8/26/2022 3:48:33 PM	B90627
Manganese	ND	0.0020		mg/L	1	8/26/2022 3:48:33 PM	B90627
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.052	0.0060		mg/L	1	8/18/2022 3:35:50 PM	69471
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	1.4	1.0		µg/L	1	8/17/2022 9:28:00 PM	69416
Surr: 2-Fluorobiphenyl	41.5	26.7-90.1		%Rec	1	8/17/2022 9:28:00 PM	69416
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
Toluene	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
Ethylbenzene	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
Naphthalene	ND	2.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
1-Methylnaphthalene	ND	4.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
2-Methylnaphthalene	ND	4.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
Acetone	ND	10		µg/L	1	8/11/2022 11:45:00 PM	R90200
Bromobenzene	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
Bromodichloromethane	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
Bromoform	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
Bromomethane	ND	3.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
2-Butanone	ND	10		µg/L	1	8/11/2022 11:45:00 PM	R90200
Carbon disulfide	ND	10		µg/L	1	8/11/2022 11:45:00 PM	R90200
Carbon Tetrachloride	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
Chlorobenzene	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
Chloroethane	ND	2.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
Chloroform	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
Chloromethane	ND	3.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
2-Chlorotoluene	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
4-Chlorotoluene	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
cis-1,2-DCE	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
Dibromochloromethane	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208557-005 **Matrix:** AQUEOUS

Client Sample ID: MW-17
Collection Date: 8/9/2022 1:52:00 PM
Received Date: 8/9/2022 3:24:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dibromomethane	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
1,1-Dichloroethane	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
1,1-Dichloroethene	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
1,2-Dichloropropane	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
1,3-Dichloropropane	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
2,2-Dichloropropane	ND	2.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
1,1-Dichloropropene	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
Hexachlorobutadiene	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
2-Hexanone	ND	10		µg/L	1	8/11/2022 11:45:00 PM	R90200
Isopropylbenzene	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
4-Isopropyltoluene	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
4-Methyl-2-pentanone	ND	10		µg/L	1	8/11/2022 11:45:00 PM	R90200
Methylene Chloride	ND	3.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
n-Butylbenzene	ND	3.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
n-Propylbenzene	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
sec-Butylbenzene	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
Styrene	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
tert-Butylbenzene	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
trans-1,2-DCE	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
Trichlorofluoromethane	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
Vinyl chloride	ND	1.0		µg/L	1	8/11/2022 11:45:00 PM	R90200
Xylenes, Total	ND	1.5		µg/L	1	8/11/2022 11:45:00 PM	R90200
Surr: 1,2-Dichloroethane-d4	115	70-130		%Rec	1	8/11/2022 11:45:00 PM	R90200
Surr: 4-Bromofluorobenzene	95.1	70-130		%Rec	1	8/11/2022 11:45:00 PM	R90200
Surr: Dibromofluoromethane	112	70-130		%Rec	1	8/11/2022 11:45:00 PM	R90200

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208557-005
Matrix: AQUEOUS
Client Sample ID: MW-17
Collection Date: 8/9/2022 1:52:00 PM
Received Date: 8/9/2022 3:24:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Surr: Toluene-d8	90.3	70-130		%Rec	1	8/11/2022 11:45:00 PM	R90200

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton
Collection Date:
Lab ID: 2208557-006
Matrix: TRIP BLANK
Received Date: 8/9/2022 3:24:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
Toluene	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
Ethylbenzene	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
Naphthalene	ND	2.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
1-Methylnaphthalene	ND	4.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
2-Methylnaphthalene	ND	4.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
Acetone	ND	10		µg/L	1	8/12/2022 12:08:00 AM	R90200
Bromobenzene	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
Bromodichloromethane	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
Bromoform	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
Bromomethane	ND	3.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
2-Butanone	ND	10		µg/L	1	8/12/2022 12:08:00 AM	R90200
Carbon disulfide	ND	10		µg/L	1	8/12/2022 12:08:00 AM	R90200
Carbon Tetrachloride	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
Chlorobenzene	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
Chloroethane	ND	2.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
Chloroform	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
Chloromethane	ND	3.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
2-Chlorotoluene	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
4-Chlorotoluene	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
cis-1,2-DCE	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
Dibromochloromethane	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
Dibromomethane	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
1,1-Dichloroethane	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
1,1-Dichloroethene	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
1,2-Dichloropropane	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
1,3-Dichloropropane	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
2,2-Dichloropropane	ND	2.0		µg/L	1	8/12/2022 12:08:00 AM	R90200

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton
Collection Date:
Lab ID: 2208557-006
Matrix: TRIP BLANK
Received Date: 8/9/2022 3:24:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,1-Dichloropropene	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
Hexachlorobutadiene	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
2-Hexanone	ND	10		µg/L	1	8/12/2022 12:08:00 AM	R90200
Isopropylbenzene	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
4-Isopropyltoluene	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
4-Methyl-2-pentanone	ND	10		µg/L	1	8/12/2022 12:08:00 AM	R90200
Methylene Chloride	ND	3.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
n-Butylbenzene	ND	3.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
n-Propylbenzene	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
sec-Butylbenzene	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
Styrene	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
tert-Butylbenzene	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
trans-1,2-DCE	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
Trichlorofluoromethane	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
Vinyl chloride	ND	1.0		µg/L	1	8/12/2022 12:08:00 AM	R90200
Xylenes, Total	ND	1.5		µg/L	1	8/12/2022 12:08:00 AM	R90200
Surr: 1,2-Dichloroethane-d4	117	70-130		%Rec	1	8/12/2022 12:08:00 AM	R90200
Surr: 4-Bromofluorobenzene	95.1	70-130		%Rec	1	8/12/2022 12:08:00 AM	R90200
Surr: Dibromofluoromethane	114	70-130		%Rec	1	8/12/2022 12:08:00 AM	R90200
Surr: Toluene-d8	90.4	70-130		%Rec	1	8/12/2022 12:08:00 AM	R90200

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2208557**
06-Sep-22

Client: EA Engineering
Project: Sparton

Sample ID: **MB-B** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **B90627** RunNo: **90627**
Prep Date: Analysis Date: **8/26/2022** SeqNo: **3238164** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID: **LLLCS-B** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **B90627** RunNo: **90627**
Prep Date: Analysis Date: **8/26/2022** SeqNo: **3238165** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060	0.006000	0	99.8	50	150			
Iron	0.020	0.020	0.02000	0	102	50	150			
Manganese	0.0021	0.0020	0.002000	0	107	50	150			

Sample ID: **LCS-B** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **B90627** RunNo: **90627**
Prep Date: Analysis Date: **8/26/2022** SeqNo: **3238166** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.52	0.0060	0.5000	0	103	85	115			
Iron	0.52	0.020	0.5000	0	105	85	115			
Manganese	0.51	0.0020	0.5000	0	103	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2208557**
06-Sep-22

Client: EA Engineering
Project: Sparton

Sample ID: **MB-69471** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **69471** RunNo: **90323**
Prep Date: **8/12/2022** Analysis Date: **8/15/2022** SeqNo: **3222014** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LCS-69471** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **69471** RunNo: **90323**
Prep Date: **8/12/2022** Analysis Date: **8/15/2022** SeqNo: **3222016** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.51	0.0060	0.5000	0	101	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2208557**
06-Sep-22

Client: EA Engineering
Project: Sparton

Sample ID: **100NG LCS4** SampType: **LCS4** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R90200** RunNo: **90200**
Prep Date: Analysis Date: **8/11/2022** SeqNo: **3217387** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	108	70	130			
Toluene	19	1.0	20.00	0	96.5	70	130			
Ethylbenzene	19	1.0	20.00	0	92.6	70	130			
Methyl tert-butyl ether (MTBE)	40	1.0	40.00	0	100	70	130			
1,2,4-Trimethylbenzene	19	1.0	20.00	0	95.7	70	130			
1,3,5-Trimethylbenzene	19	1.0	20.00	0	94.0	70	130			
1,2-Dichloroethane (EDC)	23	1.0	20.00	0	114	70	130			
1,2-Dibromoethane (EDB)	19	1.0	20.00	0	94.9	70	130			
Naphthalene	17	2.0	20.00	0	83.5	70	130			
1-Methylnaphthalene	16	4.0	20.00	0	82.1	60.3	126			
2-Methylnaphthalene	14	4.0	20.00	0	71.6	59	127			
Acetone	49	10	40.00	0	121	53.2	126			
Bromobenzene	19	1.0	20.00	0	93.6	70	130			
Bromodichloromethane	22	1.0	20.00	0	109	70	130			
Bromoform	19	1.0	20.00	0	93.7	70	130			
Bromomethane	12	3.0	20.00	0	61.0	15	213			
2-Butanone	44	10	40.00	0	110	59.4	136			
Carbon disulfide	37	10	40.00	0	91.5	70	130			
Carbon Tetrachloride	21	1.0	20.00	0	106	70	130			
Chlorobenzene	19	1.0	20.00	0	96.6	70	130			
Chloroethane	22	2.0	20.00	0	109	69.5	131			
Chloroform	22	1.0	20.00	0	111	70	130			
Chloromethane	20	3.0	20.00	0	101	56.9	143			
2-Chlorotoluene	20	1.0	20.00	0	97.6	70	130			
4-Chlorotoluene	20	1.0	20.00	0	98.5	70	130			
cis-1,2-DCE	21	1.0	20.00	0	104	70	130			
cis-1,3-Dichloropropene	21	1.0	20.00	0	103	70	130			
1,2-Dibromo-3-chloropropane	18	2.0	20.00	0	90.6	62.3	135			
Dibromochloromethane	19	1.0	20.00	0	94.4	70	130			
Dibromomethane	21	1.0	20.00	0	107	70	130			
1,2-Dichlorobenzene	19	1.0	20.00	0	95.9	70	130			
1,3-Dichlorobenzene	19	1.0	20.00	0	96.5	70	130			
1,4-Dichlorobenzene	20	1.0	20.00	0	98.1	70	130			
Dichlorodifluoromethane	29	1.0	20.00	0	147	41	159			
1,1-Dichloroethane	22	1.0	20.00	0	111	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	102	70	130			
1,2-Dichloropropane	22	1.0	20.00	0	109	70	130			
1,3-Dichloropropane	20	1.0	20.00	0	100	70	130			
2,2-Dichloropropane	20	2.0	20.00	0	101	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2208557**
06-Sep-22

Client: EA Engineering
Project: Sparton

Sample ID: **100NG LCS4** SampType: **LCS4** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **R90200** RunNo: **90200**
Prep Date: Analysis Date: **8/11/2022** SeqNo: **3217387** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	21	1.0	20.00	0	104	70	130			
Hexachlorobutadiene	17	1.0	20.00	0	86.4	63.6	129			
2-Hexanone	40	10	40.00	0	101	63.2	130			
Isopropylbenzene	19	1.0	20.00	0	94.0	70	130			
4-Isopropyltoluene	19	1.0	20.00	0	92.7	70	130			
4-Methyl-2-pentanone	44	10	40.00	0	111	64.7	132			
Methylene Chloride	23	3.0	20.00	0	113	70	130			
n-Butylbenzene	19	3.0	20.00	0	92.6	70	130			
n-Propylbenzene	19	1.0	20.00	0	97.0	70	130			
sec-Butylbenzene	19	1.0	20.00	0	94.1	70	130			
Styrene	19	1.0	20.00	0	94.8	70	130			
tert-Butylbenzene	18	1.0	20.00	0	91.5	70	130			
1,1,1,2-Tetrachloroethane	18	1.0	20.00	0	90.9	70	130			
1,1,2,2-Tetrachloroethane	21	2.0	20.00	0	107	65.8	138			
Tetrachloroethene (PCE)	19	1.0	20.00	0	92.5	70	130			
trans-1,2-DCE	21	1.0	20.00	0	105	70	130			
trans-1,3-Dichloropropene	18	1.0	20.00	0	90.4	70	130			
1,2,3-Trichlorobenzene	18	1.0	20.00	0	89.8	70	130			
1,2,4-Trichlorobenzene	16	1.0	20.00	0	81.8	70	130			
1,1,1-Trichloroethane	21	1.0	20.00	0	104	70	130			
1,1,2-Trichloroethane	21	1.0	20.00	0	103	70	130			
Trichloroethene (TCE)	21	1.0	20.00	0	104	70	130			
Trichlorofluoromethane	23	1.0	20.00	0	114	70	130			
1,2,3-Trichloropropane	20	2.0	20.00	0	101	70	130			
Vinyl chloride	22	1.0	20.00	0	112	70	130			
Xylenes, Total	58	1.5	60.00	0	96.5	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		111	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		96.1	70	130			
Surr: Dibromofluoromethane	11		10.00		105	70	130			
Surr: Toluene-d8	9.7		10.00		97.5	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R90200** RunNo: **90200**
Prep Date: Analysis Date: **8/11/2022** SeqNo: **3217907** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2208557**
06-Sep-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R90200**	RunNo: **90200**	
Prep Date:	Analysis Date: **8/11/2022**	SeqNo: **3217907**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2208557**
06-Sep-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R90200** RunNo: **90200**
Prep Date: Analysis Date: **8/11/2022** SeqNo: **3217907** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	11		10.00		115	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		95.8	70	130			
Surr: Dibromofluoromethane	11		10.00		111	70	130			
Surr: Toluene-d8	9.1		10.00		90.7	70	130			

Sample ID: **2208557-001ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MW-80** Batch ID: **R90200** RunNo: **90200**
Prep Date: Analysis Date: **8/11/2022** SeqNo: **3217909** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	23	1.0	20.00	0	113	70	130			
Toluene	20	1.0	20.00	0	99.6	70	130			
Chlorobenzene	20	1.0	20.00	0	100	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	101	70	130			
Trichloroethene (TCE)	21	1.0	20.00	0.2280	105	70	130			
Surr: 1,2-Dichloroethane-d4	12		10.00		117	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2208557**
06-Sep-22

Client: EA Engineering
Project: Sparton

Sample ID: **2208557-001ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MW-80** Batch ID: **R90200** RunNo: **90200**
Prep Date: Analysis Date: **8/11/2022** SeqNo: **3217909** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	9.9		10.00		98.6	70	130			
Surr: Dibromofluoromethane	11		10.00		111	70	130			
Surr: Toluene-d8	9.2		10.00		92.2	70	130			

Sample ID: **2208557-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MW-80** Batch ID: **R90200** RunNo: **90200**
Prep Date: Analysis Date: **8/11/2022** SeqNo: **3217910** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	109	70	130	3.30	20	
Toluene	19	1.0	20.00	0	95.0	70	130	4.75	20	
Chlorobenzene	19	1.0	20.00	0	97.3	70	130	2.98	20	
1,1-Dichloroethene	19	1.0	20.00	0	96.5	70	130	4.88	20	
Trichloroethene (TCE)	21	1.0	20.00	0.2280	102	70	130	2.94	20	
Surr: 1,2-Dichloroethane-d4	12		10.00		117	70	130	0	0	
Surr: 4-Bromofluorobenzene	9.9		10.00		98.6	70	130	0	0	
Surr: Dibromofluoromethane	11		10.00		112	70	130	0	0	
Surr: Toluene-d8	9.0		10.00		90.2	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2208557**
06-Sep-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb-69416** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **69416** RunNo: **90362**
Prep Date: **8/11/2022** Analysis Date: **8/17/2022** SeqNo: **3223753** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	3.0		4.000		76.0	31.6	100			
Surr: 2,4,6-Tribromophenol	6.0		8.000		74.8	22	101			
Surr: 2-Fluorobiphenyl	2.8		4.000		71.0	26.7	90.1			
Surr: 4-Terphenyl-d14	4.1		4.000		103	72.3	147			

Sample ID: **lcs-69416** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **69416** RunNo: **90362**
Prep Date: **8/11/2022** Analysis Date: **8/17/2022** SeqNo: **3223754** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.80	0.10	2.000	0	40.0	20.2	48.4			
Surr: Nitrobenzene-d5	4.0		5.000		79.6	31.6	100			
Surr: 2,4,6-Tribromophenol	7.1		10.00		71.0	22	101			
Surr: 2-Fluorobiphenyl	3.4		5.000		67.2	26.7	90.1			
Surr: 4-Terphenyl-d14	5.0		5.000		99.6	72.3	147			

Sample ID: **lcsd-69416** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **69416** RunNo: **90362**
Prep Date: **8/11/2022** Analysis Date: **8/17/2022** SeqNo: **3223755** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.56	0.10	2.000	0	28.0	20.2	48.4	35.3	30.1	R
Surr: Nitrobenzene-d5	3.0		5.000		60.0	31.6	100	0	0	
Surr: 2,4,6-Tribromophenol	5.3		10.00		52.8	22	101	0	0	
Surr: 2-Fluorobiphenyl	2.5		5.000		50.0	26.7	90.1	0	0	
Surr: 4-Terphenyl-d14	4.8		5.000		95.2	72.3	147	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: EA Engineering Work Order Number: 2208557 RcptNo: 1

Received By: **Kasandra Payan** 8/9/2022 3:24:00 PM

Completed By: **Isaiah Ortiz** 8/9/2022 3:37:40 PM

Reviewed By: 8-10-22

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 6 (<2 or >12 unless noted)
Adjusted? NO
Checked by: SCL 8/10/22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.7	Good	Not Present			

Chain-of-Custody Record

Client: Sparton Technologies Inc

EA Engineering, Science, and Technology, Inc., PBC

Mailing Address: 320 Gold Av SW #1300
Albuquerque, NM 87102

Phone #: 505-715-4154

email or Fax#: rmarley@eaest.com

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation:
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush 72 Hours

Project Name: Sparton

Project #: Bills to Sparton direct

Project Manager: Bob Marley, EA Engineering

Sampler: Scott Miles

On Ice: ☒ Yes ☐ No

Sample Temperature: 4.8-0.1=4.7

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2208557	VOCs, 8260B	1,4-Dioxane, 8270SIM	Total Chromium	Dissolved Metals (Cr, Fe, Mn)	Air Bubbles (Y or N)
8-8-22	1251	Aq	MW-80	3xVOA, 1x1L Amber 1x250 ml HDPE	HCl, none HNO3	001	X	X	X		
	1251		MW-80 Duplicate			002	X	X	X		
8-9-22	0955		MW-77			003	X	X		X	
	1231		MW-71R			004	X	X	X		
	1352		MW-17			005	X	X	X	X	
			Trip Blank	2x VOAs	HCl	006	X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
8-9-22	15:23			8-09-22	1524
Date:	Time:	Relinquished by:	Received by:	Date	Time

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

September 08, 2022

Bob Marley
EA Engineering
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL:
FAX:

RE: Sparton OrderNo.: 2208787

Dear Bob Marley:

Hall Environmental Analysis Laboratory received 4 sample(s) on 8/11/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2208787**
Date Reported: **9/8/2022**

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208787-001 **Matrix:** AQUEOUS

Client Sample ID: MW-65
Collection Date: 8/10/2022 1:08:00 PM
Received Date: 8/11/2022 3:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	8/18/2022 3:39:07 PM	69471
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	8/18/2022 1:18:00 PM	69560
Surr: 2-Fluorobiphenyl	77.0	26.7-90.1		%Rec	1	8/18/2022 1:18:00 PM	69560
EPA METHOD 8260B: VOLATILES						Analyst:	**BRM**
Benzene	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
Toluene	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
Ethylbenzene	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
Naphthalene	ND	2.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
1-Methylnaphthalene	ND	4.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
2-Methylnaphthalene	ND	4.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
Acetone	ND	10		µg/L	1	8/18/2022 7:26:51 PM	R90405
Bromobenzene	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
Bromodichloromethane	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
Bromoform	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
Bromomethane	ND	3.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
2-Butanone	ND	10		µg/L	1	8/18/2022 7:26:51 PM	R90405
Carbon disulfide	ND	10		µg/L	1	8/18/2022 7:26:51 PM	R90405
Carbon Tetrachloride	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
Chlorobenzene	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
Chloroethane	ND	2.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
Chloroform	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
Chloromethane	ND	3.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
2-Chlorotoluene	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
4-Chlorotoluene	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
cis-1,2-DCE	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
Dibromochloromethane	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
Dibromomethane	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208787-001 **Matrix:** AQUEOUS

Client Sample ID: MW-65
Collection Date: 8/10/2022 1:08:00 PM
Received Date: 8/11/2022 3:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BRM**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
1,1-Dichloroethane	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
1,1-Dichloroethene	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
1,2-Dichloropropane	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
1,3-Dichloropropane	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
2,2-Dichloropropane	ND	2.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
1,1-Dichloropropene	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
Hexachlorobutadiene	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
2-Hexanone	ND	10		µg/L	1	8/18/2022 7:26:51 PM	R90405
Isopropylbenzene	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
4-Isopropyltoluene	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
4-Methyl-2-pentanone	ND	10		µg/L	1	8/18/2022 7:26:51 PM	R90405
Methylene Chloride	ND	3.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
n-Butylbenzene	ND	3.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
n-Propylbenzene	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
sec-Butylbenzene	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
Styrene	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
tert-Butylbenzene	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
trans-1,2-DCE	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
Trichlorofluoromethane	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
Vinyl chloride	ND	1.0		µg/L	1	8/18/2022 7:26:51 PM	R90405
Xylenes, Total	ND	1.5		µg/L	1	8/18/2022 7:26:51 PM	R90405
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	8/18/2022 7:26:51 PM	R90405
Surr: 4-Bromofluorobenzene	116	70-130		%Rec	1	8/18/2022 7:26:51 PM	R90405
Surr: Dibromofluoromethane	94.2	70-130		%Rec	1	8/18/2022 7:26:51 PM	R90405
Surr: Toluene-d8	99.0	70-130		%Rec	1	8/18/2022 7:26:51 PM	R90405

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208787-002 **Matrix:** AQUEOUS

Client Sample ID: MW-78
Collection Date: 8/10/2022 2:37:00 PM
Received Date: 8/11/2022 3:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.040	0.0060		mg/L	1	9/6/2022 4:38:12 PM	B90845
Iron	ND	0.020		mg/L	1	9/6/2022 4:38:12 PM	B90845
Manganese	ND	0.0020		mg/L	1	9/6/2022 4:38:12 PM	B90845
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.8	1.0		µg/L	1	8/18/2022 2:01:00 PM	69560
Surr: 2-Fluorobiphenyl	84.0	26.7-90.1		%Rec	1	8/18/2022 2:01:00 PM	69560
EPA METHOD 8260B: VOLATILES						Analyst:	**BRM**
Benzene	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
Toluene	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
Ethylbenzene	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
Naphthalene	ND	2.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
1-Methylnaphthalene	ND	4.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
2-Methylnaphthalene	ND	4.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
Acetone	ND	10		µg/L	1	8/18/2022 7:53:53 PM	R90405
Bromobenzene	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
Bromodichloromethane	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
Bromoform	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
Bromomethane	ND	3.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
2-Butanone	ND	10		µg/L	1	8/18/2022 7:53:53 PM	R90405
Carbon disulfide	ND	10		µg/L	1	8/18/2022 7:53:53 PM	R90405
Carbon Tetrachloride	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
Chlorobenzene	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
Chloroethane	ND	2.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
Chloroform	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
Chloromethane	ND	3.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
2-Chlorotoluene	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
4-Chlorotoluene	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
cis-1,2-DCE	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
Dibromochloromethane	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
Dibromomethane	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208787-002 **Matrix:** AQUEOUS

Client Sample ID: MW-78
Collection Date: 8/10/2022 2:37:00 PM
Received Date: 8/11/2022 3:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BRM**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
1,1-Dichloroethane	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
1,1-Dichloroethene	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
1,2-Dichloropropane	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
1,3-Dichloropropane	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
2,2-Dichloropropane	ND	2.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
1,1-Dichloropropene	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
Hexachlorobutadiene	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
2-Hexanone	ND	10		µg/L	1	8/18/2022 7:53:53 PM	R90405
Isopropylbenzene	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
4-Isopropyltoluene	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
4-Methyl-2-pentanone	ND	10		µg/L	1	8/18/2022 7:53:53 PM	R90405
Methylene Chloride	ND	3.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
n-Butylbenzene	ND	3.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
n-Propylbenzene	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
sec-Butylbenzene	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
Styrene	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
tert-Butylbenzene	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
trans-1,2-DCE	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
Trichlorofluoromethane	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
Vinyl chloride	ND	1.0		µg/L	1	8/18/2022 7:53:53 PM	R90405
Xylenes, Total	ND	1.5		µg/L	1	8/18/2022 7:53:53 PM	R90405
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	8/18/2022 7:53:53 PM	R90405
Surr: 4-Bromofluorobenzene	112	70-130		%Rec	1	8/18/2022 7:53:53 PM	R90405
Surr: Dibromofluoromethane	94.2	70-130		%Rec	1	8/18/2022 7:53:53 PM	R90405
Surr: Toluene-d8	99.5	70-130		%Rec	1	8/18/2022 7:53:53 PM	R90405

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208787-003 **Matrix:** AQUEOUS

Client Sample ID: MW-52R
Collection Date: 8/11/2022 1:17:00 PM
Received Date: 8/11/2022 3:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	8/18/2022 3:42:29 PM	69471
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	8/18/2022 2:45:00 PM	69560
Surr: 2-Fluorobiphenyl	83.0	26.7-90.1		%Rec	1	8/18/2022 2:45:00 PM	69560
EPA METHOD 8260B: VOLATILES						Analyst:	**BRM**
Benzene	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
Toluene	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
Ethylbenzene	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
Naphthalene	ND	2.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
1-Methylnaphthalene	ND	4.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
2-Methylnaphthalene	ND	4.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
Acetone	ND	10		µg/L	1	8/18/2022 8:20:55 PM	R90405
Bromobenzene	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
Bromodichloromethane	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
Bromoform	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
Bromomethane	ND	3.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
2-Butanone	ND	10		µg/L	1	8/18/2022 8:20:55 PM	R90405
Carbon disulfide	ND	10		µg/L	1	8/18/2022 8:20:55 PM	R90405
Carbon Tetrachloride	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
Chlorobenzene	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
Chloroethane	ND	2.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
Chloroform	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
Chloromethane	ND	3.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
2-Chlorotoluene	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
4-Chlorotoluene	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
cis-1,2-DCE	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
Dibromochloromethane	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
Dibromomethane	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2208787-003 **Matrix:** AQUEOUS

Client Sample ID: MW-52R
Collection Date: 8/11/2022 1:17:00 PM
Received Date: 8/11/2022 3:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BRM**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
1,1-Dichloroethane	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
1,1-Dichloroethene	18	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
1,2-Dichloropropane	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
1,3-Dichloropropane	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
2,2-Dichloropropane	ND	2.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
1,1-Dichloropropene	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
Hexachlorobutadiene	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
2-Hexanone	ND	10		µg/L	1	8/18/2022 8:20:55 PM	R90405
Isopropylbenzene	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
4-Isopropyltoluene	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
4-Methyl-2-pentanone	ND	10		µg/L	1	8/18/2022 8:20:55 PM	R90405
Methylene Chloride	ND	3.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
n-Butylbenzene	ND	3.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
n-Propylbenzene	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
sec-Butylbenzene	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
Styrene	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
tert-Butylbenzene	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
trans-1,2-DCE	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
Trichloroethene (TCE)	9.5	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
Trichlorofluoromethane	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
Vinyl chloride	ND	1.0		µg/L	1	8/18/2022 8:20:55 PM	R90405
Xylenes, Total	ND	1.5		µg/L	1	8/18/2022 8:20:55 PM	R90405
Surr: 1,2-Dichloroethane-d4	106	70-130		%Rec	1	8/18/2022 8:20:55 PM	R90405
Surr: 4-Bromofluorobenzene	117	70-130		%Rec	1	8/18/2022 8:20:55 PM	R90405
Surr: Dibromofluoromethane	98.8	70-130		%Rec	1	8/18/2022 8:20:55 PM	R90405
Surr: Toluene-d8	97.0	70-130		%Rec	1	8/18/2022 8:20:55 PM	R90405

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton
Collection Date:
Lab ID: 2208787-004
Matrix: TRIP BLANK
Received Date: 8/11/2022 3:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BRM**	
Benzene	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
Toluene	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
Ethylbenzene	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
Naphthalene	ND	2.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
1-Methylnaphthalene	ND	4.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
2-Methylnaphthalene	ND	4.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
Acetone	ND	10		µg/L	1	8/18/2022 8:47:57 PM	R90405
Bromobenzene	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
Bromodichloromethane	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
Bromoform	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
Bromomethane	ND	3.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
2-Butanone	ND	10		µg/L	1	8/18/2022 8:47:57 PM	R90405
Carbon disulfide	ND	10		µg/L	1	8/18/2022 8:47:57 PM	R90405
Carbon Tetrachloride	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
Chlorobenzene	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
Chloroethane	ND	2.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
Chloroform	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
Chloromethane	ND	3.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
2-Chlorotoluene	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
4-Chlorotoluene	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
cis-1,2-DCE	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
Dibromochloromethane	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
Dibromomethane	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
1,1-Dichloroethane	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
1,1-Dichloroethene	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
1,2-Dichloropropane	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
1,3-Dichloropropane	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
2,2-Dichloropropane	ND	2.0		µg/L	1	8/18/2022 8:47:57 PM	R90405

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton
Collection Date:
Lab ID: 2208787-004
Matrix: TRIP BLANK
Received Date: 8/11/2022 3:12:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **BRM**	
1,1-Dichloropropene	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
Hexachlorobutadiene	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
2-Hexanone	ND	10		µg/L	1	8/18/2022 8:47:57 PM	R90405
Isopropylbenzene	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
4-Isopropyltoluene	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
4-Methyl-2-pentanone	ND	10		µg/L	1	8/18/2022 8:47:57 PM	R90405
Methylene Chloride	ND	3.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
n-Butylbenzene	ND	3.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
n-Propylbenzene	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
sec-Butylbenzene	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
Styrene	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
tert-Butylbenzene	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
trans-1,2-DCE	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
1,1,1-Trichloroethane	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
Trichlorofluoromethane	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
Vinyl chloride	ND	1.0		µg/L	1	8/18/2022 8:47:57 PM	R90405
Xylenes, Total	ND	1.5		µg/L	1	8/18/2022 8:47:57 PM	R90405
Surr: 1,2-Dichloroethane-d4	105	70-130		%Rec	1	8/18/2022 8:47:57 PM	R90405
Surr: 4-Bromofluorobenzene	114	70-130		%Rec	1	8/18/2022 8:47:57 PM	R90405
Surr: Dibromofluoromethane	95.3	70-130		%Rec	1	8/18/2022 8:47:57 PM	R90405
Surr: Toluene-d8	104	70-130		%Rec	1	8/18/2022 8:47:57 PM	R90405

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2208787**
08-Sep-22

Client: EA Engineering
Project: Sparton

Sample ID: **MB-B** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **B90845** RunNo: **90845**
Prep Date: Analysis Date: **9/6/2022** SeqNo: **3247437** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID: **LCSLL-B** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **B90845** RunNo: **90845**
Prep Date: Analysis Date: **9/6/2022** SeqNo: **3247438** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060	0.006000	0	91.2	50	150			
Iron	0.022	0.020	0.02000	0	109	50	150			
Manganese	0.0021	0.0020	0.002000	0	104	50	150			

Sample ID: **LCS-B** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **B90845** RunNo: **90845**
Prep Date: Analysis Date: **9/6/2022** SeqNo: **3247439** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.52	0.0060	0.5000	0	105	85	115			
Iron	0.54	0.020	0.5000	0	108	85	115			
Manganese	0.51	0.0020	0.5000	0	102	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2208787**
08-Sep-22

Client: EA Engineering
Project: Sparton

Sample ID: **MB-69471** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **69471** RunNo: **90323**
Prep Date: **8/12/2022** Analysis Date: **8/15/2022** SeqNo: **3222014** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LCS-69471** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **69471** RunNo: **90323**
Prep Date: **8/12/2022** Analysis Date: **8/15/2022** SeqNo: **3222016** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.51	0.0060	0.5000	0	101	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2208787**
08-Sep-22

Client: EA Engineering
Project: Sparton

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R90405** RunNo: **90405**
Prep Date: Analysis Date: **8/18/2022** SeqNo: **3225444** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	97.0	70	130			
Toluene	19	1.0	20.00	0	96.0	70	130			
Chlorobenzene	19	1.0	20.00	0	97.2	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	91.7	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	95.5	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		105	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		115	70	130			
Surr: Dibromofluoromethane	9.9		10.00		98.6	70	130			
Surr: Toluene-d8	9.5		10.00		94.7	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R90405** RunNo: **90405**
Prep Date: Analysis Date: **8/18/2022** SeqNo: **3225465** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2208787**
08-Sep-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R90405**	RunNo: **90405**	
Prep Date:	Analysis Date: **8/18/2022**	SeqNo: **3225465**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2208787**
08-Sep-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R90405** RunNo: **90405**
Prep Date: Analysis Date: **8/18/2022** SeqNo: **3225465** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	11		10.00		107	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		111	70	130			
Surr: Dibromofluoromethane	9.7		10.00		97.4	70	130			
Surr: Toluene-d8	9.7		10.00		96.6	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2208787**

08-Sep-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb-69560** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **69560** RunNo: **90410**
Prep Date: **8/17/2022** Analysis Date: **8/18/2022** SeqNo: **3225670** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	2.1		4.000		53.5	31.6	100			
Surr: 2,4,6-Tribromophenol	4.9		8.000		61.3	22	101			
Surr: 2-Fluorobiphenyl	1.7		4.000		43.0	26.7	90.1			
Surr: 4-Terphenyl-d14	3.7		4.000		91.5	72.3	147			

Sample ID: **lcs-69560** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **69560** RunNo: **90410**
Prep Date: **8/17/2022** Analysis Date: **8/18/2022** SeqNo: **3225671** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.68	0.10	2.000	0	34.0	20.2	48.4			
Surr: Nitrobenzene-d5	3.6		5.000		71.2	31.6	100			
Surr: 2,4,6-Tribromophenol	6.8		10.00		68.0	22	101			
Surr: 2-Fluorobiphenyl	2.8		5.000		56.0	26.7	90.1			
Surr: 4-Terphenyl-d14	4.9		5.000		98.8	72.3	147			

Sample ID: **lcsd-69560** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **69560** RunNo: **90410**
Prep Date: **8/17/2022** Analysis Date: **8/18/2022** SeqNo: **3225672** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.54	0.10	2.000	0	27.0	20.2	48.4	23.0	30.1	
Surr: Nitrobenzene-d5	3.2		5.000		64.4	31.6	100	0	0	
Surr: 2,4,6-Tribromophenol	6.0		10.00		60.2	22	101	0	0	
Surr: 2-Fluorobiphenyl	2.7		5.000		53.2	26.7	90.1	0	0	
Surr: 4-Terphenyl-d14	4.5		5.000		89.2	72.3	147	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: EA Engineering Work Order Number: 2208787 RcptNo: 1

Received By: **Sean Livingston** 8/11/2022 3:12:00 PM S. Livingston

Completed By: **Isaiah Ortiz** 8/11/2022 3:39:44 PM I. Ortiz

Reviewed By: JN 8/11/22

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 3 (<2 or >12 unless noted)
Adjusted? no
Checked by: CMC 8/11/22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.2	Good	Not Present			

Chain-of-Custody Record

Client: Sparton Technologies Inc

EA Engineering, Science, and Technology, Inc., PBC

Mailing Address: 320 Gold Av SW #1300
Albuquerque, NM 87102

Phone #: 505-715-4154

email or Fax#: rmarley@eaest.com

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation:
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ **Rush** 72 Hours

Project Name: Sparton

Project #: Bills to Sparton direct

Project Manager: Bob Marley, EA Engineering

Sampler: Scott Miles

On Ice: ☑ Yes ☐ No

Sample Temperature: 4.2±0=4.2°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2208787	VOCs, 8260B	1,4-Dioxane, 8270SIM	Total Chromium	Dissolved Metals (Cr, Fe, Mn)										Air Bubbles (Y or N)
8-10-22	1308	Aq	MW-65	3xVOA 1xL Amber 1x 250ml HDPE	HCl none HNO3	001	X	X	X											
↓	1437	↓	MW-78	↓	↓	002	X	X		X										
8-11-22	1317	↓	MW-52R	↓	↓	003	X	X	X											
		↓	Trip Blank	2xVOA	HCl	004	X													

Date:	Time:	Relinquished by:	Received by:	Date	Time
8-11-22	1511	[signature]	SOL CPU	8/11/22	15:12
Date:	Time:	Relinquished by:	Received by:	Date	Time

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

September 22, 2022

Bob Marley
EA Engineering
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL:
FAX:

RE: Sparton OrderNo.: 2209129

Dear Bob Marley:

Hall Environmental Analysis Laboratory received 7 sample(s) on 9/2/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2209129**
Date Reported: **9/22/2022**

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2209129-001 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Influent
Collection Date: 9/2/2022 10:42:00 AM
Received Date: 9/2/2022 1:37:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.043	0.0060		mg/L	1	9/15/2022 4:33:35 PM	A91088
Iron	ND	0.020		mg/L	1	9/15/2022 4:33:35 PM	A91088
Manganese	0.035	0.0020		mg/L	1	9/15/2022 4:33:35 PM	A91088
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.043	0.0060		mg/L	1	9/3/2022 11:46:16 AM	69957
EPA METHOD 8270SIM						Analyst:	**TOM**
1,4-Dioxane	1.4	1.0		µg/L	1	9/12/2022 10:20:00 PM	70004
Surr: 2-Fluorobiphenyl	40.0	26.7-90.1		%Rec	1	9/12/2022 10:20:00 PM	70004
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
Toluene	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
Ethylbenzene	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
Naphthalene	ND	2.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
1-Methylnaphthalene	ND	4.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
2-Methylnaphthalene	ND	4.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
Acetone	ND	10		µg/L	1	9/7/2022 8:15:00 PM	R90843
Bromobenzene	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
Bromodichloromethane	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
Bromoform	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
Bromomethane	ND	3.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
2-Butanone	ND	10		µg/L	1	9/7/2022 8:15:00 PM	R90843
Carbon disulfide	ND	10		µg/L	1	9/7/2022 8:15:00 PM	R90843
Carbon Tetrachloride	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
Chlorobenzene	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
Chloroethane	ND	2.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
Chloroform	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
Chloromethane	ND	3.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
2-Chlorotoluene	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
4-Chlorotoluene	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
cis-1,2-DCE	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
Dibromochloromethane	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2209129-001 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Influent
Collection Date: 9/2/2022 10:42:00 AM
Received Date: 9/2/2022 1:37:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dibromomethane	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
1,1-Dichloroethane	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
1,1-Dichloroethene	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
1,2-Dichloropropane	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
1,3-Dichloropropane	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
2,2-Dichloropropane	ND	2.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
1,1-Dichloropropene	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
Hexachlorobutadiene	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
2-Hexanone	ND	10		µg/L	1	9/7/2022 8:15:00 PM	R90843
Isopropylbenzene	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
4-Isopropyltoluene	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
4-Methyl-2-pentanone	ND	10		µg/L	1	9/7/2022 8:15:00 PM	R90843
Methylene Chloride	ND	3.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
n-Butylbenzene	ND	3.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
n-Propylbenzene	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
sec-Butylbenzene	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
Styrene	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
tert-Butylbenzene	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
trans-1,2-DCE	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
Trichloroethene (TCE)	4.6	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
Trichlorofluoromethane	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
Vinyl chloride	ND	1.0		µg/L	1	9/7/2022 8:15:00 PM	R90843
Xylenes, Total	ND	1.5		µg/L	1	9/7/2022 8:15:00 PM	R90843
Surr: 1,2-Dichloroethane-d4	120	70-130		%Rec	1	9/7/2022 8:15:00 PM	R90843
Surr: 4-Bromofluorobenzene	91.5	70-130		%Rec	1	9/7/2022 8:15:00 PM	R90843
Surr: Dibromofluoromethane	116	70-130		%Rec	1	9/7/2022 8:15:00 PM	R90843

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2209129-001
Matrix: AQUEOUS
Client Sample ID: CW-2 Influent
Collection Date: 9/2/2022 10:42:00 AM
Received Date: 9/2/2022 1:37:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Surr: Toluene-d8	90.6	70-130		%Rec	1	9/7/2022 8:15:00 PM	R90843

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2209129-002 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent
Collection Date: 9/2/2022 10:33:00 AM
Received Date: 9/2/2022 1:37:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.044	0.0060		mg/L	1	9/15/2022 4:37:50 PM	B91088
Iron	ND	0.020		mg/L	1	9/15/2022 4:37:50 PM	B91088
Manganese	0.029	0.0020		mg/L	1	9/15/2022 4:37:50 PM	B91088
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.043	0.0060		mg/L	1	9/3/2022 11:52:45 AM	69957
EPA METHOD 8270SIM						Analyst:	**TOM**
1,4-Dioxane	1.3	1.0		µg/L	1	9/12/2022 11:10:00 PM	70004
Surr: 2-Fluorobiphenyl	35.0	26.7-90.1		%Rec	1	9/12/2022 11:10:00 PM	70004
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
Toluene	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
Ethylbenzene	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
Naphthalene	ND	2.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
1-Methylnaphthalene	ND	4.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
2-Methylnaphthalene	ND	4.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
Acetone	ND	10		µg/L	1	9/7/2022 8:38:00 PM	R90843
Bromobenzene	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
Bromodichloromethane	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
Bromoform	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
Bromomethane	ND	3.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
2-Butanone	ND	10		µg/L	1	9/7/2022 8:38:00 PM	R90843
Carbon disulfide	ND	10		µg/L	1	9/7/2022 8:38:00 PM	R90843
Carbon Tetrachloride	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
Chlorobenzene	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
Chloroethane	ND	2.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
Chloroform	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
Chloromethane	ND	3.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
2-Chlorotoluene	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
4-Chlorotoluene	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
cis-1,2-DCE	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
Dibromochloromethane	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2209129-002 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent
Collection Date: 9/2/2022 10:33:00 AM
Received Date: 9/2/2022 1:37:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dibromomethane	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
1,1-Dichloroethane	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
1,1-Dichloroethene	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
1,2-Dichloropropane	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
1,3-Dichloropropane	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
2,2-Dichloropropane	ND	2.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
1,1-Dichloropropene	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
Hexachlorobutadiene	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
2-Hexanone	ND	10		µg/L	1	9/7/2022 8:38:00 PM	R90843
Isopropylbenzene	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
4-Isopropyltoluene	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
4-Methyl-2-pentanone	ND	10		µg/L	1	9/7/2022 8:38:00 PM	R90843
Methylene Chloride	ND	3.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
n-Butylbenzene	ND	3.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
n-Propylbenzene	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
sec-Butylbenzene	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
Styrene	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
tert-Butylbenzene	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
trans-1,2-DCE	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
Trichlorofluoromethane	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
Vinyl chloride	ND	1.0		µg/L	1	9/7/2022 8:38:00 PM	R90843
Xylenes, Total	ND	1.5		µg/L	1	9/7/2022 8:38:00 PM	R90843
Surr: 1,2-Dichloroethane-d4	119	70-130		%Rec	1	9/7/2022 8:38:00 PM	R90843
Surr: 4-Bromofluorobenzene	87.8	70-130		%Rec	1	9/7/2022 8:38:00 PM	R90843
Surr: Dibromofluoromethane	118	70-130		%Rec	1	9/7/2022 8:38:00 PM	R90843

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2209129-002
Matrix: AQUEOUS
Client Sample ID: CW-2 Effluent
Collection Date: 9/2/2022 10:33:00 AM
Received Date: 9/2/2022 1:37:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Surr: Toluene-d8	90.5	70-130		%Rec	1	9/7/2022 8:38:00 PM	R90843

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2209129-003 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Influent
Collection Date: 9/2/2022 12:27:00 PM
Received Date: 9/2/2022 1:37:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	9/15/2022 4:42:03 PM	B91088
Iron	ND	0.020		mg/L	1	9/15/2022 4:42:03 PM	B91088
Manganese	ND	0.0020		mg/L	1	9/15/2022 4:42:03 PM	B91088
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	9/3/2022 11:59:15 AM	69957
EPA METHOD 8270SIM						Analyst:	**TOM**
1,4-Dioxane	1.4	1.0		µg/L	1	9/13/2022	70004
Surr: 2-Fluorobiphenyl	39.5	26.7-90.1		%Rec	1	9/13/2022	70004
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
Toluene	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
Ethylbenzene	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
Naphthalene	ND	2.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
1-Methylnaphthalene	ND	4.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
2-Methylnaphthalene	ND	4.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
Acetone	ND	10		µg/L	1	9/7/2022 9:24:00 PM	R90843
Bromobenzene	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
Bromodichloromethane	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
Bromoform	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
Bromomethane	ND	3.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
2-Butanone	ND	10		µg/L	1	9/7/2022 9:24:00 PM	R90843
Carbon disulfide	ND	10		µg/L	1	9/7/2022 9:24:00 PM	R90843
Carbon Tetrachloride	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
Chlorobenzene	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
Chloroethane	ND	2.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
Chloroform	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
Chloromethane	ND	3.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
2-Chlorotoluene	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
4-Chlorotoluene	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
cis-1,2-DCE	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
Dibromochloromethane	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2209129-003 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Influent
Collection Date: 9/2/2022 12:27:00 PM
Received Date: 9/2/2022 1:37:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dibromomethane	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
1,1-Dichloroethane	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
1,1-Dichloroethene	16	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
1,2-Dichloropropane	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
1,3-Dichloropropane	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
2,2-Dichloropropane	ND	2.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
1,1-Dichloropropene	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
Hexachlorobutadiene	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
2-Hexanone	ND	10		µg/L	1	9/7/2022 9:24:00 PM	R90843
Isopropylbenzene	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
4-Isopropyltoluene	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
4-Methyl-2-pentanone	ND	10		µg/L	1	9/7/2022 9:24:00 PM	R90843
Methylene Chloride	ND	3.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
n-Butylbenzene	ND	3.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
n-Propylbenzene	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
sec-Butylbenzene	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
Styrene	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
tert-Butylbenzene	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
trans-1,2-DCE	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
Trichloroethene (TCE)	120	10		µg/L	10	9/7/2022 9:01:00 PM	R90843
Trichlorofluoromethane	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
Vinyl chloride	ND	1.0		µg/L	1	9/7/2022 9:24:00 PM	R90843
Xylenes, Total	ND	1.5		µg/L	1	9/7/2022 9:24:00 PM	R90843
Surr: 1,2-Dichloroethane-d4	118	70-130		%Rec	1	9/7/2022 9:24:00 PM	R90843
Surr: 4-Bromofluorobenzene	90.7	70-130		%Rec	1	9/7/2022 9:24:00 PM	R90843
Surr: Dibromofluoromethane	115	70-130		%Rec	1	9/7/2022 9:24:00 PM	R90843

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2209129-003
Matrix: AQUEOUS
Client Sample ID: CW-1 Influent
Collection Date: 9/2/2022 12:27:00 PM
Received Date: 9/2/2022 1:37:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Surr: Toluene-d8	92.8	70-130		%Rec	1	9/7/2022 9:24:00 PM	R90843

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2209129-004 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Effluent
Collection Date: 9/2/2022 12:16:00 PM
Received Date: 9/2/2022 1:37:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	9/15/2022 4:46:26 PM	B91088
Iron	ND	0.020		mg/L	1	9/15/2022 4:46:26 PM	B91088
Manganese	ND	0.0020		mg/L	1	9/15/2022 4:46:26 PM	B91088
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	9/3/2022 12:13:55 PM	69957
EPA METHOD 8270SIM						Analyst:	**TOM**
1,4-Dioxane	1.3	1.0		µg/L	1	9/13/2022 12:50:00 AM	70004
Surr: 2-Fluorobiphenyl	40.5	26.7-90.1		%Rec	1	9/13/2022 12:50:00 AM	70004
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
Toluene	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
Ethylbenzene	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
Naphthalene	ND	2.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
1-Methylnaphthalene	ND	4.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
2-Methylnaphthalene	ND	4.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
Acetone	ND	10		µg/L	1	9/7/2022 9:47:00 PM	R90843
Bromobenzene	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
Bromodichloromethane	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
Bromoform	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
Bromomethane	ND	3.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
2-Butanone	ND	10		µg/L	1	9/7/2022 9:47:00 PM	R90843
Carbon disulfide	ND	10		µg/L	1	9/7/2022 9:47:00 PM	R90843
Carbon Tetrachloride	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
Chlorobenzene	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
Chloroethane	ND	2.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
Chloroform	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
Chloromethane	ND	3.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
2-Chlorotoluene	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
4-Chlorotoluene	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
cis-1,2-DCE	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
Dibromochloromethane	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2209129-004 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Effluent
Collection Date: 9/2/2022 12:16:00 PM
Received Date: 9/2/2022 1:37:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dibromomethane	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
1,1-Dichloroethane	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
1,1-Dichloroethene	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
1,2-Dichloropropane	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
1,3-Dichloropropane	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
2,2-Dichloropropane	ND	2.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
1,1-Dichloropropene	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
Hexachlorobutadiene	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
2-Hexanone	ND	10		µg/L	1	9/7/2022 9:47:00 PM	R90843
Isopropylbenzene	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
4-Isopropyltoluene	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
4-Methyl-2-pentanone	ND	10		µg/L	1	9/7/2022 9:47:00 PM	R90843
Methylene Chloride	ND	3.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
n-Butylbenzene	ND	3.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
n-Propylbenzene	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
sec-Butylbenzene	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
Styrene	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
tert-Butylbenzene	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
trans-1,2-DCE	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
Trichlorofluoromethane	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
Vinyl chloride	ND	1.0		µg/L	1	9/7/2022 9:47:00 PM	R90843
Xylenes, Total	ND	1.5		µg/L	1	9/7/2022 9:47:00 PM	R90843
Surr: 1,2-Dichloroethane-d4	120	70-130		%Rec	1	9/7/2022 9:47:00 PM	R90843
Surr: 4-Bromofluorobenzene	89.7	70-130		%Rec	1	9/7/2022 9:47:00 PM	R90843
Surr: Dibromofluoromethane	116	70-130		%Rec	1	9/7/2022 9:47:00 PM	R90843

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2209129-004
Matrix: AQUEOUS
Client Sample ID: CW-1 Effluent
Collection Date: 9/2/2022 12:16:00 PM
Received Date: 9/2/2022 1:37:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Surr: Toluene-d8	92.8	70-130		%Rec	1	9/7/2022 9:47:00 PM	R90843

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2209129-005
Matrix: AQUEOUS
Client Sample ID: CW-2 Effluent Duplicate
Collection Date: 9/2/2022 10:33:00 AM
Received Date: 9/2/2022 1:37:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst: **TOM**	
1,4-Dioxane	1.9	1.0		µg/L	1	9/13/2022 1:38:00 AM	70004
Surr: 2-Fluorobiphenyl	47.5	26.7-90.1		%Rec	1	9/13/2022 1:38:00 AM	70004

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2209129-006
Matrix: AQUEOUS
Client Sample ID: CW-1 Effluent Duplicate
Collection Date: 9/2/2022 10:33:00 AM
Received Date: 9/2/2022 1:37:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst: **TOM**	
1,4-Dioxane	1.9	1.0		µg/L	1	9/13/2022 2:27:00 AM	70004
Surr: 2-Fluorobiphenyl	54.5	26.7-90.1		%Rec	1	9/13/2022 2:27:00 AM	70004

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton
Collection Date:
Lab ID: 2209129-007
Matrix: TRIP BLANK
Received Date: 9/2/2022 1:37:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
Toluene	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
Ethylbenzene	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
Naphthalene	ND	2.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
1-Methylnaphthalene	ND	4.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
2-Methylnaphthalene	ND	4.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
Acetone	ND	10		µg/L	1	9/7/2022 10:10:00 PM	R90843
Bromobenzene	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
Bromodichloromethane	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
Bromoform	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
Bromomethane	ND	3.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
2-Butanone	ND	10		µg/L	1	9/7/2022 10:10:00 PM	R90843
Carbon disulfide	ND	10		µg/L	1	9/7/2022 10:10:00 PM	R90843
Carbon Tetrachloride	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
Chlorobenzene	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
Chloroethane	ND	2.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
Chloroform	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
Chloromethane	ND	3.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
2-Chlorotoluene	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
4-Chlorotoluene	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
cis-1,2-DCE	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
Dibromochloromethane	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
Dibromomethane	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
1,1-Dichloroethane	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
1,1-Dichloroethene	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
1,2-Dichloropropane	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
1,3-Dichloropropane	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
2,2-Dichloropropane	ND	2.0		µg/L	1	9/7/2022 10:10:00 PM	R90843

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton
Collection Date:
Lab ID: 2209129-007
Matrix: TRIP BLANK
Received Date: 9/2/2022 1:37:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,1-Dichloropropene	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
Hexachlorobutadiene	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
2-Hexanone	ND	10		µg/L	1	9/7/2022 10:10:00 PM	R90843
Isopropylbenzene	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
4-Isopropyltoluene	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
4-Methyl-2-pentanone	ND	10		µg/L	1	9/7/2022 10:10:00 PM	R90843
Methylene Chloride	ND	3.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
n-Butylbenzene	ND	3.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
n-Propylbenzene	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
sec-Butylbenzene	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
Styrene	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
tert-Butylbenzene	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
trans-1,2-DCE	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
Trichlorofluoromethane	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
Vinyl chloride	ND	1.0		µg/L	1	9/7/2022 10:10:00 PM	R90843
Xylenes, Total	ND	1.5		µg/L	1	9/7/2022 10:10:00 PM	R90843
Surr: 1,2-Dichloroethane-d4	119	70-130		%Rec	1	9/7/2022 10:10:00 PM	R90843
Surr: 4-Bromofluorobenzene	88.6	70-130		%Rec	1	9/7/2022 10:10:00 PM	R90843
Surr: Dibromofluoromethane	115	70-130		%Rec	1	9/7/2022 10:10:00 PM	R90843
Surr: Toluene-d8	89.6	70-130		%Rec	1	9/7/2022 10:10:00 PM	R90843

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2209129**
22-Sep-22

Client: EA Engineering
Project: Sparton

Sample ID: **MB-A** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **A91088** RunNo: **91088**
Prep Date: Analysis Date: **9/15/2022** SeqNo: **3258293** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID: **LLLCS-A** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **A91088** RunNo: **91088**
Prep Date: Analysis Date: **9/15/2022** SeqNo: **3258294** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.0064	0.0060	0.006000	0	107	50	150			
Iron	0.023	0.020	0.02000	0	113	50	150			
Manganese	0.0022	0.0020	0.002000	0	108	50	150			

Sample ID: **MB-B** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **B91088** RunNo: **91088**
Prep Date: Analysis Date: **9/15/2022** SeqNo: **3258295** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID: **LCS-A** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **A91088** RunNo: **91088**
Prep Date: Analysis Date: **9/15/2022** SeqNo: **3258296** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.51	0.0060	0.5000	0	101	85	115			
Iron	0.51	0.020	0.5000	0	102	85	115			
Manganese	0.51	0.0020	0.5000	0	101	85	115			

Sample ID: **LLLCS-B** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **B91088** RunNo: **91088**
Prep Date: Analysis Date: **9/15/2022** SeqNo: **3258297** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.0073	0.0060	0.006000	0	121	50	150			
Iron	0.020	0.020	0.02000	0	102	50	150			
Manganese	0.0023	0.0020	0.002000	0	113	50	150			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2209129**
22-Sep-22

Client: EA Engineering
Project: Sparton

Sample ID: **2209129-004DMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **CW-1 Effluent** Batch ID: **B91088** RunNo: **91088**
Prep Date: Analysis Date: **9/15/2022** SeqNo: **3258353** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.50	0.0060	0.5000	0.003950	98.9	70	130			
Iron	0.50	0.020	0.5000	0	99.0	70	130			
Manganese	0.50	0.0020	0.5000	0	99.3	70	130			

Sample ID: **2209129-004DMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **CW-1 Effluent** Batch ID: **B91088** RunNo: **91088**
Prep Date: Analysis Date: **9/15/2022** SeqNo: **3258354** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.50	0.0060	0.5000	0.003950	99.1	70	130	0.129	20	
Iron	0.51	0.020	0.5000	0	102	70	130	3.40	20	
Manganese	0.50	0.0020	0.5000	0	101	70	130	1.71	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2209129**
22-Sep-22

Client: EA Engineering
Project: Sparton

Sample ID: **MB-69957** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **69957** RunNo: **90805**
Prep Date: **9/2/2022** Analysis Date: **9/3/2022** SeqNo: **3246191** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LCSLL-69957** SampType: **LCSLL** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC** Batch ID: **69957** RunNo: **90805**
Prep Date: **9/2/2022** Analysis Date: **9/3/2022** SeqNo: **3246192** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.0065	0.0060	0.006000	0	108	50	150			

Sample ID: **LCS-69957** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **69957** RunNo: **90805**
Prep Date: **9/2/2022** Analysis Date: **9/3/2022** SeqNo: **3246193** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.48	0.0060	0.5000	0	96.5	85	115			

Sample ID: **2209129-004CMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **CW-1 Effluent** Batch ID: **69957** RunNo: **90805**
Prep Date: **9/2/2022** Analysis Date: **9/3/2022** SeqNo: **3246212** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.50	0.0060	0.5000	0.004492	98.1	70	130			

Sample ID: **2209129-004CMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **CW-1 Effluent** Batch ID: **69957** RunNo: **90805**
Prep Date: **9/2/2022** Analysis Date: **9/3/2022** SeqNo: **3246213** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.49	0.0060	0.5000	0.004492	97.1	70	130	1.04	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2209129**
22-Sep-22

Client: EA Engineering
Project: Sparton

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R90843** RunNo: **90843**
Prep Date: Analysis Date: **9/7/2022** SeqNo: **3247778** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	103	70	130			
Toluene	20	1.0	20.00	0	100	70	130			
Chlorobenzene	21	1.0	20.00	0	103	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	89.2	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	99.3	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		106	70	130			
Surr: 4-Bromofluorobenzene	9.2		10.00		92.1	70	130			
Surr: Dibromofluoromethane	11		10.00		105	70	130			
Surr: Toluene-d8	9.2		10.00		91.7	70	130			

Sample ID: **MB** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R90843** RunNo: **90843**
Prep Date: Analysis Date: **9/7/2022** SeqNo: **3247779** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Estimated value
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ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2209129**
22-Sep-22

Client: EA Engineering
Project: Sparton

Sample ID: **MB**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R90843**	RunNo: **90843**			
Prep Date:	Analysis Date: **9/7/2022**	SeqNo: **3247779**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2209129**
22-Sep-22

Client: EA Engineering
Project: Sparton

Sample ID: **MB**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R90843**	RunNo: **90843**			
Prep Date:	Analysis Date: **9/7/2022**	SeqNo: **3247779**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	11		10.00		111	70	130			
Surr: 4-Bromofluorobenzene	9.0		10.00		90.4	70	130			
Surr: Dibromofluoromethane	11		10.00		108	70	130			
Surr: Toluene-d8	9.1		10.00		91.0	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2209129**
22-Sep-22

Client: EA Engineering
Project: Sparton

Sample ID: **mb-70004** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **70004** RunNo: **90964**
Prep Date: **9/7/2022** Analysis Date: **9/12/2022** SeqNo: **3253033** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	2.0		4.000		50.5	31.6	100			
Surr: 2,4,6-Tribromophenol	4.3		8.000		53.8	22	101			
Surr: 2-Fluorobiphenyl	1.9		4.000		47.0	26.7	90.1			
Surr: 4-Terphenyl-d14	3.6		4.000		91.0	72.3	147			

Sample ID: **lcs-70004** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **70004** RunNo: **90964**
Prep Date: **9/7/2022** Analysis Date: **9/12/2022** SeqNo: **3253034** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.68	0.10	2.000	0	34.0	20.2	48.4			
Surr: Nitrobenzene-d5	3.0		5.000		59.6	31.6	100			
Surr: 2,4,6-Tribromophenol	5.7		10.00		57.0	22	101			
Surr: 2-Fluorobiphenyl	2.9		5.000		58.4	26.7	90.1			
Surr: 4-Terphenyl-d14	5.4		5.000		108	72.3	147			

Sample ID: **lcsd-70004** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **70004** RunNo: **90964**
Prep Date: **9/7/2022** Analysis Date: **9/12/2022** SeqNo: **3253035** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.76	0.10	2.000	0	38.0	20.2	48.4	11.1	30.1	
Surr: Nitrobenzene-d5	3.5		5.000		70.4	31.6	100	0	0	
Surr: 2,4,6-Tribromophenol	6.2		10.00		62.2	22	101	0	0	
Surr: 2-Fluorobiphenyl	3.5		5.000		70.0	26.7	90.1	0	0	
Surr: 4-Terphenyl-d14	5.3		5.000		106	72.3	147	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: EA Engineering Work Order Number: 2209129 RcptNo: 1

Received By: Juan Rojas 9/2/2022 1:37:00 PM

Completed By: Sean Livingston 9/2/2022 1:41:46 PM

Reviewed By: 9-2-22

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☑ NA ☐
   Samples were collected the same day and chilled.
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 8
(<2 or >12 unless noted)
Adjusted? NO
Checked by: JN 9/2/22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	6.8	Good				
2	11.7	Good				

Chain-of-Custody Record

Client: EA Engineering, Science and Technology

Mailing Address: 320 Gold Ave # 1300
Albuquerque, NM 87102

Phone #: (505) 715-4154

email or Fax#: rmarley@eaest.com

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other

☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: Sparton

Project #: Bills to Sparton direct

Project Manager: Bob Marley

Sampler: Scott Miles

On Ice: ☒ Yes ☐ No

# of Coolers: 2

Cooler Temp (including CF): 6.7+0.1=6.8 (°C)

11.6+0.1=11.7

HEAL No. 2209129

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	VOCs 8260B	1,4 Dioxane 8270SIM	Total Chromium	Dissolved Metals (Cr, Fe, Mn)
9-2-22	1042	Aq	CW-2 Influent	3x VOA, 1x1L Amber, 1x125ml HDPE, 1x250ml HDPE	HCl, none, HNO3	001											X	X	X	X
	1033		CW-2 Effluent			002											X	X	X	X
	1227		CW-1 Influent			003											X	X	X	X
	1216		CW-1 Effluent			004											X	X	X	X
	1033		CW-2 Effluent Duplicate	1x1L Amber	none	005												X		
	1216		CW-1 Effluent Duplicate			006												X		
			Trip Blank	2x VOA	HCl	007											X			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
9-2-22	1337	Mike		CDO	9/2/22	13:37
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

October 19, 2022

Bob Marley
EA Engineering
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL:
FAX

RE: Sparton Coors Rd OrderNo.: 2210069

Dear Bob Marley:

Hall Environmental Analysis Laboratory received 7 sample(s) on 10/3/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2210069**
Date Reported: **10/19/2022**

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2210069-001 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Influent
Collection Date: 10/1/2022 3:33:00 PM
Received Date: 10/3/2022 4:33:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	10/6/2022 12:38:22 PM	A91612
Iron	ND	0.020		mg/L	1	10/6/2022 12:38:22 PM	A91612
Manganese	ND	0.0020		mg/L	1	10/6/2022 12:38:22 PM	A91612
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	10/11/2022 5:47:39 PM	70650
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	1.6	1.0		µg/L	1	10/12/2022 12:33:00 PM	70655
Surr: 2-Fluorobiphenyl	45.5	15-107		%Rec	1	10/12/2022 12:33:00 PM	70655
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
Toluene	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
Ethylbenzene	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
Naphthalene	ND	2.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
1-Methylnaphthalene	ND	4.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
2-Methylnaphthalene	ND	4.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
Acetone	ND	10		µg/L	1	10/10/2022 5:42:19 PM	R91679
Bromobenzene	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
Bromodichloromethane	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
Bromoform	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
Bromomethane	ND	3.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
2-Butanone	ND	10		µg/L	1	10/10/2022 5:42:19 PM	R91679
Carbon disulfide	ND	10		µg/L	1	10/10/2022 5:42:19 PM	R91679
Carbon Tetrachloride	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
Chlorobenzene	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
Chloroethane	ND	2.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
Chloroform	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
Chloromethane	ND	3.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
2-Chlorotoluene	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
4-Chlorotoluene	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
cis-1,2-DCE	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
Dibromochloromethane	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2210069-001 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Influent
Collection Date: 10/1/2022 3:33:00 PM
Received Date: 10/3/2022 4:33:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dibromomethane	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
1,1-Dichloroethane	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
1,1-Dichloroethene	15	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
1,2-Dichloropropane	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
1,3-Dichloropropane	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
2,2-Dichloropropane	ND	2.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
1,1-Dichloropropene	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
Hexachlorobutadiene	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
2-Hexanone	ND	10		µg/L	1	10/10/2022 5:42:19 PM	R91679
Isopropylbenzene	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
4-Isopropyltoluene	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
4-Methyl-2-pentanone	ND	10		µg/L	1	10/10/2022 5:42:19 PM	R91679
Methylene Chloride	ND	3.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
n-Butylbenzene	ND	3.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
n-Propylbenzene	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
sec-Butylbenzene	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
Styrene	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
tert-Butylbenzene	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
trans-1,2-DCE	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
Trichloroethene (TCE)	120	10		µg/L	10	10/11/2022 12:36:56 PM	R91713
Trichlorofluoromethane	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
Vinyl chloride	ND	1.0		µg/L	1	10/10/2022 5:42:19 PM	R91679
Xylenes, Total	ND	1.5		µg/L	1	10/10/2022 5:42:19 PM	R91679
Surr: 1,2-Dichloroethane-d4	81.8	70-130		%Rec	1	10/10/2022 5:42:19 PM	R91679
Surr: 4-Bromofluorobenzene	98.4	70-130		%Rec	1	10/10/2022 5:42:19 PM	R91679
Surr: Dibromofluoromethane	115	70-130		%Rec	1	10/10/2022 5:42:19 PM	R91679

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2210069-001 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Influent
Collection Date: 10/1/2022 3:33:00 PM
Received Date: 10/3/2022 4:33:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Surr: Toluene-d8	101	70-130		%Rec	1	10/10/2022 5:42:19 PM	R91679

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2210069-002 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Effluent
Collection Date: 10/1/2022 3:26:00 PM
Received Date: 10/3/2022 4:33:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	10/6/2022 12:42:30 PM	A91612
Iron	ND	0.020		mg/L	1	10/6/2022 12:42:30 PM	A91612
Manganese	ND	0.0020		mg/L	1	10/6/2022 12:42:30 PM	A91612
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	10/11/2022 5:49:16 PM	70650
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.4	1.0		µg/L	1	10/12/2022 1:18:00 PM	70655
Surr: 2-Fluorobiphenyl	68.5	15-107		%Rec	1	10/12/2022 1:18:00 PM	70655
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
Toluene	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
Ethylbenzene	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
Naphthalene	ND	2.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
1-Methylnaphthalene	ND	4.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
2-Methylnaphthalene	ND	4.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
Acetone	ND	10		µg/L	1	10/10/2022 6:10:50 PM	R91679
Bromobenzene	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
Bromodichloromethane	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
Bromoform	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
Bromomethane	ND	3.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
2-Butanone	ND	10		µg/L	1	10/10/2022 6:10:50 PM	R91679
Carbon disulfide	ND	10		µg/L	1	10/10/2022 6:10:50 PM	R91679
Carbon Tetrachloride	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
Chlorobenzene	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
Chloroethane	ND	2.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
Chloroform	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
Chloromethane	ND	3.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
2-Chlorotoluene	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
4-Chlorotoluene	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
cis-1,2-DCE	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
Dibromochloromethane	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2210069-002 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Effluent
Collection Date: 10/1/2022 3:26:00 PM
Received Date: 10/3/2022 4:33:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dibromomethane	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
1,1-Dichloroethane	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
1,1-Dichloroethene	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
1,2-Dichloropropane	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
1,3-Dichloropropane	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
2,2-Dichloropropane	ND	2.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
1,1-Dichloropropene	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
Hexachlorobutadiene	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
2-Hexanone	ND	10		µg/L	1	10/10/2022 6:10:50 PM	R91679
Isopropylbenzene	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
4-Isopropyltoluene	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
4-Methyl-2-pentanone	ND	10		µg/L	1	10/10/2022 6:10:50 PM	R91679
Methylene Chloride	ND	3.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
n-Butylbenzene	ND	3.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
n-Propylbenzene	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
sec-Butylbenzene	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
Styrene	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
tert-Butylbenzene	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
trans-1,2-DCE	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
Trichlorofluoromethane	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
Vinyl chloride	ND	1.0		µg/L	1	10/10/2022 6:10:50 PM	R91679
Xylenes, Total	ND	1.5		µg/L	1	10/10/2022 6:10:50 PM	R91679
Surr: 1,2-Dichloroethane-d4	117	70-130		%Rec	1	10/10/2022 6:10:50 PM	R91679
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	10/10/2022 6:10:50 PM	R91679
Surr: Dibromofluoromethane	116	70-130		%Rec	1	10/10/2022 6:10:50 PM	R91679

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2210069-002 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Effluent
Collection Date: 10/1/2022 3:26:00 PM
Received Date: 10/3/2022 4:33:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Surr: Toluene-d8	99.3	70-130		%Rec	1	10/10/2022 6:10:50 PM	R91679

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2210069-003 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Effluent Duplicate
Collection Date: 10/1/2022 3:31:00 PM
Received Date: 10/3/2022 4:33:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst: **DAM**	
1,4-Dioxane	1.8	1.0		µg/L	1	10/12/2022 2:04:00 PM	70655
Surr: 2-Fluorobiphenyl	49.5	15-107		%Rec	1	10/12/2022 2:04:00 PM	70655

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2210069-004 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Influent
Collection Date: 10/1/2022 4:42:00 PM
Received Date: 10/3/2022 4:33:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.042	0.0060		mg/L	1	10/6/2022 12:46:39 PM	A91612
Iron	ND	0.020		mg/L	1	10/6/2022 12:46:39 PM	A91612
Manganese	0.034	0.0020		mg/L	1	10/6/2022 12:46:39 PM	A91612
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.049	0.0060		mg/L	1	10/11/2022 5:50:51 PM	70650
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	1.9	1.0		µg/L	1	10/12/2022 2:51:00 PM	70655
Surr: 2-Fluorobiphenyl	49.0	15-107		%Rec	1	10/12/2022 2:51:00 PM	70655
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
Toluene	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
Ethylbenzene	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
Naphthalene	ND	2.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
1-Methylnaphthalene	ND	4.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
2-Methylnaphthalene	ND	4.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
Acetone	ND	10		µg/L	1	10/10/2022 6:39:26 PM	R91679
Bromobenzene	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
Bromodichloromethane	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
Bromoform	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
Bromomethane	ND	3.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
2-Butanone	ND	10		µg/L	1	10/10/2022 6:39:26 PM	R91679
Carbon disulfide	ND	10		µg/L	1	10/10/2022 6:39:26 PM	R91679
Carbon Tetrachloride	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
Chlorobenzene	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
Chloroethane	ND	2.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
Chloroform	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
Chloromethane	ND	3.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
2-Chlorotoluene	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
4-Chlorotoluene	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
cis-1,2-DCE	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
Dibromochloromethane	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2210069-004 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Influent
Collection Date: 10/1/2022 4:42:00 PM
Received Date: 10/3/2022 4:33:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dibromomethane	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
1,1-Dichloroethane	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
1,1-Dichloroethene	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
1,2-Dichloropropane	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
1,3-Dichloropropane	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
2,2-Dichloropropane	ND	2.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
1,1-Dichloropropene	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
Hexachlorobutadiene	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
2-Hexanone	ND	10		µg/L	1	10/10/2022 6:39:26 PM	R91679
Isopropylbenzene	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
4-Isopropyltoluene	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
4-Methyl-2-pentanone	ND	10		µg/L	1	10/10/2022 6:39:26 PM	R91679
Methylene Chloride	ND	3.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
n-Butylbenzene	ND	3.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
n-Propylbenzene	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
sec-Butylbenzene	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
Styrene	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
tert-Butylbenzene	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
trans-1,2-DCE	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
Trichloroethene (TCE)	5.4	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
Trichlorofluoromethane	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
Vinyl chloride	ND	1.0		µg/L	1	10/10/2022 6:39:26 PM	R91679
Xylenes, Total	ND	1.5		µg/L	1	10/10/2022 6:39:26 PM	R91679
Surr: 1,2-Dichloroethane-d4	115	70-130		%Rec	1	10/10/2022 6:39:26 PM	R91679
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	10/10/2022 6:39:26 PM	R91679
Surr: Dibromofluoromethane	119	70-130		%Rec	1	10/10/2022 6:39:26 PM	R91679

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2210069-004 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Influent
Collection Date: 10/1/2022 4:42:00 PM
Received Date: 10/3/2022 4:33:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Surr: Toluene-d8	100	70-130		%Rec	1	10/10/2022 6:39:26 PM	R91679

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2210069-005 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent
Collection Date: 10/1/2022 4:33:00 PM
Received Date: 10/3/2022 4:33:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.039	0.0060		mg/L	1	10/6/2022 12:57:27 PM	A91612
Iron	ND	0.020		mg/L	1	10/6/2022 12:57:27 PM	A91612
Manganese	0.027	0.0020		mg/L	1	10/6/2022 12:57:27 PM	A91612
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.050	0.0060		mg/L	1	10/11/2022 5:52:25 PM	70650
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.4	1.0		µg/L	1	10/12/2022 3:35:00 PM	70655
Surr: 2-Fluorobiphenyl	62.5	15-107		%Rec	1	10/12/2022 3:35:00 PM	70655
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
Toluene	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
Ethylbenzene	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
Naphthalene	ND	2.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
1-Methylnaphthalene	ND	4.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
2-Methylnaphthalene	ND	4.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
Acetone	ND	10		µg/L	1	10/10/2022 7:08:05 PM	R91679
Bromobenzene	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
Bromodichloromethane	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
Bromoform	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
Bromomethane	ND	3.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
2-Butanone	ND	10		µg/L	1	10/10/2022 7:08:05 PM	R91679
Carbon disulfide	ND	10		µg/L	1	10/10/2022 7:08:05 PM	R91679
Carbon Tetrachloride	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
Chlorobenzene	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
Chloroethane	ND	2.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
Chloroform	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
Chloromethane	ND	3.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
2-Chlorotoluene	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
4-Chlorotoluene	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
cis-1,2-DCE	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
Dibromochloromethane	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2210069-005 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent
Collection Date: 10/1/2022 4:33:00 PM
Received Date: 10/3/2022 4:33:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Dibromomethane	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
1,1-Dichloroethane	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
1,1-Dichloroethene	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
1,2-Dichloropropane	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
1,3-Dichloropropane	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
2,2-Dichloropropane	ND	2.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
1,1-Dichloropropene	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
Hexachlorobutadiene	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
2-Hexanone	ND	10		µg/L	1	10/10/2022 7:08:05 PM	R91679
Isopropylbenzene	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
4-Isopropyltoluene	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
4-Methyl-2-pentanone	ND	10		µg/L	1	10/10/2022 7:08:05 PM	R91679
Methylene Chloride	ND	3.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
n-Butylbenzene	ND	3.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
n-Propylbenzene	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
sec-Butylbenzene	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
Styrene	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
tert-Butylbenzene	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
trans-1,2-DCE	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
Trichlorofluoromethane	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
Vinyl chloride	ND	1.0		µg/L	1	10/10/2022 7:08:05 PM	R91679
Xylenes, Total	ND	1.5		µg/L	1	10/10/2022 7:08:05 PM	R91679
Surr: 1,2-Dichloroethane-d4	121	70-130		%Rec	1	10/10/2022 7:08:05 PM	R91679
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	10/10/2022 7:08:05 PM	R91679
Surr: Dibromofluoromethane	118	70-130		%Rec	1	10/10/2022 7:08:05 PM	R91679

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2210069-005 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent
Collection Date: 10/1/2022 4:33:00 PM
Received Date: 10/3/2022 4:33:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Surr: Toluene-d8	98.8	70-130		%Rec	1	10/10/2022 7:08:05 PM	R91679

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2210069-006 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent Duplicate
Collection Date: 10/1/2022 4:38:00 PM
Received Date: 10/3/2022 4:33:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst: **DAM**	
1,4-Dioxane	1.9	1.0		µg/L	1	10/12/2022 4:20:00 PM	70655
Surr: 2-Fluorobiphenyl	54.5	15-107		%Rec	1	10/12/2022 4:20:00 PM	70655

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton Coors Rd
Collection Date:
Lab ID: 2210069-007
Matrix: TRIP BLANK
Received Date: 10/3/2022 4:33:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
Toluene	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
Ethylbenzene	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
Naphthalene	ND	2.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
1-Methylnaphthalene	ND	4.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
2-Methylnaphthalene	ND	4.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
Acetone	ND	10		µg/L	1	10/10/2022 7:36:40 PM	R91679
Bromobenzene	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
Bromodichloromethane	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
Bromoform	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
Bromomethane	ND	3.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
2-Butanone	ND	10		µg/L	1	10/10/2022 7:36:40 PM	R91679
Carbon disulfide	ND	10		µg/L	1	10/10/2022 7:36:40 PM	R91679
Carbon Tetrachloride	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
Chlorobenzene	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
Chloroethane	ND	2.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
Chloroform	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
Chloromethane	ND	3.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
2-Chlorotoluene	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
4-Chlorotoluene	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
cis-1,2-DCE	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
Dibromochloromethane	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
Dibromomethane	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
1,1-Dichloroethane	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
1,1-Dichloroethene	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
1,2-Dichloropropane	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
1,3-Dichloropropane	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
2,2-Dichloropropane	ND	2.0		µg/L	1	10/10/2022 7:36:40 PM	R91679

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton Coors Rd
Collection Date:
Lab ID: 2210069-007
Matrix: TRIP BLANK
Received Date: 10/3/2022 4:33:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,1-Dichloropropene	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
Hexachlorobutadiene	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
2-Hexanone	ND	10		µg/L	1	10/10/2022 7:36:40 PM	R91679
Isopropylbenzene	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
4-Isopropyltoluene	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
4-Methyl-2-pentanone	ND	10		µg/L	1	10/10/2022 7:36:40 PM	R91679
Methylene Chloride	ND	3.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
n-Butylbenzene	ND	3.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
n-Propylbenzene	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
sec-Butylbenzene	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
Styrene	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
tert-Butylbenzene	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
trans-1,2-DCE	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
Trichlorofluoromethane	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
Vinyl chloride	ND	1.0		µg/L	1	10/10/2022 7:36:40 PM	R91679
Xylenes, Total	ND	1.5		µg/L	1	10/10/2022 7:36:40 PM	R91679
Surr: 1,2-Dichloroethane-d4	122	70-130		%Rec	1	10/10/2022 7:36:40 PM	R91679
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	10/10/2022 7:36:40 PM	R91679
Surr: Dibromofluoromethane	118	70-130		%Rec	1	10/10/2022 7:36:40 PM	R91679
Surr: Toluene-d8	102	70-130		%Rec	1	10/10/2022 7:36:40 PM	R91679

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2210069**
19-Oct-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **MB-A** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **A91612** RunNo: **91612**
Prep Date: Analysis Date: **10/6/2022** SeqNo: **3282797** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID: **LCSLL-A** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **A91612** RunNo: **91612**
Prep Date: Analysis Date: **10/6/2022** SeqNo: **3282798** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.0065	0.0060	0.006000	0	109	50	150			
Iron	ND	0.020	0.02000	0	81.3	50	150			
Manganese	ND	0.0020	0.002000	0	93.9	50	150			

Sample ID: **LCS-A** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **A91612** RunNo: **91612**
Prep Date: Analysis Date: **10/6/2022** SeqNo: **3282799** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.48	0.0060	0.5000	0	96.5	85	115			
Iron	0.48	0.020	0.5000	0	95.3	85	115			
Manganese	0.48	0.0020	0.5000	0	95.5	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2210069**
19-Oct-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **MB-70650** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **70650** RunNo: **91712**
Prep Date: **10/6/2022** Analysis Date: **10/11/2022** SeqNo: **3287878** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LCSLL-70650** SampType: **LCSLL** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC** Batch ID: **70650** RunNo: **91712**
Prep Date: **10/6/2022** Analysis Date: **10/11/2022** SeqNo: **3287879** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.0068	0.0060	0.006000	0	113	50	150			

Sample ID: **LCS-70650** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **70650** RunNo: **91712**
Prep Date: **10/6/2022** Analysis Date: **10/11/2022** SeqNo: **3287880** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.50	0.0060	0.5000	0	101	85	115			

Sample ID: **2210069-001CMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **CW-1 Influent** Batch ID: **70650** RunNo: **91712**
Prep Date: **10/6/2022** Analysis Date: **10/11/2022** SeqNo: **3287887** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.54	0.0060	0.5000	0.004146	106	70	130			

Sample ID: **2210069-001CMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **CW-1 Influent** Batch ID: **70650** RunNo: **91712**
Prep Date: **10/6/2022** Analysis Date: **10/11/2022** SeqNo: **3287888** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.53	0.0060	0.5000	0.004146	105	70	130	1.28	20	

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2210069**
19-Oct-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R91679** RunNo: **91679**
Prep Date: Analysis Date: **10/10/2022** SeqNo: **3285252** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	70	130			
Toluene	21	1.0	20.00	0	104	70	130			
Chlorobenzene	21	1.0	20.00	0	103	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	88.4	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	99.3	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	11		10.00		105	70	130			
Surr: Dibromofluoromethane	11		10.00		109	70	130			
Surr: Toluene-d8	10		10.00		100	70	130			

Sample ID: **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R91679** RunNo: **91679**
Prep Date: Analysis Date: **10/10/2022** SeqNo: **3285253** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	111	70	130			
Toluene	20	1.0	20.00	0	101	70	130			
Chlorobenzene	20	1.0	20.00	0	98.6	70	130			
1,1-Dichloroethene	17	1.0	20.00	0	86.8	70	130			
Trichloroethene (TCE)	21	1.0	20.00	0	104	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		106	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		97.9	70	130			
Surr: Dibromofluoromethane	12		10.00		118	70	130			
Surr: Toluene-d8	9.8		10.00		98.1	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R91679** RunNo: **91679**
Prep Date: Analysis Date: **10/10/2022** SeqNo: **3285288** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2210069**
19-Oct-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R91679**	RunNo: **91679**	
Prep Date:	Analysis Date: **10/10/2022**	SeqNo: **3285288**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2210069**
19-Oct-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R91679** RunNo: **91679**
Prep Date: Analysis Date: **10/10/2022** SeqNo: **3285288** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	11		10.00		109	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	11		10.00		110	70	130			
Surr: Toluene-d8	10		10.00		99.9	70	130			

Sample ID: **mb2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R91679** RunNo: **91679**
Prep Date: Analysis Date: **10/11/2022** SeqNo: **3285289** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2210069**
19-Oct-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb2**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R91679**	RunNo: **91679**	
Prep Date:	Analysis Date: **10/11/2022**	SeqNo: **3285289**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2210069**
19-Oct-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb2**		SampType: **MBLK**			TestCode: **EPA Method 8260B: VOLATILES**					
Client ID: **PBW**		Batch ID: **R91679**			RunNo: **91679**					
Prep Date:		Analysis Date: **10/11/2022**			SeqNo: **3285289**		Units: **µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	12		10.00		121	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	12		10.00		121	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2210069**
19-Oct-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb-70655** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **70655** RunNo: **91751**
Prep Date: **10/6/2022** Analysis Date: **10/12/2022** SeqNo: **3289326** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	2.5		4.000		62.5	15	108			
Surr: 2,4,6-Tribromophenol	5.9		8.000		73.5	15	112			
Surr: 2-Fluorobiphenyl	2.0		4.000		49.0	15	107			
Surr: 4-Terphenyl-d14	4.1		4.000		102	15	166			

Sample ID: **lcs-70655** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **70655** RunNo: **91751**
Prep Date: **10/6/2022** Analysis Date: **10/12/2022** SeqNo: **3289327** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.72	0.30	2.000	0	36.0	15	60.5			
Surr: Nitrobenzene-d5	3.8		5.000		75.6	15	108			
Surr: 2,4,6-Tribromophenol	7.3		10.00		73.4	15	112			
Surr: 2-Fluorobiphenyl	2.4		5.000		48.0	15	107			
Surr: 4-Terphenyl-d14	6.0		5.000		120	15	166			

Sample ID: **lcsd-70655** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **70655** RunNo: **91751**
Prep Date: **10/6/2022** Analysis Date: **10/12/2022** SeqNo: **3289328** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.72	0.30	2.000	0	36.0	15	60.5	0	29.7	
Surr: Nitrobenzene-d5	4.1		5.000		82.4	15	108	0	0	
Surr: 2,4,6-Tribromophenol	8.7		10.00		87.0	15	112	0	0	
Surr: 2-Fluorobiphenyl	3.2		5.000		64.4	15	107	0	0	
Surr: 4-Terphenyl-d14	6.0		5.000		119	15	166	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Estimated value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix interference		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: EA Engineering Work Order Number: 2210069 RcptNo: 1

Received By: **Joseph Alderette** 10/3/2022 4:33:00 PM

Completed By: **Sean Livingston** 10/4/2022 11:49:29 AM

Reviewed By: KPA 10.05.22

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 8 (<2 or >12 unless noted)
Adjusted? NO
Checked by: JM 10/5/22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.1	Good				
2	1.9	Good				

Chain-of-Custody Record

Client: Sparton Technologies Inc

EA Engineering, Science, and Technology, Inc., PBC

Mailing Address: 320 Gold Av SW #1300
Albuquerque, NM 87102

Phone #: 505-715-4154

email or Fax#: rmarley@eaest.com

QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)

Accreditation:
☐ NELAP ☐ Other_____
☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ **Rush** 72 Hours

Project Name:
Sparton Coors Rd

Project #: Bills to Sparton direct

Project Manager:
Bob Marley, EA Engineering

Sampler: Scott Miles

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.1 - 0 = 1.1°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2210069	VOCs, 8260B	1,4-Dioxane, 8270SIM	Total Chromium	Dissolved Metals (Cr, Fe, Mn)	Air Bubbles (Y or N)
10-1-22	1533	Water	CW-1 Influent	1x1L Amber, 3xVOA 1x HDPE 125ml 1 HDPE 250ml	none HNO3 HCl	001	X	X	X	X	
	1526	Water	CW-1 Effluent	↓	↓	002	X	X	X	X	
	1531	Water	CW-1 Effluent Duplicate	1x1L Amber	none	003		X			
	1642	Water	CW-2 Influent	1x1L Amber, 3xVOA 1x HDPE 125ml 1 HDPE 250ml	none HNO3 HCl	004	X	X	X	X	
	1633	Water	CW-2 Effluent	↓	↓	005	X	X	X	X	
	1638	Water	CW-2 Effluent Duplicate	1x1L Amber	none	006		X			
		Water	Trip Blank	2x VOA	HCl	007	X				

Date:	Time:	Relinquished by:	Received by:	Date	Time
		[signature]	[signature] CDO	10.3.22	16:33
Date:	Time:	Relinquished by:	Received by:	Date	Time

2nd Cooler temp 1.9 - 0 = 1.9°C [signature] 10.3.22

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

December 05, 2022

Bob Marley
EA Engineering
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL:
FAX:

RE: Sparton Coors Rd OrderNo.: 2211121

Dear Bob Marley:

Hall Environmental Analysis Laboratory received 7 sample(s) on 11/2/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2211121**
Date Reported: **12/5/2022**

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211121-001 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent
Collection Date: 11/2/2022 11:11:00 AM
Received Date: 11/2/2022 1:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.045	0.0060		mg/L	1	11/29/2022 4:25:28 PM	D92890
Iron	ND	0.020		mg/L	1	11/29/2022 4:25:28 PM	D92890
Manganese	0.030	0.0020		mg/L	1	11/29/2022 4:25:28 PM	D92890
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.038	0.0060		mg/L	1	11/15/2022 3:29:08 PM	71427
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.8	1.0		µg/L	1	11/10/2022 2:29:00 PM	71328
Surr: 2-Fluorobiphenyl	51.5	15-107		%Rec	1	11/10/2022 2:29:00 PM	71328
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
Toluene	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
Ethylbenzene	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
Naphthalene	ND	2.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
1-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
2-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
Acetone	ND	10		µg/L	1	11/8/2022 2:27:00 AM	R92372
Bromobenzene	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
Bromodichloromethane	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
Bromoform	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
Bromomethane	ND	3.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
2-Butanone	ND	10		µg/L	1	11/8/2022 2:27:00 AM	R92372
Carbon disulfide	ND	10		µg/L	1	11/8/2022 2:27:00 AM	R92372
Carbon Tetrachloride	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
Chlorobenzene	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
Chloroethane	ND	2.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
Chloroform	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
Chloromethane	ND	3.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
2-Chlorotoluene	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
4-Chlorotoluene	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
cis-1,2-DCE	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
Dibromochloromethane	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211121-001 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent
Collection Date: 11/2/2022 11:11:00 AM
Received Date: 11/2/2022 1:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dibromomethane	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
1,1-Dichloroethane	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
1,1-Dichloroethene	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
1,2-Dichloropropane	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
1,3-Dichloropropane	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
2,2-Dichloropropane	ND	2.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
1,1-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
Hexachlorobutadiene	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
2-Hexanone	ND	10		µg/L	1	11/8/2022 2:27:00 AM	R92372
Isopropylbenzene	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
4-Isopropyltoluene	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
4-Methyl-2-pentanone	ND	10		µg/L	1	11/8/2022 2:27:00 AM	R92372
Methylene Chloride	ND	3.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
n-Butylbenzene	ND	3.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
n-Propylbenzene	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
sec-Butylbenzene	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
Styrene	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
tert-Butylbenzene	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
trans-1,2-DCE	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
Trichlorofluoromethane	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
Vinyl chloride	ND	1.0		µg/L	1	11/8/2022 2:27:00 AM	R92372
Xylenes, Total	ND	1.5		µg/L	1	11/8/2022 2:27:00 AM	R92372
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%Rec	1	11/8/2022 2:27:00 AM	R92372
Surr: 4-Bromofluorobenzene	94.7	70-130		%Rec	1	11/8/2022 2:27:00 AM	R92372
Surr: Dibromofluoromethane	95.4	70-130		%Rec	1	11/8/2022 2:27:00 AM	R92372

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211121-001
Matrix: AQUEOUS
Client Sample ID: CW-2 Effluent
Collection Date: 11/2/2022 11:11:00 AM
Received Date: 11/2/2022 1:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Surr: Toluene-d8	91.5	70-130		%Rec	1	11/8/2022 2:27:00 AM	R92372

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211121-002 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Influent
Collection Date: 11/2/2022 11:26:00 AM
Received Date: 11/2/2022 1:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.042	0.0060		mg/L	1	11/29/2022 4:35:07 PM	D92890
Iron	ND	0.020		mg/L	1	11/29/2022 4:35:07 PM	D92890
Manganese	0.038	0.0020		mg/L	1	11/29/2022 4:35:07 PM	D92890
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.039	0.0060		mg/L	1	11/15/2022 3:33:47 PM	71427
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	1.7	1.0		µg/L	1	11/10/2022 3:12:00 PM	71328
Surr: 2-Fluorobiphenyl	33.5	15-107		%Rec	1	11/10/2022 3:12:00 PM	71328
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
Toluene	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
Ethylbenzene	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
Naphthalene	ND	2.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
1-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
2-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
Acetone	ND	10		µg/L	1	11/8/2022 2:50:00 AM	R92372
Bromobenzene	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
Bromodichloromethane	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
Bromoform	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
Bromomethane	ND	3.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
2-Butanone	ND	10		µg/L	1	11/8/2022 2:50:00 AM	R92372
Carbon disulfide	ND	10		µg/L	1	11/8/2022 2:50:00 AM	R92372
Carbon Tetrachloride	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
Chlorobenzene	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
Chloroethane	ND	2.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
Chloroform	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
Chloromethane	ND	3.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
2-Chlorotoluene	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
4-Chlorotoluene	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
cis-1,2-DCE	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
Dibromochloromethane	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211121-002 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Influent
Collection Date: 11/2/2022 11:26:00 AM
Received Date: 11/2/2022 1:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dibromomethane	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
1,1-Dichloroethane	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
1,1-Dichloroethene	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
1,2-Dichloropropane	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
1,3-Dichloropropane	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
2,2-Dichloropropane	ND	2.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
1,1-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
Hexachlorobutadiene	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
2-Hexanone	ND	10		µg/L	1	11/8/2022 2:50:00 AM	R92372
Isopropylbenzene	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
4-Isopropyltoluene	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
4-Methyl-2-pentanone	ND	10		µg/L	1	11/8/2022 2:50:00 AM	R92372
Methylene Chloride	ND	3.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
n-Butylbenzene	ND	3.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
n-Propylbenzene	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
sec-Butylbenzene	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
Styrene	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
tert-Butylbenzene	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
trans-1,2-DCE	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
Trichloroethene (TCE)	4.3	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
Trichlorofluoromethane	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
Vinyl chloride	ND	1.0		µg/L	1	11/8/2022 2:50:00 AM	R92372
Xylenes, Total	ND	1.5		µg/L	1	11/8/2022 2:50:00 AM	R92372
Surr: 1,2-Dichloroethane-d4	94.7	70-130		%Rec	1	11/8/2022 2:50:00 AM	R92372
Surr: 4-Bromofluorobenzene	94.4	70-130		%Rec	1	11/8/2022 2:50:00 AM	R92372
Surr: Dibromofluoromethane	95.0	70-130		%Rec	1	11/8/2022 2:50:00 AM	R92372

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211121-002 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Influent
Collection Date: 11/2/2022 11:26:00 AM
Received Date: 11/2/2022 1:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Surr: Toluene-d8	90.8	70-130		%Rec	1	11/8/2022 2:50:00 AM	R92372

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211121-003 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Effluent
Collection Date: 11/2/2022 12:31:00 PM
Received Date: 11/2/2022 1:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	11/29/2022 4:43:03 PM	D92890
Iron	ND	0.020		mg/L	1	11/29/2022 4:43:03 PM	D92890
Manganese	ND	0.0020		mg/L	1	11/29/2022 4:43:03 PM	D92890
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	11/15/2022 3:35:18 PM	71427
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	1.6	1.0		µg/L	1	11/10/2022 3:57:00 PM	71328
Surr: 2-Fluorobiphenyl	49.5	15-107		%Rec	1	11/10/2022 3:57:00 PM	71328
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
Toluene	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
Ethylbenzene	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
Naphthalene	ND	2.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
1-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
2-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
Acetone	ND	10		µg/L	1	11/8/2022 3:13:00 AM	R92372
Bromobenzene	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
Bromodichloromethane	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
Bromoform	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
Bromomethane	ND	3.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
2-Butanone	ND	10		µg/L	1	11/8/2022 3:13:00 AM	R92372
Carbon disulfide	ND	10		µg/L	1	11/8/2022 3:13:00 AM	R92372
Carbon Tetrachloride	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
Chlorobenzene	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
Chloroethane	ND	2.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
Chloroform	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
Chloromethane	ND	3.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
2-Chlorotoluene	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
4-Chlorotoluene	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
cis-1,2-DCE	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
Dibromochloromethane	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211121-003 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Effluent
Collection Date: 11/2/2022 12:31:00 PM
Received Date: 11/2/2022 1:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dibromomethane	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
1,1-Dichloroethane	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
1,1-Dichloroethene	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
1,2-Dichloropropane	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
1,3-Dichloropropane	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
2,2-Dichloropropane	ND	2.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
1,1-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
Hexachlorobutadiene	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
2-Hexanone	ND	10		µg/L	1	11/8/2022 3:13:00 AM	R92372
Isopropylbenzene	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
4-Isopropyltoluene	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
4-Methyl-2-pentanone	ND	10		µg/L	1	11/8/2022 3:13:00 AM	R92372
Methylene Chloride	ND	3.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
n-Butylbenzene	ND	3.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
n-Propylbenzene	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
sec-Butylbenzene	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
Styrene	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
tert-Butylbenzene	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
trans-1,2-DCE	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
Trichlorofluoromethane	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
Vinyl chloride	ND	1.0		µg/L	1	11/8/2022 3:13:00 AM	R92372
Xylenes, Total	ND	1.5		µg/L	1	11/8/2022 3:13:00 AM	R92372
Surr: 1,2-Dichloroethane-d4	93.1	70-130		%Rec	1	11/8/2022 3:13:00 AM	R92372
Surr: 4-Bromofluorobenzene	93.8	70-130		%Rec	1	11/8/2022 3:13:00 AM	R92372
Surr: Dibromofluoromethane	93.8	70-130		%Rec	1	11/8/2022 3:13:00 AM	R92372

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211121-003
Matrix: AQUEOUS
Client Sample ID: CW-1 Effluent
Collection Date: 11/2/2022 12:31:00 PM
Received Date: 11/2/2022 1:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Surr: Toluene-d8	89.3	70-130		%Rec	1	11/8/2022 3:13:00 AM	R92372

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211121-004 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Influent
Collection Date: 11/2/2022 12:38:00 PM
Received Date: 11/2/2022 1:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	11/29/2022 4:46:14 PM	D92890
Iron	ND	0.020		mg/L	1	11/29/2022 4:46:14 PM	D92890
Manganese	ND	0.0020		mg/L	1	11/29/2022 4:46:14 PM	D92890
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	11/17/2022 10:22:11 AM	71427
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.1	1.0		µg/L	1	11/10/2022 4:41:00 PM	71328
Surr: 2-Fluorobiphenyl	44.0	15-107		%Rec	1	11/10/2022 4:41:00 PM	71328
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
Toluene	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
Ethylbenzene	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
Naphthalene	ND	2.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
1-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
2-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
Acetone	ND	10		µg/L	1	11/8/2022 3:59:00 AM	R92372
Bromobenzene	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
Bromodichloromethane	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
Bromoform	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
Bromomethane	ND	3.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
2-Butanone	ND	10		µg/L	1	11/8/2022 3:59:00 AM	R92372
Carbon disulfide	ND	10		µg/L	1	11/8/2022 3:59:00 AM	R92372
Carbon Tetrachloride	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
Chlorobenzene	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
Chloroethane	ND	2.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
Chloroform	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
Chloromethane	ND	3.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
2-Chlorotoluene	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
4-Chlorotoluene	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
cis-1,2-DCE	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
Dibromochloromethane	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211121-004 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Influent
Collection Date: 11/2/2022 12:38:00 PM
Received Date: 11/2/2022 1:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dibromomethane	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
1,1-Dichloroethane	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
1,1-Dichloroethene	15	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
1,2-Dichloropropane	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
1,3-Dichloropropane	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
2,2-Dichloropropane	ND	2.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
1,1-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
Hexachlorobutadiene	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
2-Hexanone	ND	10		µg/L	1	11/8/2022 3:59:00 AM	R92372
Isopropylbenzene	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
4-Isopropyltoluene	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
4-Methyl-2-pentanone	ND	10		µg/L	1	11/8/2022 3:59:00 AM	R92372
Methylene Chloride	ND	3.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
n-Butylbenzene	ND	3.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
n-Propylbenzene	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
sec-Butylbenzene	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
Styrene	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
tert-Butylbenzene	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
trans-1,2-DCE	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
Trichloroethene (TCE)	120	10		µg/L	10	11/8/2022 3:36:00 AM	R92372
Trichlorofluoromethane	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
Vinyl chloride	ND	1.0		µg/L	1	11/8/2022 3:59:00 AM	R92372
Xylenes, Total	ND	1.5		µg/L	1	11/8/2022 3:59:00 AM	R92372
Surr: 1,2-Dichloroethane-d4	94.8	70-130		%Rec	1	11/8/2022 3:59:00 AM	R92372
Surr: 4-Bromofluorobenzene	93.7	70-130		%Rec	1	11/8/2022 3:59:00 AM	R92372
Surr: Dibromofluoromethane	96.0	70-130		%Rec	1	11/8/2022 3:59:00 AM	R92372

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211121-004
Matrix: AQUEOUS
Client Sample ID: CW-1 Influent
Collection Date: 11/2/2022 12:38:00 PM
Received Date: 11/2/2022 1:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Surr: Toluene-d8	95.0	70-130		%Rec	1	11/8/2022 3:59:00 AM	R92372

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211121-005
Matrix: AQUEOUS
Client Sample ID: CW-2 Effluent Duplicate
Collection Date: 11/2/2022 11:11:00 AM
Received Date: 11/2/2022 1:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst: **DAM**	
1,4-Dioxane	1.6	1.0		µg/L	1	11/10/2022 5:26:00 PM	71328
Surr: 2-Fluorobiphenyl	32.5	15-107		%Rec	1	11/10/2022 5:26:00 PM	71328

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211121-006
Matrix: AQUEOUS
Client Sample ID: CW-1 Effluent Duplicate
Collection Date: 11/2/2022 12:31:00 PM
Received Date: 11/2/2022 1:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst: **DAM**	
1,4-Dioxane	1.8	1.0		µg/L	1	11/10/2022 6:10:00 PM	71328
Surr: 2-Fluorobiphenyl	23.0	15-107		%Rec	1	11/10/2022 6:10:00 PM	71328

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211121-007
Matrix: TRIP BLANK
Client Sample ID: Trip Blank
Collection Date:
Received Date: 11/2/2022 1:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
Toluene	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
Ethylbenzene	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
Naphthalene	ND	2.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
1-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
2-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
Acetone	ND	10		µg/L	1	11/8/2022 4:22:00 AM	R92372
Bromobenzene	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
Bromodichloromethane	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
Bromoform	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
Bromomethane	ND	3.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
2-Butanone	ND	10		µg/L	1	11/8/2022 4:22:00 AM	R92372
Carbon disulfide	ND	10		µg/L	1	11/8/2022 4:22:00 AM	R92372
Carbon Tetrachloride	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
Chlorobenzene	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
Chloroethane	ND	2.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
Chloroform	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
Chloromethane	ND	3.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
2-Chlorotoluene	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
4-Chlorotoluene	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
cis-1,2-DCE	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
Dibromochloromethane	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
Dibromomethane	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
1,1-Dichloroethane	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
1,1-Dichloroethene	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
1,2-Dichloropropane	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
1,3-Dichloropropane	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
2,2-Dichloropropane	ND	2.0		µg/L	1	11/8/2022 4:22:00 AM	R92372

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211121-007
Matrix: TRIP BLANK
Client Sample ID: Trip Blank
Collection Date:
Received Date: 11/2/2022 1:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
Hexachlorobutadiene	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
2-Hexanone	ND	10		µg/L	1	11/8/2022 4:22:00 AM	R92372
Isopropylbenzene	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
4-Isopropyltoluene	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
4-Methyl-2-pentanone	ND	10		µg/L	1	11/8/2022 4:22:00 AM	R92372
Methylene Chloride	ND	3.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
n-Butylbenzene	ND	3.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
n-Propylbenzene	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
sec-Butylbenzene	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
Styrene	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
tert-Butylbenzene	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
trans-1,2-DCE	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
Trichlorofluoromethane	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
Vinyl chloride	ND	1.0		µg/L	1	11/8/2022 4:22:00 AM	R92372
Xylenes, Total	ND	1.5		µg/L	1	11/8/2022 4:22:00 AM	R92372
Surr: 1,2-Dichloroethane-d4	93.4	70-130		%Rec	1	11/8/2022 4:22:00 AM	R92372
Surr: 4-Bromofluorobenzene	92.9	70-130		%Rec	1	11/8/2022 4:22:00 AM	R92372
Surr: Dibromofluoromethane	97.1	70-130		%Rec	1	11/8/2022 4:22:00 AM	R92372
Surr: Toluene-d8	89.7	70-130		%Rec	1	11/8/2022 4:22:00 AM	R92372

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211121**
05-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **MB-D** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **D92890** RunNo: **92890**
Prep Date: Analysis Date: **11/29/2022** SeqNo: **3344309** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID: **LLLCS-D** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **D92890** RunNo: **92890**
Prep Date: Analysis Date: **11/29/2022** SeqNo: **3344310** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060	0.006000	0	77.8	50	150			
Iron	ND	0.020	0.02000	0	84.4	50	150			
Manganese	0.0021	0.0020	0.002000	0	103	50	150			

Sample ID: **LCS-D** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **D92890** RunNo: **92890**
Prep Date: Analysis Date: **11/29/2022** SeqNo: **3344314** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.49	0.0060	0.5000	0	97.7	85	115			
Iron	0.50	0.020	0.5000	0	99.8	85	115			
Manganese	0.51	0.0020	0.5000	0	103	85	115			

Sample ID: **2211121-001DMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **CW-2 Effluent** Batch ID: **D92890** RunNo: **92890**
Prep Date: Analysis Date: **11/29/2022** SeqNo: **3344421** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.54	0.0060	0.5000	0.04452	98.1	70	130			
Iron	0.50	0.020	0.5000	0	101	70	130			
Manganese	0.53	0.0020	0.5000	0.03048	100	70	130			

Sample ID: **2211121-001DMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **CW-2 Effluent** Batch ID: **D92890** RunNo: **92890**
Prep Date: Analysis Date: **11/29/2022** SeqNo: **3344422** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.52	0.0060	0.5000	0.04452	94.5	70	130	3.49	20	
Iron	0.50	0.020	0.5000	0	99.3	70	130	1.65	20	
Manganese	0.52	0.0020	0.5000	0.03048	97.9	70	130	2.27	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211121**
05-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **2211121-001CMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **CW-2 Effluent** Batch ID: **71427** RunNo: **92598**
Prep Date: **11/10/2022** Analysis Date: **11/15/2022** SeqNo: **3329935** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.48	0.0060	0.5000	0.03823	87.6	70	130			

Sample ID: **2211121-001CMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **CW-2 Effluent** Batch ID: **71427** RunNo: **92598**
Prep Date: **11/10/2022** Analysis Date: **11/15/2022** SeqNo: **3329936** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.49	0.0060	0.5000	0.03823	90.4	70	130	2.95	20	

Sample ID: **MB-71427** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **71427** RunNo: **92598**
Prep Date: **11/10/2022** Analysis Date: **11/15/2022** SeqNo: **3330320** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LCSLL-71427** SampType: **LCSLL** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC** Batch ID: **71427** RunNo: **92598**
Prep Date: **11/10/2022** Analysis Date: **11/15/2022** SeqNo: **3330321** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060	0.006000	0	78.3	50	150			

Sample ID: **LCS-71427** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **71427** RunNo: **92598**
Prep Date: **11/10/2022** Analysis Date: **11/15/2022** SeqNo: **3330322** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.52	0.0060	0.5000	0	105	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211121**
05-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R92372** RunNo: **92372**
Prep Date: Analysis Date: **11/7/2022** SeqNo: **3320905** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	97.5	70	130			
Toluene	20	1.0	20.00	0	102	70	130			
Chlorobenzene	21	1.0	20.00	0	107	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	88.3	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	95.0	70	130			
Surr: 1,2-Dichloroethane-d4	9.3		10.00		93.2	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		95.9	70	130			
Surr: Dibromofluoromethane	9.2		10.00		91.8	70	130			
Surr: Toluene-d8	9.1		10.00		90.7	70	130			

Sample ID: **100ng lcs 2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R92372** RunNo: **92372**
Prep Date: Analysis Date: **11/7/2022** SeqNo: **3320906** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	70	130			
Toluene	21	1.0	20.00	0	103	70	130			
Chlorobenzene	21	1.0	20.00	0	107	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	94.1	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	98.7	70	130			
Surr: 1,2-Dichloroethane-d4	9.9		10.00		98.7	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		96.8	70	130			
Surr: Dibromofluoromethane	9.8		10.00		97.8	70	130			
Surr: Toluene-d8	9.2		10.00		91.5	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R92372** RunNo: **92372**
Prep Date: Analysis Date: **11/7/2022** SeqNo: **3320907** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211121**
05-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R92372**	RunNo: **92372**	
Prep Date:	Analysis Date: **11/7/2022**	SeqNo: **3320907**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211121**
05-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R92372** RunNo: **92372**
Prep Date: Analysis Date: **11/7/2022** SeqNo: **3320907** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.6		10.00		96.2	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		95.2	70	130			
Surr: Dibromofluoromethane	9.5		10.00		95.2	70	130			
Surr: Toluene-d8	9.0		10.00		90.4	70	130			

Sample ID: **mb 2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R92372** RunNo: **92372**
Prep Date: Analysis Date: **11/7/2022** SeqNo: **3320908** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211121**
05-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb 2**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R92372**	RunNo: **92372**	
Prep Date:	Analysis Date: **11/7/2022**	SeqNo: **3320908**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211121**
05-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb 2**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R92372**	RunNo: **92372**			
Prep Date:	Analysis Date: **11/7/2022**	SeqNo: **3320908**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		95.3	70	130			
Surr: Dibromofluoromethane	9.9		10.00		99.4	70	130			
Surr: Toluene-d8	9.2		10.00		91.5	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211121**
05-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb-71328** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **71328** RunNo: **92499**
Prep Date: **11/7/2022** Analysis Date: **11/10/2022** SeqNo: **3324796** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	0.62		4.000		15.5	15	108			
Surr: 2,4,6-Tribromophenol	4.0		8.000		49.8	15	112			
Surr: 2-Fluorobiphenyl	0.38		4.000		9.50	15	107			S
Surr: 4-Terphenyl-d14	3.6		4.000		89.5	15	166			

Sample ID: **lcs-71328** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **71328** RunNo: **92499**
Prep Date: **11/7/2022** Analysis Date: **11/10/2022** SeqNo: **3324797** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.58	0.10	2.000	0	29.0	15	60.5			
Surr: Nitrobenzene-d5	3.0		5.000		60.0	15	108			
Surr: 2,4,6-Tribromophenol	6.1		10.00		60.8	15	112			
Surr: 2-Fluorobiphenyl	2.2		5.000		44.0	15	107			
Surr: 4-Terphenyl-d14	5.6		5.000		112	15	166			

Sample ID: **lcsd-71328** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **71328** RunNo: **92499**
Prep Date: **11/7/2022** Analysis Date: **11/10/2022** SeqNo: **3324798** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.76	0.10	2.000	0	38.0	15	60.5	26.9	29.7	
Surr: Nitrobenzene-d5	3.8		5.000		75.2	15	108	0	0	
Surr: 2,4,6-Tribromophenol	6.9		10.00		68.6	15	112	0	0	
Surr: 2-Fluorobiphenyl	2.8		5.000		55.6	15	107	0	0	
Surr: 4-Terphenyl-d14	5.8		5.000		116	15	166	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **EA Engineering** Work Order Number: **2211121** RcptNo: 1

Received By: **Juan Rojas** **11/2/2022 1:05:00 PM**

Completed By: **Desiree Dominguez** **11/2/2022 2:31:44 PM**

Reviewed By: JM 11/2/22

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☑ NA ☐
   Samples were collected the same day and chilled.
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 8 (<2 or >12 unless noted)
Adjusted? NO
Checked by: KPG 11-02-22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	13.3	Good				
2	8.9	Good				

Chain-of-Custody Record

Client: Sparton Technologies
EA Engineering, Science and Technology
Mailing Address: 320 Gold Ave SW # 1300
Albuquerque, NM 87102
Phone #: 505 715-4154
email or Fax#: r marley@eaest.com
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: Sparton Coors Rd
Project #: Bills to Sparton Direct
Project Manager: Bob Marley
Sampler: Scott Miles
On Ice: ☒ Yes ☐ No
# of Coolers: 2
Cooler Temp (Including CF): 13.6-0.3=13.3 (°C)
9.2-0.3=8.9

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2211121	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	VOCs 8260B	1,4 Dioxane 8270SIM	Total Chromium	Dissolved Metals (Ca, Fe, Mn)		
11-2-22	1111	Aq	CW-2 Effluent	3x VOA 1x1L Amber 1x250 mL HDPE 1x125 mL HDPE	HCl, none HNO3	-001											X	X	X	X		
	1126		CW-2 Influent			-002											X	X	X	X		
	1231		CW-1 Effluent			-003											X	X	X	X		
	1238		CW-1 Influent			-004											X	X	X	X		
	1111		CW-2 Effluent Duplicate	1x1L amber	none	-005												X				
	1231		CW-1 Effluent Duplicate			-006												X				
			Trip Blank	2x VOA	HCl	-007											X					

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
11-2-22	1305			COC	11/2/22	13:05
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

December 14, 2022

Bob Marley
EA Engineering
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL:
FAX

RE: Sparton Coors Rd OrderNo.: 2211299

Dear Bob Marley:

Hall Environmental Analysis Laboratory received 12 sample(s) on 11/4/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2211299**
Date Reported: **12/14/2022**

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211299-001 **Matrix:** AQUEOUS

Client Sample ID: MW-71R
Collection Date: 11/2/2022 5:29:00 PM
Received Date: 11/4/2022 4:21:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	12/12/2022 10:27:08 AM	A93207
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	11/17/2022 3:38:17 PM	71454
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	11/11/2022 3:04:00 AM	71355
Surr: 2-Fluorobiphenyl	41.0	15-107		%Rec	1	11/11/2022 3:04:00 AM	71355
EPA METHOD 8260B: VOLATILES						Analyst:	**RAA**
Benzene	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
Toluene	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
Ethylbenzene	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
Naphthalene	ND	2.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
1-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
2-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
Acetone	ND	10		µg/L	1	11/8/2022 6:57:27 PM	R92431
Bromobenzene	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
Bromodichloromethane	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
Bromoform	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
Bromomethane	ND	3.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
2-Butanone	ND	10		µg/L	1	11/8/2022 6:57:27 PM	R92431
Carbon disulfide	ND	10		µg/L	1	11/8/2022 6:57:27 PM	R92431
Carbon Tetrachloride	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
Chlorobenzene	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
Chloroethane	ND	2.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
Chloroform	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
Chloromethane	ND	3.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
2-Chlorotoluene	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
4-Chlorotoluene	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
cis-1,2-DCE	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
Dibromochloromethane	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
Dibromomethane	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211299-001 **Matrix:** AQUEOUS

Client Sample ID: MW-71R
Collection Date: 11/2/2022 5:29:00 PM
Received Date: 11/4/2022 4:21:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
1,1-Dichloroethane	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
1,1-Dichloroethene	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
1,2-Dichloropropane	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
1,3-Dichloropropane	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
2,2-Dichloropropane	ND	2.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
1,1-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
Hexachlorobutadiene	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
2-Hexanone	ND	10		µg/L	1	11/8/2022 6:57:27 PM	R92431
Isopropylbenzene	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
4-Isopropyltoluene	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
4-Methyl-2-pentanone	ND	10		µg/L	1	11/8/2022 6:57:27 PM	R92431
Methylene Chloride	ND	3.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
n-Butylbenzene	ND	3.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
n-Propylbenzene	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
sec-Butylbenzene	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
Styrene	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
tert-Butylbenzene	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
trans-1,2-DCE	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
Trichloroethene (TCE)	6.9	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
Trichlorofluoromethane	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
Vinyl chloride	ND	1.0		µg/L	1	11/8/2022 6:57:27 PM	R92431
Xylenes, Total	ND	1.5		µg/L	1	11/8/2022 6:57:27 PM	R92431
Surr: 1,2-Dichloroethane-d4	105	70-130		%Rec	1	11/8/2022 6:57:27 PM	R92431
Surr: 4-Bromofluorobenzene	99.1	70-130		%Rec	1	11/8/2022 6:57:27 PM	R92431
Surr: Dibromofluoromethane	104	70-130		%Rec	1	11/8/2022 6:57:27 PM	R92431
Surr: Toluene-d8	105	70-130		%Rec	1	11/8/2022 6:57:27 PM	R92431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211299-002 **Matrix:** AQUEOUS

Client Sample ID: MW-71R Duplicate
Collection Date: 11/2/2022 5:29:00 PM
Received Date: 11/4/2022 4:21:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	12/12/2022 10:31:39 AM	A93207
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	11/17/2022 3:45:54 PM	71455
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	11/11/2022 3:47:00 AM	71355
Surr: 2-Fluorobiphenyl	58.5	15-107		%Rec	1	11/11/2022 3:47:00 AM	71355
EPA METHOD 8260B: VOLATILES						Analyst:	**RAA**
Benzene	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
Toluene	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
Ethylbenzene	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
Naphthalene	ND	2.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
1-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
2-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
Acetone	ND	10		µg/L	1	11/8/2022 7:24:34 PM	R92431
Bromobenzene	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
Bromodichloromethane	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
Bromoform	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
Bromomethane	ND	3.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
2-Butanone	ND	10		µg/L	1	11/8/2022 7:24:34 PM	R92431
Carbon disulfide	ND	10		µg/L	1	11/8/2022 7:24:34 PM	R92431
Carbon Tetrachloride	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
Chlorobenzene	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
Chloroethane	ND	2.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
Chloroform	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
Chloromethane	ND	3.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
2-Chlorotoluene	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
4-Chlorotoluene	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
cis-1,2-DCE	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
Dibromochloromethane	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
Dibromomethane	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
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ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211299-002 **Matrix:** AQUEOUS

Client Sample ID: MW-71R Duplicate
Collection Date: 11/2/2022 5:29:00 PM
Received Date: 11/4/2022 4:21:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
1,1-Dichloroethane	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
1,1-Dichloroethene	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
1,2-Dichloropropane	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
1,3-Dichloropropane	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
2,2-Dichloropropane	ND	2.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
1,1-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
Hexachlorobutadiene	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
2-Hexanone	ND	10		µg/L	1	11/8/2022 7:24:34 PM	R92431
Isopropylbenzene	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
4-Isopropyltoluene	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
4-Methyl-2-pentanone	ND	10		µg/L	1	11/8/2022 7:24:34 PM	R92431
Methylene Chloride	ND	3.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
n-Butylbenzene	ND	3.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
n-Propylbenzene	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
sec-Butylbenzene	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
Styrene	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
tert-Butylbenzene	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
trans-1,2-DCE	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
Trichloroethene (TCE)	6.0	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
Trichlorofluoromethane	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
Vinyl chloride	ND	1.0		µg/L	1	11/8/2022 7:24:34 PM	R92431
Xylenes, Total	ND	1.5		µg/L	1	11/8/2022 7:24:34 PM	R92431
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%Rec	1	11/8/2022 7:24:34 PM	R92431
Surr: 4-Bromofluorobenzene	99.8	70-130		%Rec	1	11/8/2022 7:24:34 PM	R92431
Surr: Dibromofluoromethane	93.4	70-130		%Rec	1	11/8/2022 7:24:34 PM	R92431
Surr: Toluene-d8	107	70-130		%Rec	1	11/8/2022 7:24:34 PM	R92431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: MW-64
Project: Sparton Coors Rd
Collection Date: 11/3/2022 11:28:00 AM
Lab ID: 2211299-003
Matrix: AQUEOUS
Received Date: 11/4/2022 4:21:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	12/12/2022 10:33:14 AM	A93207
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	11/17/2022 3:50:41 PM	71455
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	11/11/2022 4:29:00 AM	71355
Surr: 2-Fluorobiphenyl	52.0	15-107		%Rec	1	11/11/2022 4:29:00 AM	71355
EPA METHOD 8260B: VOLATILES						Analyst:	**RAA**
Benzene	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
Toluene	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
Ethylbenzene	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
Naphthalene	ND	2.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
1-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
2-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
Acetone	ND	10		µg/L	1	11/8/2022 7:51:31 PM	R92431
Bromobenzene	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
Bromodichloromethane	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
Bromoform	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
Bromomethane	ND	3.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
2-Butanone	ND	10		µg/L	1	11/8/2022 7:51:31 PM	R92431
Carbon disulfide	ND	10		µg/L	1	11/8/2022 7:51:31 PM	R92431
Carbon Tetrachloride	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
Chlorobenzene	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
Chloroethane	ND	2.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
Chloroform	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
Chloromethane	ND	3.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
2-Chlorotoluene	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
4-Chlorotoluene	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
cis-1,2-DCE	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
Dibromochloromethane	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
Dibromomethane	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211299-003 **Matrix:** AQUEOUS

Client Sample ID: MW-64
Collection Date: 11/3/2022 11:28:00 AM
Received Date: 11/4/2022 4:21:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
1,1-Dichloroethane	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
1,1-Dichloroethene	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
1,2-Dichloropropane	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
1,3-Dichloropropane	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
2,2-Dichloropropane	ND	2.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
1,1-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
Hexachlorobutadiene	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
2-Hexanone	ND	10		µg/L	1	11/8/2022 7:51:31 PM	R92431
Isopropylbenzene	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
4-Isopropyltoluene	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
4-Methyl-2-pentanone	ND	10		µg/L	1	11/8/2022 7:51:31 PM	R92431
Methylene Chloride	ND	3.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
n-Butylbenzene	ND	3.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
n-Propylbenzene	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
sec-Butylbenzene	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
Styrene	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
tert-Butylbenzene	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
trans-1,2-DCE	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
Trichlorofluoromethane	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
Vinyl chloride	ND	1.0		µg/L	1	11/8/2022 7:51:31 PM	R92431
Xylenes, Total	ND	1.5		µg/L	1	11/8/2022 7:51:31 PM	R92431
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	11/8/2022 7:51:31 PM	R92431
Surr: 4-Bromofluorobenzene	107	70-130		%Rec	1	11/8/2022 7:51:31 PM	R92431
Surr: Dibromofluoromethane	97.5	70-130		%Rec	1	11/8/2022 7:51:31 PM	R92431
Surr: Toluene-d8	101	70-130		%Rec	1	11/8/2022 7:51:31 PM	R92431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211299-004 **Matrix:** AQUEOUS

Client Sample ID: MW-66
Collection Date: 11/3/2022 2:51:00 PM
Received Date: 11/4/2022 4:21:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	12/12/2022 10:34:49 AM	A93207
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	11/17/2022 3:52:17 PM	71455
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	11/11/2022 5:12:00 AM	71355
Surr: 2-Fluorobiphenyl	50.0	15-107		%Rec	1	11/11/2022 5:12:00 AM	71355
EPA METHOD 8260B: VOLATILES						Analyst:	**RAA**
Benzene	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
Toluene	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
Ethylbenzene	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
Naphthalene	ND	2.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
1-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
2-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
Acetone	ND	10		µg/L	1	11/8/2022 8:18:21 PM	R92431
Bromobenzene	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
Bromodichloromethane	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
Bromoform	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
Bromomethane	ND	3.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
2-Butanone	ND	10		µg/L	1	11/8/2022 8:18:21 PM	R92431
Carbon disulfide	ND	10		µg/L	1	11/8/2022 8:18:21 PM	R92431
Carbon Tetrachloride	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
Chlorobenzene	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
Chloroethane	ND	2.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
Chloroform	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
Chloromethane	ND	3.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
2-Chlorotoluene	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
4-Chlorotoluene	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
cis-1,2-DCE	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
Dibromochloromethane	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
Dibromomethane	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211299-004 **Matrix:** AQUEOUS

Client Sample ID: MW-66
Collection Date: 11/3/2022 2:51:00 PM
Received Date: 11/4/2022 4:21:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
1,1-Dichloroethane	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
1,1-Dichloroethene	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
1,2-Dichloropropane	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
1,3-Dichloropropane	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
2,2-Dichloropropane	ND	2.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
1,1-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
Hexachlorobutadiene	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
2-Hexanone	ND	10		µg/L	1	11/8/2022 8:18:21 PM	R92431
Isopropylbenzene	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
4-Isopropyltoluene	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
4-Methyl-2-pentanone	ND	10		µg/L	1	11/8/2022 8:18:21 PM	R92431
Methylene Chloride	ND	3.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
n-Butylbenzene	ND	3.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
n-Propylbenzene	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
sec-Butylbenzene	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
Styrene	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
tert-Butylbenzene	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
trans-1,2-DCE	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
Trichlorofluoromethane	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
Vinyl chloride	ND	1.0		µg/L	1	11/8/2022 8:18:21 PM	R92431
Xylenes, Total	ND	1.5		µg/L	1	11/8/2022 8:18:21 PM	R92431
Surr: 1,2-Dichloroethane-d4	90.4	70-130		%Rec	1	11/8/2022 8:18:21 PM	R92431
Surr: 4-Bromofluorobenzene	99.8	70-130		%Rec	1	11/8/2022 8:18:21 PM	R92431
Surr: Dibromofluoromethane	98.6	70-130		%Rec	1	11/8/2022 8:18:21 PM	R92431
Surr: Toluene-d8	107	70-130		%Rec	1	11/8/2022 8:18:21 PM	R92431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211299-005 **Matrix:** AQUEOUS

Client Sample ID: MW-57D
Collection Date: 11/3/2022 3:55:00 PM
Received Date: 11/4/2022 4:21:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	12/12/2022 10:36:24 AM	A93207
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	11/17/2022 3:53:44 PM	71455
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	11/11/2022 5:54:00 AM	71355
Surr: 2-Fluorobiphenyl	40.5	15-107		%Rec	1	11/11/2022 5:54:00 AM	71355
EPA METHOD 8260B: VOLATILES						Analyst:	**RAA**
Benzene	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
Toluene	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
Ethylbenzene	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
Naphthalene	ND	2.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
1-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
2-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
Acetone	ND	10		µg/L	1	11/8/2022 8:45:21 PM	R92431
Bromobenzene	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
Bromodichloromethane	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
Bromoform	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
Bromomethane	ND	3.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
2-Butanone	ND	10		µg/L	1	11/8/2022 8:45:21 PM	R92431
Carbon disulfide	ND	10		µg/L	1	11/8/2022 8:45:21 PM	R92431
Carbon Tetrachloride	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
Chlorobenzene	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
Chloroethane	ND	2.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
Chloroform	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
Chloromethane	ND	3.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
2-Chlorotoluene	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
4-Chlorotoluene	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
cis-1,2-DCE	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
Dibromochloromethane	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
Dibromomethane	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211299-005 **Matrix:** AQUEOUS

Client Sample ID: MW-57D
Collection Date: 11/3/2022 3:55:00 PM
Received Date: 11/4/2022 4:21:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
1,1-Dichloroethane	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
1,1-Dichloroethene	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
1,2-Dichloropropane	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
1,3-Dichloropropane	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
2,2-Dichloropropane	ND	2.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
1,1-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
Hexachlorobutadiene	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
2-Hexanone	ND	10		µg/L	1	11/8/2022 8:45:21 PM	R92431
Isopropylbenzene	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
4-Isopropyltoluene	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
4-Methyl-2-pentanone	ND	10		µg/L	1	11/8/2022 8:45:21 PM	R92431
Methylene Chloride	ND	3.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
n-Butylbenzene	ND	3.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
n-Propylbenzene	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
sec-Butylbenzene	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
Styrene	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
tert-Butylbenzene	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
trans-1,2-DCE	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
Trichlorofluoromethane	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
Vinyl chloride	ND	1.0		µg/L	1	11/8/2022 8:45:21 PM	R92431
Xylenes, Total	ND	1.5		µg/L	1	11/8/2022 8:45:21 PM	R92431
Surr: 1,2-Dichloroethane-d4	103	70-130		%Rec	1	11/8/2022 8:45:21 PM	R92431
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	11/8/2022 8:45:21 PM	R92431
Surr: Dibromofluoromethane	104	70-130		%Rec	1	11/8/2022 8:45:21 PM	R92431
Surr: Toluene-d8	104	70-130		%Rec	1	11/8/2022 8:45:21 PM	R92431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211299-006 **Matrix:** AQUEOUS

Client Sample ID: MW-78
Collection Date: 11/3/2022 5:33:00 PM
Received Date: 11/4/2022 4:21:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.037	0.0060		mg/L	1	12/12/2022 10:37:51 AM	A93207
Iron	ND	0.020		mg/L	1	12/12/2022 10:37:51 AM	A93207
Manganese	ND	0.0020		mg/L	1	12/12/2022 10:37:51 AM	A93207
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.2	1.0		µg/L	1	11/11/2022 6:37:00 AM	71355
Surr: 2-Fluorobiphenyl	64.5	15-107		%Rec	1	11/11/2022 6:37:00 AM	71355
EPA METHOD 8260B: VOLATILES						Analyst:	**RAA**
Benzene	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
Toluene	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
Ethylbenzene	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
Naphthalene	ND	2.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
1-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
2-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
Acetone	ND	10		µg/L	1	11/8/2022 9:12:23 PM	R92431
Bromobenzene	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
Bromodichloromethane	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
Bromoform	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
Bromomethane	ND	3.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
2-Butanone	ND	10		µg/L	1	11/8/2022 9:12:23 PM	R92431
Carbon disulfide	ND	10		µg/L	1	11/8/2022 9:12:23 PM	R92431
Carbon Tetrachloride	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
Chlorobenzene	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
Chloroethane	ND	2.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
Chloroform	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
Chloromethane	ND	3.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
2-Chlorotoluene	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
4-Chlorotoluene	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
cis-1,2-DCE	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
Dibromochloromethane	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
Dibromomethane	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211299-006 **Matrix:** AQUEOUS

Client Sample ID: MW-78
Collection Date: 11/3/2022 5:33:00 PM
Received Date: 11/4/2022 4:21:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
1,1-Dichloroethane	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
1,1-Dichloroethene	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
1,2-Dichloropropane	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
1,3-Dichloropropane	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
2,2-Dichloropropane	ND	2.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
1,1-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
Hexachlorobutadiene	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
2-Hexanone	ND	10		µg/L	1	11/8/2022 9:12:23 PM	R92431
Isopropylbenzene	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
4-Isopropyltoluene	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
4-Methyl-2-pentanone	ND	10		µg/L	1	11/8/2022 9:12:23 PM	R92431
Methylene Chloride	ND	3.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
n-Butylbenzene	ND	3.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
n-Propylbenzene	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
sec-Butylbenzene	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
Styrene	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
tert-Butylbenzene	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
trans-1,2-DCE	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
Trichlorofluoromethane	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
Vinyl chloride	ND	1.0		µg/L	1	11/8/2022 9:12:23 PM	R92431
Xylenes, Total	ND	1.5		µg/L	1	11/8/2022 9:12:23 PM	R92431
Surr: 1,2-Dichloroethane-d4	87.5	70-130		%Rec	1	11/8/2022 9:12:23 PM	R92431
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	11/8/2022 9:12:23 PM	R92431
Surr: Dibromofluoromethane	98.3	70-130		%Rec	1	11/8/2022 9:12:23 PM	R92431
Surr: Toluene-d8	110	70-130		%Rec	1	11/8/2022 9:12:23 PM	R92431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211299-007 **Matrix:** AQUEOUS

Client Sample ID: MW-30
Collection Date: 11/3/2022 3:56:00 PM
Received Date: 11/4/2022 4:21:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	12/12/2022 10:47:36 AM	A93207
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	11/17/2022 3:56:56 PM	71455
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	11/11/2022 7:19:00 AM	71355
Surr: 2-Fluorobiphenyl	57.0	15-107		%Rec	1	11/11/2022 7:19:00 AM	71355
EPA METHOD 8260B: VOLATILES						Analyst:	**RAA**
Benzene	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
Toluene	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
Ethylbenzene	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
Naphthalene	ND	2.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
1-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
2-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
Acetone	ND	10		µg/L	1	11/8/2022 9:39:22 PM	R92431
Bromobenzene	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
Bromodichloromethane	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
Bromoform	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
Bromomethane	ND	3.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
2-Butanone	ND	10		µg/L	1	11/8/2022 9:39:22 PM	R92431
Carbon disulfide	ND	10		µg/L	1	11/8/2022 9:39:22 PM	R92431
Carbon Tetrachloride	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
Chlorobenzene	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
Chloroethane	ND	2.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
Chloroform	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
Chloromethane	ND	3.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
2-Chlorotoluene	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
4-Chlorotoluene	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
cis-1,2-DCE	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
Dibromochloromethane	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
Dibromomethane	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211299-007 **Matrix:** AQUEOUS

Client Sample ID: MW-30
Collection Date: 11/3/2022 3:56:00 PM
Received Date: 11/4/2022 4:21:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
1,1-Dichloroethane	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
1,1-Dichloroethene	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
1,2-Dichloropropane	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
1,3-Dichloropropane	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
2,2-Dichloropropane	ND	2.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
1,1-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
Hexachlorobutadiene	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
2-Hexanone	ND	10		µg/L	1	11/8/2022 9:39:22 PM	R92431
Isopropylbenzene	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
4-Isopropyltoluene	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
4-Methyl-2-pentanone	ND	10		µg/L	1	11/8/2022 9:39:22 PM	R92431
Methylene Chloride	ND	3.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
n-Butylbenzene	ND	3.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
n-Propylbenzene	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
sec-Butylbenzene	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
Styrene	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
tert-Butylbenzene	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
trans-1,2-DCE	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
Trichloroethene (TCE)	1.6	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
Trichlorofluoromethane	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
Vinyl chloride	ND	1.0		µg/L	1	11/8/2022 9:39:22 PM	R92431
Xylenes, Total	ND	1.5		µg/L	1	11/8/2022 9:39:22 PM	R92431
Surr: 1,2-Dichloroethane-d4	96.7	70-130		%Rec	1	11/8/2022 9:39:22 PM	R92431
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	11/8/2022 9:39:22 PM	R92431
Surr: Dibromofluoromethane	101	70-130		%Rec	1	11/8/2022 9:39:22 PM	R92431
Surr: Toluene-d8	105	70-130		%Rec	1	11/8/2022 9:39:22 PM	R92431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211299-008 **Matrix:** AQUEOUS

Client Sample ID: MW-47R
Collection Date: 11/4/2022 10:21:00 AM
Received Date: 11/4/2022 4:21:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	12/12/2022 10:50:48 AM	A93207
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	11/17/2022 3:58:27 PM	71455
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	11/16/2022 12:10:00 AM	71355
Surr: 2-Fluorobiphenyl	51.0	15-107		%Rec	1	11/16/2022 12:10:00 AM	71355
EPA METHOD 8260B: VOLATILES						Analyst:	**RAA**
Benzene	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
Toluene	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
Ethylbenzene	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
Naphthalene	ND	2.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
1-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
2-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
Acetone	ND	10		µg/L	1	11/8/2022 10:06:24 PM	R92431
Bromobenzene	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
Bromodichloromethane	1.8	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
Bromoform	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
Bromomethane	ND	3.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
2-Butanone	ND	10		µg/L	1	11/8/2022 10:06:24 PM	R92431
Carbon disulfide	ND	10		µg/L	1	11/8/2022 10:06:24 PM	R92431
Carbon Tetrachloride	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
Chlorobenzene	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
Chloroethane	ND	2.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
Chloroform	4.3	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
Chloromethane	ND	3.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
2-Chlorotoluene	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
4-Chlorotoluene	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
cis-1,2-DCE	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
Dibromochloromethane	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
Dibromomethane	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211299-008 **Matrix:** AQUEOUS

Client Sample ID: MW-47R
Collection Date: 11/4/2022 10:21:00 AM
Received Date: 11/4/2022 4:21:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
1,1-Dichloroethane	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
1,1-Dichloroethene	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
1,2-Dichloropropane	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
1,3-Dichloropropane	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
2,2-Dichloropropane	ND	2.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
1,1-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
Hexachlorobutadiene	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
2-Hexanone	ND	10		µg/L	1	11/8/2022 10:06:24 PM	R92431
Isopropylbenzene	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
4-Isopropyltoluene	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
4-Methyl-2-pentanone	ND	10		µg/L	1	11/8/2022 10:06:24 PM	R92431
Methylene Chloride	ND	3.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
n-Butylbenzene	ND	3.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
n-Propylbenzene	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
sec-Butylbenzene	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
Styrene	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
tert-Butylbenzene	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
trans-1,2-DCE	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
Trichlorofluoromethane	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
Vinyl chloride	ND	1.0		µg/L	1	11/8/2022 10:06:24 PM	R92431
Xylenes, Total	ND	1.5		µg/L	1	11/8/2022 10:06:24 PM	R92431
Surr: 1,2-Dichloroethane-d4	104	70-130		%Rec	1	11/8/2022 10:06:24 PM	R92431
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	11/8/2022 10:06:24 PM	R92431
Surr: Dibromofluoromethane	101	70-130		%Rec	1	11/8/2022 10:06:24 PM	R92431
Surr: Toluene-d8	109	70-130		%Rec	1	11/8/2022 10:06:24 PM	R92431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211299-009 **Matrix:** AQUEOUS

Client Sample ID: MW-65
Collection Date: 11/4/2022 2:19:00 PM
Received Date: 11/4/2022 4:21:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	12/12/2022 10:52:23 AM	A93207
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	11/17/2022 4:00:00 PM	71455
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	11/16/2022 12:52:00 AM	71355
Surr: 2-Fluorobiphenyl	49.0	15-107		%Rec	1	11/16/2022 12:52:00 AM	71355
EPA METHOD 8260B: VOLATILES						Analyst:	**RAA**
Benzene	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
Toluene	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
Ethylbenzene	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
Naphthalene	ND	2.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
1-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
2-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
Acetone	ND	10		µg/L	1	11/8/2022 10:33:28 PM	R92431
Bromobenzene	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
Bromodichloromethane	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
Bromoform	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
Bromomethane	ND	3.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
2-Butanone	ND	10		µg/L	1	11/8/2022 10:33:28 PM	R92431
Carbon disulfide	ND	10		µg/L	1	11/8/2022 10:33:28 PM	R92431
Carbon Tetrachloride	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
Chlorobenzene	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
Chloroethane	ND	2.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
Chloroform	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
Chloromethane	ND	3.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
2-Chlorotoluene	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
4-Chlorotoluene	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
cis-1,2-DCE	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
Dibromochloromethane	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
Dibromomethane	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211299-009 **Matrix:** AQUEOUS

Client Sample ID: MW-65
Collection Date: 11/4/2022 2:19:00 PM
Received Date: 11/4/2022 4:21:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
1,1-Dichloroethane	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
1,1-Dichloroethene	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
1,2-Dichloropropane	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
1,3-Dichloropropane	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
2,2-Dichloropropane	ND	2.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
1,1-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
Hexachlorobutadiene	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
2-Hexanone	ND	10		µg/L	1	11/8/2022 10:33:28 PM	R92431
Isopropylbenzene	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
4-Isopropyltoluene	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
4-Methyl-2-pentanone	ND	10		µg/L	1	11/8/2022 10:33:28 PM	R92431
Methylene Chloride	ND	3.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
n-Butylbenzene	ND	3.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
n-Propylbenzene	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
sec-Butylbenzene	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
Styrene	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
tert-Butylbenzene	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
trans-1,2-DCE	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
Trichlorofluoromethane	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
Vinyl chloride	ND	1.0		µg/L	1	11/8/2022 10:33:28 PM	R92431
Xylenes, Total	ND	1.5		µg/L	1	11/8/2022 10:33:28 PM	R92431
Surr: 1,2-Dichloroethane-d4	87.4	70-130		%Rec	1	11/8/2022 10:33:28 PM	R92431
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	11/8/2022 10:33:28 PM	R92431
Surr: Dibromofluoromethane	92.3	70-130		%Rec	1	11/8/2022 10:33:28 PM	R92431
Surr: Toluene-d8	106	70-130		%Rec	1	11/8/2022 10:33:28 PM	R92431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211299-010 **Matrix:** AQUEOUS

Client Sample ID: MW-32
Collection Date: 11/4/2022 10:54:00 AM
Received Date: 11/4/2022 4:21:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.022	0.0060		mg/L	1	12/12/2022 10:53:56 AM	A93207
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.014	0.0060		mg/L	1	11/17/2022 4:06:24 PM	71455
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	1.8	1.0		µg/L	1	11/16/2022 3:41:00 AM	71435
Surr: 2-Fluorobiphenyl	42.5	15-107		%Rec	1	11/16/2022 3:41:00 AM	71435
EPA METHOD 8260B: VOLATILES						Analyst:	**RAA**
Benzene	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
Toluene	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
Ethylbenzene	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
Naphthalene	ND	2.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
1-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
2-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
Acetone	ND	10		µg/L	1	11/8/2022 11:00:34 PM	R92431
Bromobenzene	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
Bromodichloromethane	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
Bromoform	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
Bromomethane	ND	3.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
2-Butanone	ND	10		µg/L	1	11/8/2022 11:00:34 PM	R92431
Carbon disulfide	ND	10		µg/L	1	11/8/2022 11:00:34 PM	R92431
Carbon Tetrachloride	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
Chlorobenzene	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
Chloroethane	ND	2.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
Chloroform	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
Chloromethane	ND	3.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
2-Chlorotoluene	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
4-Chlorotoluene	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
cis-1,2-DCE	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
Dibromochloromethane	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
Dibromomethane	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211299-010 **Matrix:** AQUEOUS

Client Sample ID: MW-32
Collection Date: 11/4/2022 10:54:00 AM
Received Date: 11/4/2022 4:21:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
1,1-Dichloroethane	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
1,1-Dichloroethene	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
1,2-Dichloropropane	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
1,3-Dichloropropane	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
2,2-Dichloropropane	ND	2.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
1,1-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
Hexachlorobutadiene	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
2-Hexanone	ND	10		µg/L	1	11/8/2022 11:00:34 PM	R92431
Isopropylbenzene	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
4-Isopropyltoluene	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
4-Methyl-2-pentanone	ND	10		µg/L	1	11/8/2022 11:00:34 PM	R92431
Methylene Chloride	ND	3.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
n-Butylbenzene	ND	3.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
n-Propylbenzene	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
sec-Butylbenzene	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
Styrene	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
tert-Butylbenzene	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
trans-1,2-DCE	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
Trichlorofluoromethane	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
Vinyl chloride	ND	1.0		µg/L	1	11/8/2022 11:00:34 PM	R92431
Xylenes, Total	ND	1.5		µg/L	1	11/8/2022 11:00:34 PM	R92431
Surr: 1,2-Dichloroethane-d4	88.6	70-130		%Rec	1	11/8/2022 11:00:34 PM	R92431
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	11/8/2022 11:00:34 PM	R92431
Surr: Dibromofluoromethane	99.2	70-130		%Rec	1	11/8/2022 11:00:34 PM	R92431
Surr: Toluene-d8	103	70-130		%Rec	1	11/8/2022 11:00:34 PM	R92431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211299-011 **Matrix:** AQUEOUS

Client Sample ID: MW-41
Collection Date: 11/4/2022 2:55:00 PM
Received Date: 11/4/2022 4:21:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.034	0.0060		mg/L	1	12/12/2022 10:55:30 AM	A93207
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.034	0.0060		mg/L	1	11/17/2022 4:08:00 PM	71455
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	1.4	1.0		µg/L	1	11/16/2022 4:23:00 AM	71435
Surr: 2-Fluorobiphenyl	32.5	15-107		%Rec	1	11/16/2022 4:23:00 AM	71435
EPA METHOD 8260B: VOLATILES						Analyst:	**RAA**
Benzene	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
Toluene	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
Ethylbenzene	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
Naphthalene	ND	2.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
1-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
2-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
Acetone	ND	10		µg/L	1	11/8/2022 11:27:36 PM	R92431
Bromobenzene	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
Bromodichloromethane	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
Bromoform	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
Bromomethane	ND	3.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
2-Butanone	ND	10		µg/L	1	11/8/2022 11:27:36 PM	R92431
Carbon disulfide	ND	10		µg/L	1	11/8/2022 11:27:36 PM	R92431
Carbon Tetrachloride	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
Chlorobenzene	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
Chloroethane	ND	2.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
Chloroform	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
Chloromethane	ND	3.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
2-Chlorotoluene	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
4-Chlorotoluene	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
cis-1,2-DCE	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
Dibromochloromethane	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
Dibromomethane	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211299-011 **Matrix:** AQUEOUS

Client Sample ID: MW-41
Collection Date: 11/4/2022 2:55:00 PM
Received Date: 11/4/2022 4:21:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
1,1-Dichloroethane	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
1,1-Dichloroethene	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
1,2-Dichloropropane	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
1,3-Dichloropropane	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
2,2-Dichloropropane	ND	2.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
1,1-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
Hexachlorobutadiene	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
2-Hexanone	ND	10		µg/L	1	11/8/2022 11:27:36 PM	R92431
Isopropylbenzene	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
4-Isopropyltoluene	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
4-Methyl-2-pentanone	ND	10		µg/L	1	11/8/2022 11:27:36 PM	R92431
Methylene Chloride	ND	3.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
n-Butylbenzene	ND	3.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
n-Propylbenzene	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
sec-Butylbenzene	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
Styrene	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
tert-Butylbenzene	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
trans-1,2-DCE	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
Trichlorofluoromethane	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
Vinyl chloride	ND	1.0		µg/L	1	11/8/2022 11:27:36 PM	R92431
Xylenes, Total	ND	1.5		µg/L	1	11/8/2022 11:27:36 PM	R92431
Surr: 1,2-Dichloroethane-d4	97.7	70-130		%Rec	1	11/8/2022 11:27:36 PM	R92431
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	11/8/2022 11:27:36 PM	R92431
Surr: Dibromofluoromethane	108	70-130		%Rec	1	11/8/2022 11:27:36 PM	R92431
Surr: Toluene-d8	107	70-130		%Rec	1	11/8/2022 11:27:36 PM	R92431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank-1
Project: Sparton Coors Rd
Collection Date:
Lab ID: 2211299-012
Matrix: TRIP BLANK
Received Date: 11/4/2022 4:21:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
Benzene	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
Toluene	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
Ethylbenzene	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
Naphthalene	ND	2.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
1-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
2-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
Acetone	ND	10		µg/L	1	11/8/2022 11:54:37 PM	R92431
Bromobenzene	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
Bromodichloromethane	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
Bromoform	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
Bromomethane	ND	3.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
2-Butanone	ND	10		µg/L	1	11/8/2022 11:54:37 PM	R92431
Carbon disulfide	ND	10		µg/L	1	11/8/2022 11:54:37 PM	R92431
Carbon Tetrachloride	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
Chlorobenzene	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
Chloroethane	ND	2.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
Chloroform	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
Chloromethane	ND	3.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
2-Chlorotoluene	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
4-Chlorotoluene	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
cis-1,2-DCE	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
Dibromochloromethane	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
Dibromomethane	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
1,1-Dichloroethane	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
1,1-Dichloroethene	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
1,2-Dichloropropane	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
1,3-Dichloropropane	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
2,2-Dichloropropane	ND	2.0		µg/L	1	11/8/2022 11:54:37 PM	R92431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank-1
Project: Sparton Coors Rd
Collection Date:
Lab ID: 2211299-012
Matrix: TRIP BLANK
Received Date: 11/4/2022 4:21:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
Hexachlorobutadiene	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
2-Hexanone	ND	10		µg/L	1	11/8/2022 11:54:37 PM	R92431
Isopropylbenzene	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
4-Isopropyltoluene	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
4-Methyl-2-pentanone	ND	10		µg/L	1	11/8/2022 11:54:37 PM	R92431
Methylene Chloride	ND	3.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
n-Butylbenzene	ND	3.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
n-Propylbenzene	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
sec-Butylbenzene	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
Styrene	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
tert-Butylbenzene	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
trans-1,2-DCE	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
Trichlorofluoromethane	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
Vinyl chloride	ND	1.0		µg/L	1	11/8/2022 11:54:37 PM	R92431
Xylenes, Total	ND	1.5		µg/L	1	11/8/2022 11:54:37 PM	R92431
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	11/8/2022 11:54:37 PM	R92431
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	11/8/2022 11:54:37 PM	R92431
Surr: Dibromofluoromethane	101	70-130		%Rec	1	11/8/2022 11:54:37 PM	R92431
Surr: Toluene-d8	103	70-130		%Rec	1	11/8/2022 11:54:37 PM	R92431

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211299**
14-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **MB-A** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **A93207** RunNo: **93207**
Prep Date: Analysis Date: **12/12/2022** SeqNo: **3358727** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID: **LLLCS-A** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **A93207** RunNo: **93207**
Prep Date: Analysis Date: **12/12/2022** SeqNo: **3358728** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.0080	0.0060	0.006000	0	133	50	150			
Iron	0.023	0.020	0.02000	0	117	50	150			
Manganese	0.0022	0.0020	0.002000	0	112	50	150			

Sample ID: **LCS-A** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **A93207** RunNo: **93207**
Prep Date: Analysis Date: **12/12/2022** SeqNo: **3358729** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.53	0.0060	0.5000	0	107	85	115			
Iron	0.53	0.020	0.5000	0	106	85	115			
Manganese	0.53	0.0020	0.5000	0	106	85	115			

Sample ID: **2211299-001DMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MW-71R** Batch ID: **A93207** RunNo: **93207**
Prep Date: Analysis Date: **12/12/2022** SeqNo: **3358742** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.51	0.0060	0.5000	0	102	70	130			

Sample ID: **2211299-001DMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MW-71R** Batch ID: **A93207** RunNo: **93207**
Prep Date: Analysis Date: **12/12/2022** SeqNo: **3358743** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.49	0.0060	0.5000	0	97.4	70	130	4.86	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211299**
14-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **MB-71455** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **71455** RunNo: **92669**
Prep Date: **11/11/2022** Analysis Date: **11/17/2022** SeqNo: **3333715** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LCSLL-71455** SampType: **LCSLL** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC** Batch ID: **71455** RunNo: **92669**
Prep Date: **11/11/2022** Analysis Date: **11/17/2022** SeqNo: **3333716** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.0061	0.0060	0.006000	0	101	50	150			

Sample ID: **LCS-71455** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **71455** RunNo: **92669**
Prep Date: **11/11/2022** Analysis Date: **11/17/2022** SeqNo: **3333717** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.49	0.0060	0.5000	0	98.5	85	115			

Sample ID: **2211299-002CMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MW-71R Duplicate** Batch ID: **71455** RunNo: **92669**
Prep Date: **11/11/2022** Analysis Date: **11/17/2022** SeqNo: **3333722** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.51	0.0060	0.5000	0	102	70	130			

Sample ID: **2211299-002CMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MW-71R Duplicate** Batch ID: **71455** RunNo: **92669**
Prep Date: **11/11/2022** Analysis Date: **11/17/2022** SeqNo: **3333723** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.51	0.0060	0.5000	0	103	70	130	0.639	20	

Sample ID: **MB-71454** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **71454** RunNo: **92669**
Prep Date: **11/11/2022** Analysis Date: **11/17/2022** SeqNo: **3333864** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211299**

14-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **LCSLL-71454** SampType: **LCSLL** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC** Batch ID: **71454** RunNo: **92669**
Prep Date: **11/11/2022** Analysis Date: **11/17/2022** SeqNo: **3333865** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060	0.006000	0	88.9	50	150			

Sample ID: **LCS-71454** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **71454** RunNo: **92669**
Prep Date: **11/11/2022** Analysis Date: **11/17/2022** SeqNo: **3333866** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.50	0.0060	0.5000	0	99.3	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211299**
14-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R92431** RunNo: **92431**
Prep Date: Analysis Date: **11/8/2022** SeqNo: **3322389** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.7	70	130			
Toluene	22	1.0	20.00	0	109	70	130			
Chlorobenzene	21	1.0	20.00	0	106	70	130			
1,1-Dichloroethene	16	1.0	20.00	0	81.2	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	92.9	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		105	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	11		10.00		106	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R92431** RunNo: **92431**
Prep Date: Analysis Date: **11/8/2022** SeqNo: **3322413** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211299**
14-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R92431**	RunNo: **92431**	
Prep Date:	Analysis Date: **11/8/2022**	SeqNo: **3322413**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211299**

14-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R92431**	RunNo: **92431**			
Prep Date:	Analysis Date: **11/8/2022**	SeqNo: **3322413**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		100	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	10		10.00		104	70	130			
Surr: Toluene-d8	11		10.00		108	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211299**

14-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb-71355** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **71355** RunNo: **92499**
Prep Date: **11/8/2022** Analysis Date: **11/10/2022** SeqNo: **3324812** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	2.4		4.000		59.5	15	108			
Surr: 2,4,6-Tribromophenol	3.8		8.000		47.8	15	112			
Surr: 2-Fluorobiphenyl	2.5		4.000		62.0	15	107			
Surr: 4-Terphenyl-d14	4.0		4.000		101	15	166			

Sample ID: **lcs-71355** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **71355** RunNo: **92499**
Prep Date: **11/8/2022** Analysis Date: **11/10/2022** SeqNo: **3324813** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.64	0.10	2.000	0	32.0	15	60.5			
Surr: Nitrobenzene-d5	3.0		5.000		59.2	15	108			
Surr: 2,4,6-Tribromophenol	4.7		10.00		46.8	15	112			
Surr: 2-Fluorobiphenyl	2.0		5.000		40.4	15	107			
Surr: 4-Terphenyl-d14	5.2		5.000		104	15	166			

Sample ID: **lcsd-71355** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **71355** RunNo: **92499**
Prep Date: **11/8/2022** Analysis Date: **11/11/2022** SeqNo: **3324814** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.56	0.10	2.000	0	28.0	15	60.5	13.3	29.7	
Surr: Nitrobenzene-d5	3.0		5.000		59.6	15	108	0	0	
Surr: 2,4,6-Tribromophenol	4.9		10.00		49.2	15	112	0	0	
Surr: 2-Fluorobiphenyl	2.1		5.000		42.4	15	107	0	0	
Surr: 4-Terphenyl-d14	4.9		5.000		97.2	15	166	0	0	

Sample ID: **mb-71435** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **71435** RunNo: **92608**
Prep Date: **11/11/2022** Analysis Date: **11/16/2022** SeqNo: **3330932** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	2.4		4.000		59.0	15	108			
Surr: 2,4,6-Tribromophenol	5.1		8.000		63.8	15	112			
Surr: 2-Fluorobiphenyl	2.1		4.000		53.0	15	107			
Surr: 4-Terphenyl-d14	3.8		4.000		95.5	15	166			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211299**

14-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **lcs-71435** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **71435** RunNo: **92608**
Prep Date: **11/11/2022** Analysis Date: **11/16/2022** SeqNo: **3330933** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.64	0.10	2.000	0	32.0	15	60.5			
Surr: Nitrobenzene-d5	3.2		5.000		64.4	15	108			
Surr: 2,4,6-Tribromophenol	6.4		10.00		64.0	15	112			
Surr: 2-Fluorobiphenyl	2.3		5.000		45.2	15	107			
Surr: 4-Terphenyl-d14	4.6		5.000		92.8	15	166			

Sample ID: **lcsd-71435** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **71435** RunNo: **92608**
Prep Date: **11/11/2022** Analysis Date: **11/16/2022** SeqNo: **3330934** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.82	0.10	2.000	0	41.0	15	60.5	24.7	29.7	
Surr: Nitrobenzene-d5	4.2		5.000		84.8	15	108	0	0	
Surr: 2,4,6-Tribromophenol	8.5		10.00		84.6	15	112	0	0	
Surr: 2-Fluorobiphenyl	3.0		5.000		59.6	15	107	0	0	
Surr: 4-Terphenyl-d14	6.0		5.000		120	15	166	0	0	

Sample ID: **mb-71449** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **71449** RunNo: **92659**
Prep Date: **11/11/2022** Analysis Date: **11/16/2022** SeqNo: **3333294** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Nitrobenzene-d5	1.7		4.000		42.5	15	108			
Surr: 2,4,6-Tribromophenol	3.3		8.000		41.8	15	112			
Surr: 2-Fluorobiphenyl	1.6		4.000		39.5	15	107			
Surr: 4-Terphenyl-d14	3.3		4.000		82.0	15	166			

Sample ID: **lcs-71449** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **71449** RunNo: **92659**
Prep Date: **11/11/2022** Analysis Date: **11/16/2022** SeqNo: **3333295** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Nitrobenzene-d5	3.1		5.000		61.6	15	108			
Surr: 2,4,6-Tribromophenol	5.4		10.00		54.0	15	112			
Surr: 2-Fluorobiphenyl	2.3		5.000		46.4	15	107			
Surr: 4-Terphenyl-d14	5.1		5.000		102	15	166			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211299**
14-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **lcsd-71449** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **71449** RunNo: **92659**
Prep Date: **11/11/2022** Analysis Date: **11/16/2022** SeqNo: **3333296** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Nitrobenzene-d5	3.2		5.000		64.4	15	108	0	0	
Surr: 2,4,6-Tribromophenol	5.5		10.00		54.6	15	112	0	0	
Surr: 2-Fluorobiphenyl	2.3		5.000		46.0	15	107	0	0	
Surr: 4-Terphenyl-d14	5.4		5.000		108	15	166	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
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HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: EA Engineering Work Order Number: 2211299 RcptNo: 1

Received By: **Kasandra Jimena Garcia** 11/4/2022 4:21:00 PM

Completed By: **Sean Livingston** 11/4/2022 4:25:09 PM

Reviewed By: KPA 11.7.22

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 22
(<2 or >12 unless noted)
Adjusted? NO
Checked by: JM 11/7/22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.3	Good				
2	3.4	Good				

Chain-of-Custody Record

Client: Sparton Technologies, inc.
EA Engineering, Science and Technology
Mailing Address: 320 Gold Ave SW #1300
Albuquerque, NM 87102
Phone #: 505-715-4154
email or Fax#: r marley@eaest.com
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: Sparton Coors Rd
Project #: Bills to Sparton Direct
Project Manager: Bob Marley, EA Engineering
Sampler: Scott Miles/Mohammed Al Khazraji
On Ice: ☒ Yes ☐ No
# of Coolers: 2
Cooler Temp(including CF): (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2211299	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	VOCs 8260B	1,4 Dioxane 8270SIM	Total Chromium	Dissolved Chromium	Dissolved Metals (Cr, Fe, Mn)
11-2-22	1729	Aq	MW-71R	1x1L Amber 1x250ml HDPE 1x125ml HDPE, 3x VOA	none, HNO_3, HCl	001											X	X	X	X	
↓	1729		MW-71R duplicate			002											X	X	X	X	
11-3-22	1128		MW-64			003											X	X	X	X	
	1451		MW-66			004											X	X	X	X	
	1555		MW-57D			005											X	X	X	X	
	1733		MW-78			006											X	X	X		X
	1556		MW-30			007											X	X	X	X	
11-4-22	1021		MW-47R			008											X	X	X	X	
	1419		MW-65			009											X	X	X	X	
	1054		MW-32			010											X	X	X	X	
	1455		MW-41			011											X	X	X	X	
			Trip Blank	2x VOA	HCl	012											X				

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
11-4-22	1620	Mohammed Radha Al Khazraji	[signature]	OOO	11.4.22	16:21
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks:
4.2 + 0.1 = 4.3
3.3 + 0.1 = 3.4

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

December 16, 2022

Bob Marley
EA Engineering
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL:
FAX

RE: Sparton Coors Rd OrderNo.: 2211491

Dear Bob Marley:

Hall Environmental Analysis Laboratory received 14 sample(s) on 11/8/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2211491**
Date Reported: **12/16/2022**

CLIENT: EA Engineering
Client Sample ID: MW-42
Project: Sparton Coors Rd
Collection Date: 11/7/2022 10:55:00 AM
Lab ID: 2211491-001
Matrix: AQUEOUS
Received Date: 11/8/2022 4:46:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.034	0.0060		mg/L	1	12/12/2022 11:36:52 AM	A93207
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.039	0.0060		mg/L	1	12/8/2022 3:03:01 PM	71480
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	1.8	1.0		µg/L	1	11/16/2022 1:35:00 PM	71435
Surr: 2-Fluorobiphenyl	40.5	15-107		%Rec	1	11/16/2022 1:35:00 PM	71435
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
Toluene	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
Ethylbenzene	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
Naphthalene	ND	2.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
1-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
2-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
Acetone	ND	10		µg/L	1	11/10/2022 12:09:00 PM	R92476
Bromobenzene	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
Bromodichloromethane	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
Bromoform	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
Bromomethane	ND	3.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
2-Butanone	ND	10		µg/L	1	11/10/2022 12:09:00 PM	R92476
Carbon disulfide	ND	10		µg/L	1	11/10/2022 12:09:00 PM	R92476
Carbon Tetrachloride	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
Chlorobenzene	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
Chloroethane	ND	2.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
Chloroform	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
Chloromethane	ND	3.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
2-Chlorotoluene	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
4-Chlorotoluene	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
cis-1,2-DCE	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
Dibromochloromethane	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
Dibromomethane	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211491-001 **Matrix:** AQUEOUS

Client Sample ID: MW-42
Collection Date: 11/7/2022 10:55:00 AM
Received Date: 11/8/2022 4:46:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
1,1-Dichloroethane	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
1,1-Dichloroethene	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
1,2-Dichloropropane	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
1,3-Dichloropropane	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
2,2-Dichloropropane	ND	2.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
1,1-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
Hexachlorobutadiene	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
2-Hexanone	ND	10		µg/L	1	11/10/2022 12:09:00 PM	R92476
Isopropylbenzene	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
4-Isopropyltoluene	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
4-Methyl-2-pentanone	ND	10		µg/L	1	11/10/2022 12:09:00 PM	R92476
Methylene Chloride	ND	3.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
n-Butylbenzene	ND	3.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
n-Propylbenzene	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
sec-Butylbenzene	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
Styrene	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
tert-Butylbenzene	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
trans-1,2-DCE	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
Trichloroethene (TCE)	1.7	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
Trichlorofluoromethane	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
Vinyl chloride	ND	1.0		µg/L	1	11/10/2022 12:09:00 PM	R92476
Xylenes, Total	ND	1.5		µg/L	1	11/10/2022 12:09:00 PM	R92476
Surr: 1,2-Dichloroethane-d4	96.1	70-130		%Rec	1	11/10/2022 12:09:00 PM	R92476
Surr: 4-Bromofluorobenzene	94.4	70-130		%Rec	1	11/10/2022 12:09:00 PM	R92476
Surr: Dibromofluoromethane	97.4	70-130		%Rec	1	11/10/2022 12:09:00 PM	R92476
Surr: Toluene-d8	90.0	70-130		%Rec	1	11/10/2022 12:09:00 PM	R92476

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211491-002 **Matrix:** AQUEOUS

Client Sample ID: MW-39
Collection Date: 11/7/2022 2:26:00 PM
Received Date: 11/8/2022 4:46:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.080	0.0060		mg/L	1	12/12/2022 11:38:32 AM	B93207
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.070	0.0060		mg/L	1	12/8/2022 3:07:48 PM	71480
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	11/16/2022 2:19:00 PM	71435
Surr: 2-Fluorobiphenyl	31.5	15-107		%Rec	1	11/16/2022 2:19:00 PM	71435
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
Toluene	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
Ethylbenzene	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
Naphthalene	ND	2.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
1-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
2-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
Acetone	ND	10		µg/L	1	11/10/2022 1:18:00 PM	R92476
Bromobenzene	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
Bromodichloromethane	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
Bromoform	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
Bromomethane	ND	3.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
2-Butanone	ND	10		µg/L	1	11/10/2022 1:18:00 PM	R92476
Carbon disulfide	ND	10		µg/L	1	11/10/2022 1:18:00 PM	R92476
Carbon Tetrachloride	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
Chlorobenzene	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
Chloroethane	ND	2.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
Chloroform	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
Chloromethane	ND	3.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
2-Chlorotoluene	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
4-Chlorotoluene	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
cis-1,2-DCE	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
Dibromochloromethane	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
Dibromomethane	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211491-002 **Matrix:** AQUEOUS

Client Sample ID: MW-39
Collection Date: 11/7/2022 2:26:00 PM
Received Date: 11/8/2022 4:46:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
1,1-Dichloroethane	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
1,1-Dichloroethene	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
1,2-Dichloropropane	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
1,3-Dichloropropane	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
2,2-Dichloropropane	ND	2.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
1,1-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
Hexachlorobutadiene	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
2-Hexanone	ND	10		µg/L	1	11/10/2022 1:18:00 PM	R92476
Isopropylbenzene	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
4-Isopropyltoluene	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
4-Methyl-2-pentanone	ND	10		µg/L	1	11/10/2022 1:18:00 PM	R92476
Methylene Chloride	ND	3.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
n-Butylbenzene	ND	3.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
n-Propylbenzene	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
sec-Butylbenzene	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
Styrene	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
tert-Butylbenzene	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
trans-1,2-DCE	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
Trichlorofluoromethane	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
Vinyl chloride	ND	1.0		µg/L	1	11/10/2022 1:18:00 PM	R92476
Xylenes, Total	ND	1.5		µg/L	1	11/10/2022 1:18:00 PM	R92476
Surr: 1,2-Dichloroethane-d4	93.9	70-130		%Rec	1	11/10/2022 1:18:00 PM	R92476
Surr: 4-Bromofluorobenzene	94.1	70-130		%Rec	1	11/10/2022 1:18:00 PM	R92476
Surr: Dibromofluoromethane	95.1	70-130		%Rec	1	11/10/2022 1:18:00 PM	R92476
Surr: Toluene-d8	89.6	70-130		%Rec	1	11/10/2022 1:18:00 PM	R92476

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211491-003 **Matrix:** AQUEOUS

Client Sample ID: MW-43
Collection Date: 11/7/2022 2:35:00 PM
Received Date: 11/8/2022 4:46:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	12/12/2022 11:40:05 AM	B93207
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	12/8/2022 3:12:29 PM	71480
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	1.2	1.0		µg/L	1	11/16/2022 3:02:00 PM	71435
Surr: 2-Fluorobiphenyl	46.0	15-107		%Rec	1	11/16/2022 3:02:00 PM	71435
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
Toluene	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
Ethylbenzene	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
Naphthalene	ND	2.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
1-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
2-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
Acetone	ND	10		µg/L	1	11/10/2022 1:41:00 PM	R92476
Bromobenzene	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
Bromodichloromethane	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
Bromoform	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
Bromomethane	ND	3.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
2-Butanone	ND	10		µg/L	1	11/10/2022 1:41:00 PM	R92476
Carbon disulfide	ND	10		µg/L	1	11/10/2022 1:41:00 PM	R92476
Carbon Tetrachloride	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
Chlorobenzene	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
Chloroethane	ND	2.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
Chloroform	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
Chloromethane	ND	3.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
2-Chlorotoluene	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
4-Chlorotoluene	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
cis-1,2-DCE	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
Dibromochloromethane	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
Dibromomethane	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211491-003 **Matrix:** AQUEOUS

Client Sample ID: MW-43
Collection Date: 11/7/2022 2:35:00 PM
Received Date: 11/8/2022 4:46:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
1,1-Dichloroethane	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
1,1-Dichloroethene	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
1,2-Dichloropropane	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
1,3-Dichloropropane	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
2,2-Dichloropropane	ND	2.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
1,1-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
Hexachlorobutadiene	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
2-Hexanone	ND	10		µg/L	1	11/10/2022 1:41:00 PM	R92476
Isopropylbenzene	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
4-Isopropyltoluene	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
4-Methyl-2-pentanone	ND	10		µg/L	1	11/10/2022 1:41:00 PM	R92476
Methylene Chloride	ND	3.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
n-Butylbenzene	ND	3.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
n-Propylbenzene	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
sec-Butylbenzene	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
Styrene	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
tert-Butylbenzene	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
trans-1,2-DCE	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
Trichlorofluoromethane	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
Vinyl chloride	ND	1.0		µg/L	1	11/10/2022 1:41:00 PM	R92476
Xylenes, Total	ND	1.5		µg/L	1	11/10/2022 1:41:00 PM	R92476
Surr: 1,2-Dichloroethane-d4	96.5	70-130		%Rec	1	11/10/2022 1:41:00 PM	R92476
Surr: 4-Bromofluorobenzene	93.4	70-130		%Rec	1	11/10/2022 1:41:00 PM	R92476
Surr: Dibromofluoromethane	97.3	70-130		%Rec	1	11/10/2022 1:41:00 PM	R92476
Surr: Toluene-d8	89.0	70-130		%Rec	1	11/10/2022 1:41:00 PM	R92476

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211491-004 **Matrix:** AQUEOUS

Client Sample ID: MW-73
Collection Date: 11/7/2022 4:32:00 PM
Received Date: 11/8/2022 4:46:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.051	0.0060		mg/L	1	12/12/2022 11:41:39 AM	B93207
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.048	0.0060		mg/L	1	12/8/2022 3:14:03 PM	71480
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.2	1.0		µg/L	1	11/16/2022 3:45:00 PM	71435
Surr: 2-Fluorobiphenyl	50.5	15-107		%Rec	1	11/16/2022 3:45:00 PM	71435
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
Toluene	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
Ethylbenzene	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
Naphthalene	ND	2.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
1-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
2-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
Acetone	ND	10		µg/L	1	11/10/2022 2:05:00 PM	R92476
Bromobenzene	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
Bromodichloromethane	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
Bromoform	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
Bromomethane	ND	3.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
2-Butanone	ND	10		µg/L	1	11/10/2022 2:05:00 PM	R92476
Carbon disulfide	ND	10		µg/L	1	11/10/2022 2:05:00 PM	R92476
Carbon Tetrachloride	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
Chlorobenzene	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
Chloroethane	ND	2.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
Chloroform	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
Chloromethane	ND	3.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
2-Chlorotoluene	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
4-Chlorotoluene	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
cis-1,2-DCE	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
Dibromochloromethane	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
Dibromomethane	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211491-004 **Matrix:** AQUEOUS

Client Sample ID: MW-73
Collection Date: 11/7/2022 4:32:00 PM
Received Date: 11/8/2022 4:46:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
1,1-Dichloroethane	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
1,1-Dichloroethene	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
1,2-Dichloropropane	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
1,3-Dichloropropane	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
2,2-Dichloropropane	ND	2.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
1,1-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
Hexachlorobutadiene	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
2-Hexanone	ND	10		µg/L	1	11/10/2022 2:05:00 PM	R92476
Isopropylbenzene	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
4-Isopropyltoluene	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
4-Methyl-2-pentanone	ND	10		µg/L	1	11/10/2022 2:05:00 PM	R92476
Methylene Chloride	ND	3.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
n-Butylbenzene	ND	3.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
n-Propylbenzene	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
sec-Butylbenzene	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
Styrene	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
tert-Butylbenzene	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
trans-1,2-DCE	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
Trichloroethene (TCE)	2.4	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
Trichlorofluoromethane	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
Vinyl chloride	ND	1.0		µg/L	1	11/10/2022 2:05:00 PM	R92476
Xylenes, Total	ND	1.5		µg/L	1	11/10/2022 2:05:00 PM	R92476
Surr: 1,2-Dichloroethane-d4	96.2	70-130		%Rec	1	11/10/2022 2:05:00 PM	R92476
Surr: 4-Bromofluorobenzene	95.1	70-130		%Rec	1	11/10/2022 2:05:00 PM	R92476
Surr: Dibromofluoromethane	94.4	70-130		%Rec	1	11/10/2022 2:05:00 PM	R92476
Surr: Toluene-d8	89.8	70-130		%Rec	1	11/10/2022 2:05:00 PM	R92476

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211491-005 **Matrix:** AQUEOUS

Client Sample ID: MW-14R
Collection Date: 11/8/2022 10:10:00 AM
Received Date: 11/8/2022 4:46:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.090	0.0060		mg/L	1	12/12/2022 11:43:06 AM	B93207
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.091	0.0060		mg/L	1	12/8/2022 3:15:38 PM	71480
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	11/16/2022 4:29:00 PM	71435
Surr: 2-Fluorobiphenyl	45.5	15-107		%Rec	1	11/16/2022 4:29:00 PM	71435
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
Toluene	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
Ethylbenzene	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
Naphthalene	ND	2.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
1-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
2-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
Acetone	ND	10		µg/L	1	11/10/2022 2:28:00 PM	R92476
Bromobenzene	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
Bromodichloromethane	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
Bromoform	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
Bromomethane	ND	3.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
2-Butanone	ND	10		µg/L	1	11/10/2022 2:28:00 PM	R92476
Carbon disulfide	ND	10		µg/L	1	11/10/2022 2:28:00 PM	R92476
Carbon Tetrachloride	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
Chlorobenzene	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
Chloroethane	ND	2.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
Chloroform	1.4	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
Chloromethane	ND	3.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
2-Chlorotoluene	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
4-Chlorotoluene	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
cis-1,2-DCE	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
Dibromochloromethane	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
Dibromomethane	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211491-005 **Matrix:** AQUEOUS

Client Sample ID: MW-14R
Collection Date: 11/8/2022 10:10:00 AM
Received Date: 11/8/2022 4:46:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
1,1-Dichloroethane	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
1,1-Dichloroethene	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
1,2-Dichloropropane	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
1,3-Dichloropropane	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
2,2-Dichloropropane	ND	2.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
1,1-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
Hexachlorobutadiene	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
2-Hexanone	ND	10		µg/L	1	11/10/2022 2:28:00 PM	R92476
Isopropylbenzene	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
4-Isopropyltoluene	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
4-Methyl-2-pentanone	ND	10		µg/L	1	11/10/2022 2:28:00 PM	R92476
Methylene Chloride	ND	3.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
n-Butylbenzene	ND	3.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
n-Propylbenzene	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
sec-Butylbenzene	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
Styrene	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
tert-Butylbenzene	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
trans-1,2-DCE	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
Trichloroethene (TCE)	1.1	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
Trichlorofluoromethane	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
Vinyl chloride	ND	1.0		µg/L	1	11/10/2022 2:28:00 PM	R92476
Xylenes, Total	ND	1.5		µg/L	1	11/10/2022 2:28:00 PM	R92476
Surr: 1,2-Dichloroethane-d4	96.5	70-130		%Rec	1	11/10/2022 2:28:00 PM	R92476
Surr: 4-Bromofluorobenzene	94.1	70-130		%Rec	1	11/10/2022 2:28:00 PM	R92476
Surr: Dibromofluoromethane	95.5	70-130		%Rec	1	11/10/2022 2:28:00 PM	R92476
Surr: Toluene-d8	87.9	70-130		%Rec	1	11/10/2022 2:28:00 PM	R92476

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211491-006 **Matrix:** AQUEOUS

Client Sample ID: MW-31
Collection Date: 11/8/2022 12:43:00 PM
Received Date: 11/8/2022 4:46:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	12/12/2022 11:44:30 AM	B93207
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	12/8/2022 3:17:09 PM	71480
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	11/16/2022 5:12:00 PM	71435
Surr: 2-Fluorobiphenyl	34.5	15-107		%Rec	1	11/16/2022 5:12:00 PM	71435
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
Toluene	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
Ethylbenzene	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
Naphthalene	ND	2.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
1-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
2-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
Acetone	ND	10		µg/L	1	11/10/2022 2:51:00 PM	R92476
Bromobenzene	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
Bromodichloromethane	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
Bromoform	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
Bromomethane	ND	3.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
2-Butanone	ND	10		µg/L	1	11/10/2022 2:51:00 PM	R92476
Carbon disulfide	ND	10		µg/L	1	11/10/2022 2:51:00 PM	R92476
Carbon Tetrachloride	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
Chlorobenzene	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
Chloroethane	ND	2.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
Chloroform	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
Chloromethane	ND	3.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
2-Chlorotoluene	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
4-Chlorotoluene	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
cis-1,2-DCE	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
Dibromochloromethane	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
Dibromomethane	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211491-006 **Matrix:** AQUEOUS

Client Sample ID: MW-31
Collection Date: 11/8/2022 12:43:00 PM
Received Date: 11/8/2022 4:46:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
1,1-Dichloroethane	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
1,1-Dichloroethene	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
1,2-Dichloropropane	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
1,3-Dichloropropane	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
2,2-Dichloropropane	ND	2.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
1,1-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
Hexachlorobutadiene	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
2-Hexanone	ND	10		µg/L	1	11/10/2022 2:51:00 PM	R92476
Isopropylbenzene	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
4-Isopropyltoluene	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
4-Methyl-2-pentanone	ND	10		µg/L	1	11/10/2022 2:51:00 PM	R92476
Methylene Chloride	ND	3.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
n-Butylbenzene	ND	3.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
n-Propylbenzene	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
sec-Butylbenzene	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
Styrene	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
tert-Butylbenzene	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
trans-1,2-DCE	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
Trichlorofluoromethane	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
Vinyl chloride	ND	1.0		µg/L	1	11/10/2022 2:51:00 PM	R92476
Xylenes, Total	ND	1.5		µg/L	1	11/10/2022 2:51:00 PM	R92476
Surr: 1,2-Dichloroethane-d4	97.4	70-130		%Rec	1	11/10/2022 2:51:00 PM	R92476
Surr: 4-Bromofluorobenzene	94.0	70-130		%Rec	1	11/10/2022 2:51:00 PM	R92476
Surr: Dibromofluoromethane	94.3	70-130		%Rec	1	11/10/2022 2:51:00 PM	R92476
Surr: Toluene-d8	89.2	70-130		%Rec	1	11/10/2022 2:51:00 PM	R92476

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211491-007 **Matrix:** AQUEOUS

Client Sample ID: MW-40
Collection Date: 11/8/2022 1:06:00 PM
Received Date: 11/8/2022 4:46:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	12/12/2022 11:45:54 AM	B93207
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	12/8/2022 3:24:34 PM	71480
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	11/16/2022 9:00:00 PM	71449
Surr: 2-Fluorobiphenyl	50.0	15-107		%Rec	1	11/16/2022 9:00:00 PM	71449
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
Toluene	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
Ethylbenzene	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
Naphthalene	ND	2.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
1-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
2-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
Acetone	ND	10		µg/L	1	11/10/2022 3:14:00 PM	R92476
Bromobenzene	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
Bromodichloromethane	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
Bromoform	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
Bromomethane	ND	3.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
2-Butanone	ND	10		µg/L	1	11/10/2022 3:14:00 PM	R92476
Carbon disulfide	ND	10		µg/L	1	11/10/2022 3:14:00 PM	R92476
Carbon Tetrachloride	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
Chlorobenzene	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
Chloroethane	ND	2.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
Chloroform	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
Chloromethane	ND	3.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
2-Chlorotoluene	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
4-Chlorotoluene	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
cis-1,2-DCE	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
Dibromochloromethane	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
Dibromomethane	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211491-007 **Matrix:** AQUEOUS

Client Sample ID: MW-40
Collection Date: 11/8/2022 1:06:00 PM
Received Date: 11/8/2022 4:46:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
1,1-Dichloroethane	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
1,1-Dichloroethene	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
1,2-Dichloropropane	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
1,3-Dichloropropane	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
2,2-Dichloropropane	ND	2.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
1,1-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
Hexachlorobutadiene	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
2-Hexanone	ND	10		µg/L	1	11/10/2022 3:14:00 PM	R92476
Isopropylbenzene	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
4-Isopropyltoluene	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
4-Methyl-2-pentanone	ND	10		µg/L	1	11/10/2022 3:14:00 PM	R92476
Methylene Chloride	ND	3.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
n-Butylbenzene	ND	3.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
n-Propylbenzene	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
sec-Butylbenzene	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
Styrene	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
tert-Butylbenzene	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
trans-1,2-DCE	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
Trichlorofluoromethane	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
Vinyl chloride	ND	1.0		µg/L	1	11/10/2022 3:14:00 PM	R92476
Xylenes, Total	ND	1.5		µg/L	1	11/10/2022 3:14:00 PM	R92476
Surr: 1,2-Dichloroethane-d4	99.3	70-130		%Rec	1	11/10/2022 3:14:00 PM	R92476
Surr: 4-Bromofluorobenzene	91.9	70-130		%Rec	1	11/10/2022 3:14:00 PM	R92476
Surr: Dibromofluoromethane	97.6	70-130		%Rec	1	11/10/2022 3:14:00 PM	R92476
Surr: Toluene-d8	88.9	70-130		%Rec	1	11/10/2022 3:14:00 PM	R92476

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211491-008 **Matrix:** AQUEOUS

Client Sample ID: MW-72
Collection Date: 11/8/2022 3:56:00 PM
Received Date: 11/8/2022 4:46:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.057	0.0060		mg/L	1	12/12/2022 11:47:16 AM	B93207
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.062	0.0060		mg/L	1	12/8/2022 3:26:08 PM	71480
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	8.0	1.0		µg/L	1	11/16/2022 9:43:00 PM	71449
Surr: 2-Fluorobiphenyl	24.0	15-107		%Rec	1	11/16/2022 9:43:00 PM	71449
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
Toluene	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
Ethylbenzene	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
Naphthalene	ND	2.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
1-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
2-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
Acetone	ND	10		µg/L	1	11/10/2022 3:37:00 PM	R92476
Bromobenzene	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
Bromodichloromethane	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
Bromoform	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
Bromomethane	ND	3.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
2-Butanone	ND	10		µg/L	1	11/10/2022 3:37:00 PM	R92476
Carbon disulfide	ND	10		µg/L	1	11/10/2022 3:37:00 PM	R92476
Carbon Tetrachloride	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
Chlorobenzene	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
Chloroethane	ND	2.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
Chloroform	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
Chloromethane	ND	3.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
2-Chlorotoluene	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
4-Chlorotoluene	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
cis-1,2-DCE	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
Dibromochloromethane	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
Dibromomethane	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211491-008 **Matrix:** AQUEOUS

Client Sample ID: MW-72
Collection Date: 11/8/2022 3:56:00 PM
Received Date: 11/8/2022 4:46:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
1,1-Dichloroethane	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
1,1-Dichloroethene	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
1,2-Dichloropropane	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
1,3-Dichloropropane	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
2,2-Dichloropropane	ND	2.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
1,1-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
Hexachlorobutadiene	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
2-Hexanone	ND	10		µg/L	1	11/10/2022 3:37:00 PM	R92476
Isopropylbenzene	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
4-Isopropyltoluene	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
4-Methyl-2-pentanone	ND	10		µg/L	1	11/10/2022 3:37:00 PM	R92476
Methylene Chloride	ND	3.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
n-Butylbenzene	ND	3.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
n-Propylbenzene	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
sec-Butylbenzene	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
Styrene	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
tert-Butylbenzene	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
trans-1,2-DCE	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
Trichloroethene (TCE)	6.4	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
Trichlorofluoromethane	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
Vinyl chloride	ND	1.0		µg/L	1	11/10/2022 3:37:00 PM	R92476
Xylenes, Total	ND	1.5		µg/L	1	11/10/2022 3:37:00 PM	R92476
Surr: 1,2-Dichloroethane-d4	95.6	70-130		%Rec	1	11/10/2022 3:37:00 PM	R92476
Surr: 4-Bromofluorobenzene	94.7	70-130		%Rec	1	11/10/2022 3:37:00 PM	R92476
Surr: Dibromofluoromethane	93.0	70-130		%Rec	1	11/10/2022 3:37:00 PM	R92476
Surr: Toluene-d8	89.8	70-130		%Rec	1	11/10/2022 3:37:00 PM	R92476

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211491-009 **Matrix:** AQUEOUS

Client Sample ID: MW-21
Collection Date: 11/8/2022 9:06:00 AM
Received Date: 11/8/2022 4:46:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.040	0.0060		mg/L	1	12/12/2022 11:48:51 AM	B93207
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.055	0.0060		mg/L	1	12/8/2022 3:27:43 PM	71480
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	1.7	1.0		µg/L	1	11/16/2022 10:25:00 PM	71449
Surr: 2-Fluorobiphenyl	50.5	15-107		%Rec	1	11/16/2022 10:25:00 PM	71449
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
Toluene	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
Ethylbenzene	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
Naphthalene	ND	2.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
1-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
2-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
Acetone	ND	10		µg/L	1	11/10/2022 4:00:00 PM	R92476
Bromobenzene	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
Bromodichloromethane	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
Bromoform	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
Bromomethane	ND	3.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
2-Butanone	ND	10		µg/L	1	11/10/2022 4:00:00 PM	R92476
Carbon disulfide	ND	10		µg/L	1	11/10/2022 4:00:00 PM	R92476
Carbon Tetrachloride	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
Chlorobenzene	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
Chloroethane	ND	2.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
Chloroform	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
Chloromethane	ND	3.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
2-Chlorotoluene	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
4-Chlorotoluene	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
cis-1,2-DCE	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
Dibromochloromethane	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
Dibromomethane	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211491-009 **Matrix:** AQUEOUS

Client Sample ID: MW-21
Collection Date: 11/8/2022 9:06:00 AM
Received Date: 11/8/2022 4:46:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
1,1-Dichloroethane	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
1,1-Dichloroethene	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
1,2-Dichloropropane	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
1,3-Dichloropropane	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
2,2-Dichloropropane	ND	2.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
1,1-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
Hexachlorobutadiene	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
2-Hexanone	ND	10		µg/L	1	11/10/2022 4:00:00 PM	R92476
Isopropylbenzene	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
4-Isopropyltoluene	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
4-Methyl-2-pentanone	ND	10		µg/L	1	11/10/2022 4:00:00 PM	R92476
Methylene Chloride	ND	3.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
n-Butylbenzene	ND	3.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
n-Propylbenzene	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
sec-Butylbenzene	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
Styrene	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
tert-Butylbenzene	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
trans-1,2-DCE	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
Trichlorofluoromethane	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
Vinyl chloride	ND	1.0		µg/L	1	11/10/2022 4:00:00 PM	R92476
Xylenes, Total	ND	1.5		µg/L	1	11/10/2022 4:00:00 PM	R92476
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%Rec	1	11/10/2022 4:00:00 PM	R92476
Surr: 4-Bromofluorobenzene	92.2	70-130		%Rec	1	11/10/2022 4:00:00 PM	R92476
Surr: Dibromofluoromethane	94.9	70-130		%Rec	1	11/10/2022 4:00:00 PM	R92476
Surr: Toluene-d8	88.8	70-130		%Rec	1	11/10/2022 4:00:00 PM	R92476

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: MW-17
Project: Sparton Coors Rd
Collection Date: 11/8/2022 10:42:00 AM
Lab ID: 2211491-010
Matrix: AQUEOUS
Received Date: 11/8/2022 4:46:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.039	0.0060		mg/L	1	12/12/2022 11:50:24 AM	B93207
Iron	ND	0.020		mg/L	1	12/12/2022 11:50:24 AM	B93207
Manganese	ND	0.0020		mg/L	1	12/12/2022 11:50:24 AM	B93207
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.048	0.0060		mg/L	1	12/8/2022 3:29:18 PM	71480
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	1.9	1.0		µg/L	1	11/16/2022 11:08:00 PM	71449
Surr: 2-Fluorobiphenyl	50.0	15-107		%Rec	1	11/16/2022 11:08:00 PM	71449
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
Toluene	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
Ethylbenzene	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
Naphthalene	ND	2.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
1-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
2-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
Acetone	ND	10		µg/L	1	11/10/2022 4:23:00 PM	R92476
Bromobenzene	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
Bromodichloromethane	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
Bromoform	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
Bromomethane	ND	3.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
2-Butanone	ND	10		µg/L	1	11/10/2022 4:23:00 PM	R92476
Carbon disulfide	ND	10		µg/L	1	11/10/2022 4:23:00 PM	R92476
Carbon Tetrachloride	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
Chlorobenzene	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
Chloroethane	ND	2.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
Chloroform	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
Chloromethane	ND	3.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
2-Chlorotoluene	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
4-Chlorotoluene	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
cis-1,2-DCE	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
Dibromochloromethane	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211491-010 **Matrix:** AQUEOUS

Client Sample ID: MW-17
Collection Date: 11/8/2022 10:42:00 AM
Received Date: 11/8/2022 4:46:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dibromomethane	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
1,1-Dichloroethane	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
1,1-Dichloroethene	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
1,2-Dichloropropane	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
1,3-Dichloropropane	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
2,2-Dichloropropane	ND	2.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
1,1-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
Hexachlorobutadiene	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
2-Hexanone	ND	10		µg/L	1	11/10/2022 4:23:00 PM	R92476
Isopropylbenzene	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
4-Isopropyltoluene	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
4-Methyl-2-pentanone	ND	10		µg/L	1	11/10/2022 4:23:00 PM	R92476
Methylene Chloride	ND	3.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
n-Butylbenzene	ND	3.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
n-Propylbenzene	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
sec-Butylbenzene	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
Styrene	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
tert-Butylbenzene	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
trans-1,2-DCE	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
Trichlorofluoromethane	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
Vinyl chloride	ND	1.0		µg/L	1	11/10/2022 4:23:00 PM	R92476
Xylenes, Total	ND	1.5		µg/L	1	11/10/2022 4:23:00 PM	R92476
Surr: 1,2-Dichloroethane-d4	96.9	70-130		%Rec	1	11/10/2022 4:23:00 PM	R92476
Surr: 4-Bromofluorobenzene	93.5	70-130		%Rec	1	11/10/2022 4:23:00 PM	R92476
Surr: Dibromofluoromethane	95.1	70-130		%Rec	1	11/10/2022 4:23:00 PM	R92476

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211491-010 **Matrix:** AQUEOUS

Client Sample ID: MW-17
Collection Date: 11/8/2022 10:42:00 AM
Received Date: 11/8/2022 4:46:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Surr: Toluene-d8	87.9	70-130		%Rec	1	11/10/2022 4:23:00 PM	R92476

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211491-011 **Matrix:** AQUEOUS

Client Sample ID: MW-7
Collection Date: 11/8/2022 11:46:00 AM
Received Date: 11/8/2022 4:46:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.030	0.0060		mg/L	1	12/12/2022 12:00:48 PM	B93207
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.043	0.0060		mg/L	1	12/8/2022 3:30:55 PM	71480
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	1.6	1.0		µg/L	1	11/16/2022 11:50:00 PM	71449
Surr: 2-Fluorobiphenyl	50.5	15-107		%Rec	1	11/16/2022 11:50:00 PM	71449
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
Toluene	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
Ethylbenzene	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
Naphthalene	ND	2.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
1-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
2-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
Acetone	ND	10		µg/L	1	11/10/2022 4:46:00 PM	R92476
Bromobenzene	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
Bromodichloromethane	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
Bromoform	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
Bromomethane	ND	3.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
2-Butanone	ND	10		µg/L	1	11/10/2022 4:46:00 PM	R92476
Carbon disulfide	ND	10		µg/L	1	11/10/2022 4:46:00 PM	R92476
Carbon Tetrachloride	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
Chlorobenzene	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
Chloroethane	ND	2.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
Chloroform	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
Chloromethane	ND	3.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
2-Chlorotoluene	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
4-Chlorotoluene	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
cis-1,2-DCE	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
Dibromochloromethane	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
Dibromomethane	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211491-011 **Matrix:** AQUEOUS

Client Sample ID: MW-7
Collection Date: 11/8/2022 11:46:00 AM
Received Date: 11/8/2022 4:46:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
1,1-Dichloroethane	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
1,1-Dichloroethene	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
1,2-Dichloropropane	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
1,3-Dichloropropane	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
2,2-Dichloropropane	ND	2.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
1,1-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
Hexachlorobutadiene	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
2-Hexanone	ND	10		µg/L	1	11/10/2022 4:46:00 PM	R92476
Isopropylbenzene	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
4-Isopropyltoluene	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
4-Methyl-2-pentanone	ND	10		µg/L	1	11/10/2022 4:46:00 PM	R92476
Methylene Chloride	ND	3.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
n-Butylbenzene	ND	3.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
n-Propylbenzene	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
sec-Butylbenzene	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
Styrene	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
tert-Butylbenzene	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
trans-1,2-DCE	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
Trichlorofluoromethane	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
Vinyl chloride	ND	1.0		µg/L	1	11/10/2022 4:46:00 PM	R92476
Xylenes, Total	ND	1.5		µg/L	1	11/10/2022 4:46:00 PM	R92476
Surr: 1,2-Dichloroethane-d4	96.4	70-130		%Rec	1	11/10/2022 4:46:00 PM	R92476
Surr: 4-Bromofluorobenzene	91.8	70-130		%Rec	1	11/10/2022 4:46:00 PM	R92476
Surr: Dibromofluoromethane	96.2	70-130		%Rec	1	11/10/2022 4:46:00 PM	R92476
Surr: Toluene-d8	88.2	70-130		%Rec	1	11/10/2022 4:46:00 PM	R92476

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211491-012 **Matrix:** AQUEOUS

Client Sample ID: MW-23
Collection Date: 11/8/2022 12:43:00 PM
Received Date: 11/8/2022 4:46:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.11	0.0060	*	mg/L	1	12/12/2022 12:02:22 PM	B93207
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	1.2	0.030	*	mg/L	5	12/13/2022 6:03:47 PM	71480
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	5.3	1.0		µg/L	1	11/17/2022 12:33:00 AM	71449
Surr: 2-Fluorobiphenyl	34.0	15-107		%Rec	1	11/17/2022 12:33:00 AM	71449
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
Toluene	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
Ethylbenzene	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
Naphthalene	ND	2.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
1-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
2-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
Acetone	ND	10		µg/L	1	11/10/2022 5:09:00 PM	R92476
Bromobenzene	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
Bromodichloromethane	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
Bromoform	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
Bromomethane	ND	3.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
2-Butanone	ND	10		µg/L	1	11/10/2022 5:09:00 PM	R92476
Carbon disulfide	ND	10		µg/L	1	11/10/2022 5:09:00 PM	R92476
Carbon Tetrachloride	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
Chlorobenzene	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
Chloroethane	ND	2.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
Chloroform	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
Chloromethane	ND	3.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
2-Chlorotoluene	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
4-Chlorotoluene	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
cis-1,2-DCE	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
Dibromochloromethane	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
Dibromomethane	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211491-012 **Matrix:** AQUEOUS

Client Sample ID: MW-23
Collection Date: 11/8/2022 12:43:00 PM
Received Date: 11/8/2022 4:46:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
1,1-Dichloroethane	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
1,1-Dichloroethene	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
1,2-Dichloropropane	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
1,3-Dichloropropane	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
2,2-Dichloropropane	ND	2.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
1,1-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
Hexachlorobutadiene	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
2-Hexanone	ND	10		µg/L	1	11/10/2022 5:09:00 PM	R92476
Isopropylbenzene	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
4-Isopropyltoluene	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
4-Methyl-2-pentanone	ND	10		µg/L	1	11/10/2022 5:09:00 PM	R92476
Methylene Chloride	ND	3.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
n-Butylbenzene	ND	3.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
n-Propylbenzene	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
sec-Butylbenzene	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
Styrene	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
tert-Butylbenzene	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
trans-1,2-DCE	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
Trichloroethene (TCE)	3.4	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
Trichlorofluoromethane	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
Vinyl chloride	ND	1.0		µg/L	1	11/10/2022 5:09:00 PM	R92476
Xylenes, Total	ND	1.5		µg/L	1	11/10/2022 5:09:00 PM	R92476
Surr: 1,2-Dichloroethane-d4	94.5	70-130		%Rec	1	11/10/2022 5:09:00 PM	R92476
Surr: 4-Bromofluorobenzene	91.8	70-130		%Rec	1	11/10/2022 5:09:00 PM	R92476
Surr: Dibromofluoromethane	95.9	70-130		%Rec	1	11/10/2022 5:09:00 PM	R92476
Surr: Toluene-d8	88.7	70-130		%Rec	1	11/10/2022 5:09:00 PM	R92476

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211491-013 **Matrix:** AQUEOUS

Client Sample ID: MW-12
Collection Date: 11/8/2022 1:43:00 PM
Received Date: 11/8/2022 4:46:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	12/12/2022 12:03:56 PM	B93207
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.83	0.0060	*	mg/L	1	12/8/2022 3:33:54 PM	71480
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	4.9	1.0		µg/L	1	11/17/2022 1:15:00 AM	71449
Surr: 2-Fluorobiphenyl	43.0	15-107		%Rec	1	11/17/2022 1:15:00 AM	71449
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
Toluene	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
Ethylbenzene	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
Naphthalene	ND	2.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
1-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
2-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
Acetone	ND	10		µg/L	1	11/10/2022 5:32:00 PM	R92476
Bromobenzene	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
Bromodichloromethane	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
Bromoform	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
Bromomethane	ND	3.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
2-Butanone	ND	10		µg/L	1	11/10/2022 5:32:00 PM	R92476
Carbon disulfide	ND	10		µg/L	1	11/10/2022 5:32:00 PM	R92476
Carbon Tetrachloride	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
Chlorobenzene	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
Chloroethane	ND	2.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
Chloroform	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
Chloromethane	ND	3.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
2-Chlorotoluene	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
4-Chlorotoluene	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
cis-1,2-DCE	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
Dibromochloromethane	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
Dibromomethane	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211491-013 **Matrix:** AQUEOUS

Client Sample ID: MW-12
Collection Date: 11/8/2022 1:43:00 PM
Received Date: 11/8/2022 4:46:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
1,1-Dichloroethane	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
1,1-Dichloroethene	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
1,2-Dichloropropane	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
1,3-Dichloropropane	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
2,2-Dichloropropane	ND	2.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
1,1-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
Hexachlorobutadiene	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
2-Hexanone	ND	10		µg/L	1	11/10/2022 5:32:00 PM	R92476
Isopropylbenzene	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
4-Isopropyltoluene	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
4-Methyl-2-pentanone	ND	10		µg/L	1	11/10/2022 5:32:00 PM	R92476
Methylene Chloride	ND	3.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
n-Butylbenzene	ND	3.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
n-Propylbenzene	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
sec-Butylbenzene	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
Styrene	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
tert-Butylbenzene	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
trans-1,2-DCE	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
Trichloroethene (TCE)	11	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
Trichlorofluoromethane	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
Vinyl chloride	ND	1.0		µg/L	1	11/10/2022 5:32:00 PM	R92476
Xylenes, Total	ND	1.5		µg/L	1	11/10/2022 5:32:00 PM	R92476
Surr: 1,2-Dichloroethane-d4	96.4	70-130		%Rec	1	11/10/2022 5:32:00 PM	R92476
Surr: 4-Bromofluorobenzene	84.0	70-130		%Rec	1	11/10/2022 5:32:00 PM	R92476
Surr: Dibromofluoromethane	95.8	70-130		%Rec	1	11/10/2022 5:32:00 PM	R92476
Surr: Toluene-d8	88.8	70-130		%Rec	1	11/10/2022 5:32:00 PM	R92476

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton Coors Rd
Collection Date:
Lab ID: 2211491-014
Matrix: TRIP BLANK
Received Date: 11/8/2022 4:46:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
Toluene	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
Ethylbenzene	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
Naphthalene	ND	2.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
1-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
2-Methylnaphthalene	ND	4.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
Acetone	ND	10		µg/L	1	11/10/2022 5:55:00 PM	R92476
Bromobenzene	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
Bromodichloromethane	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
Bromoform	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
Bromomethane	ND	3.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
2-Butanone	ND	10		µg/L	1	11/10/2022 5:55:00 PM	R92476
Carbon disulfide	ND	10		µg/L	1	11/10/2022 5:55:00 PM	R92476
Carbon Tetrachloride	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
Chlorobenzene	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
Chloroethane	ND	2.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
Chloroform	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
Chloromethane	ND	3.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
2-Chlorotoluene	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
4-Chlorotoluene	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
cis-1,2-DCE	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
Dibromochloromethane	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
Dibromomethane	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
1,1-Dichloroethane	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
1,1-Dichloroethene	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
1,2-Dichloropropane	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
1,3-Dichloropropane	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
2,2-Dichloropropane	ND	2.0		µg/L	1	11/10/2022 5:55:00 PM	R92476

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton Coors Rd
Collection Date:
Lab ID: 2211491-014
Matrix: TRIP BLANK
Received Date: 11/8/2022 4:46:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
Hexachlorobutadiene	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
2-Hexanone	ND	10		µg/L	1	11/10/2022 5:55:00 PM	R92476
Isopropylbenzene	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
4-Isopropyltoluene	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
4-Methyl-2-pentanone	ND	10		µg/L	1	11/10/2022 5:55:00 PM	R92476
Methylene Chloride	ND	3.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
n-Butylbenzene	ND	3.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
n-Propylbenzene	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
sec-Butylbenzene	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
Styrene	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
tert-Butylbenzene	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
trans-1,2-DCE	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
Trichlorofluoromethane	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
Vinyl chloride	ND	1.0		µg/L	1	11/10/2022 5:55:00 PM	R92476
Xylenes, Total	ND	1.5		µg/L	1	11/10/2022 5:55:00 PM	R92476
Surr: 1,2-Dichloroethane-d4	94.9	70-130		%Rec	1	11/10/2022 5:55:00 PM	R92476
Surr: 4-Bromofluorobenzene	92.8	70-130		%Rec	1	11/10/2022 5:55:00 PM	R92476
Surr: Dibromofluoromethane	96.9	70-130		%Rec	1	11/10/2022 5:55:00 PM	R92476
Surr: Toluene-d8	88.3	70-130		%Rec	1	11/10/2022 5:55:00 PM	R92476

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211491**
16-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **MB-A** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **A93207** RunNo: **93207**
Prep Date: Analysis Date: **12/12/2022** SeqNo: **3358727** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LLLCS-A** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **A93207** RunNo: **93207**
Prep Date: Analysis Date: **12/12/2022** SeqNo: **3358728** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.0080	0.0060	0.006000	0	133	50	150			

Sample ID: **LCS-A** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **A93207** RunNo: **93207**
Prep Date: Analysis Date: **12/12/2022** SeqNo: **3358729** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.53	0.0060	0.5000	0	107	85	115			

Sample ID: **MB-B** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **B93207** RunNo: **93207**
Prep Date: Analysis Date: **12/12/2022** SeqNo: **3358731** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID: **LLLCS-B** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **B93207** RunNo: **93207**
Prep Date: Analysis Date: **12/12/2022** SeqNo: **3358732** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.0070	0.0060	0.006000	0	117	50	150			
Iron	ND	0.020	0.02000	0	58.3	50	150			
Manganese	0.0025	0.0020	0.002000	0	126	50	150			

Sample ID: **LCS-B** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **B93207** RunNo: **93207**
Prep Date: Analysis Date: **12/12/2022** SeqNo: **3358733** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.51	0.0060	0.5000	0	102	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211491**
16-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **LCS-B** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **B93207** RunNo: **93207**
Prep Date: Analysis Date: **12/12/2022** SeqNo: **3358733** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.53	0.020	0.5000	0	105	85	115			
Manganese	0.52	0.0020	0.5000	0	105	85	115			

Sample ID: **2211491-013DMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MW-12** Batch ID: **B93207** RunNo: **93207**
Prep Date: Analysis Date: **12/12/2022** SeqNo: **3358795** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.47	0.0060	0.5000	0	94.3	70	130			

Sample ID: **2211491-013DMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MW-12** Batch ID: **B93207** RunNo: **93207**
Prep Date: Analysis Date: **12/12/2022** SeqNo: **3358796** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.45	0.0060	0.5000	0	90.8	70	130	3.76	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211491**
16-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **MB-71480** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **71480** RunNo: **93144**
Prep Date: **11/14/2022** Analysis Date: **12/8/2022** SeqNo: **3355610** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LCSLL-71480** SampType: **LCSLL** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC** Batch ID: **71480** RunNo: **93144**
Prep Date: **11/14/2022** Analysis Date: **12/8/2022** SeqNo: **3355611** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.0069	0.0060	0.006000	0	115	50	150			

Sample ID: **LCS-71480** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **71480** RunNo: **93144**
Prep Date: **11/14/2022** Analysis Date: **12/8/2022** SeqNo: **3355612** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.49	0.0060	0.5000	0	97.1	85	115			

Sample ID: **2211491-001CMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MW-42** Batch ID: **71480** RunNo: **93144**
Prep Date: **11/14/2022** Analysis Date: **12/8/2022** SeqNo: **3355617** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.51	0.0060	0.5000	0.03936	93.6	70	130			

Sample ID: **2211491-001CMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MW-42** Batch ID: **71480** RunNo: **93144**
Prep Date: **11/14/2022** Analysis Date: **12/8/2022** SeqNo: **3355618** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.50	0.0060	0.5000	0.03936	93.1	70	130	0.450	20	

Sample ID: **2211491-002CMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MW-39** Batch ID: **71480** RunNo: **93144**
Prep Date: **11/14/2022** Analysis Date: **12/8/2022** SeqNo: **3355620** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.54	0.0060	0.5000	0.07030	93.2	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211491**
16-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **2211491-002CMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MW-39** Batch ID: **71480** RunNo: **93144**
Prep Date: **11/14/2022** Analysis Date: **12/8/2022** SeqNo: **3355621** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.54	0.0060	0.5000	0.07030	94.1	70	130	0.836	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211491**
16-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R92476** RunNo: **92476**
Prep Date: Analysis Date: **11/10/2022** SeqNo: **3324610** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	70	130			
Toluene	21	1.0	20.00	0	103	70	130			
Chlorobenzene	21	1.0	20.00	0	107	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	103	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	101	70	130			
Surr: 1,2-Dichloroethane-d4	9.2		10.00		91.8	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		98.6	70	130			
Surr: Dibromofluoromethane	9.0		10.00		90.0	70	130			
Surr: Toluene-d8	9.0		10.00		89.8	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R92476** RunNo: **92476**
Prep Date: Analysis Date: **11/10/2022** SeqNo: **3324611** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211491**
16-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R92476**	RunNo: **92476**	
Prep Date:	Analysis Date: **11/10/2022**	SeqNo: **3324611**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211491**
16-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R92476** RunNo: **92476**
Prep Date: Analysis Date: **11/10/2022** SeqNo: **3324611** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.7	70	130			
Surr: 4-Bromofluorobenzene	9.3		10.00		92.9	70	130			
Surr: Dibromofluoromethane	9.3		10.00		93.0	70	130			
Surr: Toluene-d8	9.0		10.00		90.1	70	130			

Sample ID: **2211491-001ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MW-42** Batch ID: **R92476** RunNo: **92476**
Prep Date: Analysis Date: **11/10/2022** SeqNo: **3324613** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	103	70	130			
Toluene	21	1.0	20.00	0	104	70	130			
Chlorobenzene	22	1.0	20.00	0	108	70	130			
1,1-Dichloroethene	21	1.0	20.00	0.2740	106	70	130			
Trichloroethene (TCE)	22	1.0	20.00	1.688	102	70	130			
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.9	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		96.2	70	130			
Surr: Dibromofluoromethane	9.4		10.00		94.3	70	130			
Surr: Toluene-d8	9.0		10.00		90.4	70	130			

Sample ID: **2211491-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MW-42** Batch ID: **R92476** RunNo: **92476**
Prep Date: Analysis Date: **11/10/2022** SeqNo: **3324614** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	70	130	2.32	20	
Toluene	20	1.0	20.00	0	101	70	130	2.30	20	
Chlorobenzene	21	1.0	20.00	0	107	70	130	1.66	20	
1,1-Dichloroethene	20	1.0	20.00	0.2740	99.2	70	130	6.59	20	
Trichloroethene (TCE)	21	1.0	20.00	1.688	96.9	70	130	5.20	20	
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.0	70	130	0	0	
Surr: 4-Bromofluorobenzene	9.8		10.00		97.9	70	130	0	0	
Surr: Dibromofluoromethane	9.3		10.00		92.6	70	130	0	0	
Surr: Toluene-d8	9.0		10.00		90.2	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211491**
16-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb-71435** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **71435** RunNo: **92608**
Prep Date: **11/11/2022** Analysis Date: **11/16/2022** SeqNo: **3330932** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	2.4		4.000		59.0	15	108			
Surr: 2,4,6-Tribromophenol	5.1		8.000		63.8	15	112			
Surr: 2-Fluorobiphenyl	2.1		4.000		53.0	15	107			
Surr: 4-Terphenyl-d14	3.8		4.000		95.5	15	166			

Sample ID: **lcs-71435** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **71435** RunNo: **92608**
Prep Date: **11/11/2022** Analysis Date: **11/16/2022** SeqNo: **3330933** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.64	0.10	2.000	0	32.0	15	60.5			
Surr: Nitrobenzene-d5	3.2		5.000		64.4	15	108			
Surr: 2,4,6-Tribromophenol	6.4		10.00		64.0	15	112			
Surr: 2-Fluorobiphenyl	2.3		5.000		45.2	15	107			
Surr: 4-Terphenyl-d14	4.6		5.000		92.8	15	166			

Sample ID: **lcsd-71435** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **71435** RunNo: **92608**
Prep Date: **11/11/2022** Analysis Date: **11/16/2022** SeqNo: **3330934** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.82	0.10	2.000	0	41.0	15	60.5	24.7	29.7	
Surr: Nitrobenzene-d5	4.2		5.000		84.8	15	108	0	0	
Surr: 2,4,6-Tribromophenol	8.5		10.00		84.6	15	112	0	0	
Surr: 2-Fluorobiphenyl	3.0		5.000		59.6	15	107	0	0	
Surr: 4-Terphenyl-d14	6.0		5.000		120	15	166	0	0	

Sample ID: **mb-71449** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **71449** RunNo: **92659**
Prep Date: **11/11/2022** Analysis Date: **11/16/2022** SeqNo: **3333294** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	1.7		4.000		42.5	15	108			
Surr: 2,4,6-Tribromophenol	3.3		8.000		41.8	15	112			
Surr: 2-Fluorobiphenyl	1.6		4.000		39.5	15	107			
Surr: 4-Terphenyl-d14	3.3		4.000		82.0	15	166			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211491**
16-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **lcs-71449** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **71449** RunNo: **92659**
Prep Date: **11/11/2022** Analysis Date: **11/16/2022** SeqNo: **3333295** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.60	0.10	2.000	0	30.0	15	60.5			
Surr: Nitrobenzene-d5	3.1		5.000		61.6	15	108			
Surr: 2,4,6-Tribromophenol	5.4		10.00		54.0	15	112			
Surr: 2-Fluorobiphenyl	2.3		5.000		46.4	15	107			
Surr: 4-Terphenyl-d14	5.1		5.000		102	15	166			

Sample ID: **lcsd-71449** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **71449** RunNo: **92659**
Prep Date: **11/11/2022** Analysis Date: **11/16/2022** SeqNo: **3333296** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.64	0.10	2.000	0	32.0	15	60.5	6.45	29.7	
Surr: Nitrobenzene-d5	3.2		5.000		64.4	15	108	0	0	
Surr: 2,4,6-Tribromophenol	5.5		10.00		54.6	15	112	0	0	
Surr: 2-Fluorobiphenyl	2.3		5.000		46.0	15	107	0	0	
Surr: 4-Terphenyl-d14	5.4		5.000		108	15	166	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **EA Engineering** Work Order Number: **2211491** RcptNo: **1**

Received By: **Juan Rojas** **11/8/2022 4:46:00 PM**

Completed By: **Cheyenne Cason** **11/9/2022 7:54:51 AM**

Reviewed By: SCL 11/9/22

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 26
(<2 or >12 unless noted)
Adjusted? yes
Checked by: KPG 11.9.22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks: Added 1.0ml of HNO_3 to sample 013C for metal analysis - KPG 11.9.22

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.5	Good				
2	3.4	Good				
3	5.0	Good				

Chain-of-Custody Record

Client: Sparton Technologies, inc
EA Engineering, Science and Technology
Mailing Address: 320 Gold Ave SW #1300
Albuquerque, NM 87102
Phone #: 505-715-4154
email or Fax#: r marley@eaest.com
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: Sparton Coors Rd
Project #: Bills to Sparton Direct
Project Manager: Bob Marley EA Engineering
Sampler: Scott Miles / T. Watchman
On Ice: ~~☐ Yes~~ ☐ No
# of Coolers: 2
Cooler Temp (Including CF): See Remarks (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2211491	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	VOCs 8260B	1,4 Dioxane 8270 SIM	Total Chromium	Dissolved Chromium	Dissolved Metals
11-7-22	1055	Aq	MW-42	1×1L Amber 3×VOA 1×125mL HDPE 1×250mL HDPE	none, HCl HNO3	001											X	X	X	X	
	1426		MW-39			002											X	X	X	X	
	1435		MW-43			003											X	X	X	X	
	1632		MW-73			004											X	X	X	X	
11-8-22	1010		MW-14R			005											X	X	X	X	
	1243		MW-31			006											X	X	X	X	
	1306		MW-40			007											X	X	X	X	
	1556		MW-72			008											X	X	X	X	
	0906		MW-21			009											X	X	X	X	
	1042		MW-17			010											X	X	X	X	X
	1146		MW-7			011											X	X	X	X	
	1243		MW-23			012											X	X	X	X	

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
11-8-22	1646	Thomas Watchman	[signature]	CDO	11/8/22	16:46
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks:
1.4+0.1=1.5
3.3+0.1=3.4
4.9+0.1=5.0

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: Sparton Technologies inc.
EA Engineering, Science and Technology
Mailing Address: 320 Gold Ave SW #1300
Albuquerque, NM 87102
Phone #: 505-715-4154
email or Fax#: rmarley@eaest.com
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: Sparton Coors Rd
Project #: Bills to Sparton Direct
Project Manager: Bob Marley EA Engineering
Sampler: Scott Miles/T. Watchman
On Ice: ☒ Yes ☐ No
# of Coolers: 3
Cooler Temp (including CF): See Remarks (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2211491	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method:504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	VOCs 8260B	1,4 Dioxane 8270SIM	Total Chromium	Dissolved Chromium
11-8-22	1343	Aq	MW-12	1x1L Amber 3xVOA 1x125ml HDPE, 1x250ml HDPE	none HCl HNO3	013											X	X	X	X
		↓	Trip Blank	2xVOA	HCl	014											X			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
11-8-22	1646	Shanna Watchman		CDO	11/8/22	16:46
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks:
1.4+0.1=1.5
3.3+0.1=3.4
4.9+0.1=5.0

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

December 20, 2022

Bob Marley
EA Engineering
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL:
FAX:

RE: Sparton Coors Rd OrderNo.: 2211699

Dear Bob Marley:

Hall Environmental Analysis Laboratory received 16 sample(s) on 11/10/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2211699**
Date Reported: **12/20/2022**

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211699-001 **Matrix:** AQUEOUS

Client Sample ID: MW-79
Collection Date: 11/9/2022 10:51:00 AM
Received Date: 11/10/2022 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	12/15/2022 9:31:16 AM	A93348
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	11/21/2022 2:59:32 PM	71517
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	11/17/2022 1:57:00 AM	71449
Surr: 2-Fluorobiphenyl	36.5	15-107		%Rec	1	11/17/2022 1:57:00 AM	71449
EPA METHOD 8260B: VOLATILES						Analyst:	**RAA**
Benzene	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
Toluene	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
Ethylbenzene	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
Naphthalene	ND	2.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
1-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
2-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
Acetone	ND	10		µg/L	1	11/11/2022 3:01:42 PM	R92544
Bromobenzene	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
Bromodichloromethane	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
Bromoform	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
Bromomethane	ND	3.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
2-Butanone	ND	10		µg/L	1	11/11/2022 3:01:42 PM	R92544
Carbon disulfide	ND	10		µg/L	1	11/11/2022 3:01:42 PM	R92544
Carbon Tetrachloride	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
Chlorobenzene	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
Chloroethane	ND	2.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
Chloroform	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
Chloromethane	ND	3.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
2-Chlorotoluene	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
4-Chlorotoluene	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
cis-1,2-DCE	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
Dibromochloromethane	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
Dibromomethane	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: MW-79
Project: Sparton Coors Rd
Collection Date: 11/9/2022 10:51:00 AM
Lab ID: 2211699-001
Matrix: AQUEOUS
Received Date: 11/10/2022 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
1,1-Dichloroethane	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
1,1-Dichloroethene	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
1,2-Dichloropropane	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
1,3-Dichloropropane	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
2,2-Dichloropropane	ND	2.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
1,1-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
Hexachlorobutadiene	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
2-Hexanone	ND	10		µg/L	1	11/11/2022 3:01:42 PM	R92544
Isopropylbenzene	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
4-Isopropyltoluene	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
4-Methyl-2-pentanone	ND	10		µg/L	1	11/11/2022 3:01:42 PM	R92544
Methylene Chloride	ND	3.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
n-Butylbenzene	ND	3.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
n-Propylbenzene	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
sec-Butylbenzene	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
Styrene	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
tert-Butylbenzene	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
trans-1,2-DCE	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
Trichlorofluoromethane	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
Vinyl chloride	ND	1.0		µg/L	1	11/11/2022 3:01:42 PM	R92544
Xylenes, Total	ND	1.5		µg/L	1	11/11/2022 3:01:42 PM	R92544
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	11/11/2022 3:01:42 PM	R92544
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	11/11/2022 3:01:42 PM	R92544
Surr: Dibromofluoromethane	102	70-130		%Rec	1	11/11/2022 3:01:42 PM	R92544
Surr: Toluene-d8	104	70-130		%Rec	1	11/11/2022 3:01:42 PM	R92544

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211699-002 **Matrix:** AQUEOUS

Client Sample ID: MW-74
Collection Date: 11/9/2022 12:33:00 PM
Received Date: 11/10/2022 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	12/15/2022 9:35:45 AM	A93348
Iron	ND	0.020		mg/L	1	12/15/2022 9:35:45 AM	A93348
Manganese	ND	0.0020		mg/L	1	12/15/2022 9:35:45 AM	A93348
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	1.9	1.0		µg/L	1	11/17/2022 2:39:00 AM	71449
Surr: 2-Fluorobiphenyl	46.5	15-107		%Rec	1	11/17/2022 2:39:00 AM	71449
EPA METHOD 8260B: VOLATILES						Analyst:	**RAA**
Benzene	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
Toluene	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
Ethylbenzene	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
Naphthalene	ND	2.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
1-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
2-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
Acetone	ND	10		µg/L	1	11/11/2022 4:22:56 PM	R92544
Bromobenzene	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
Bromodichloromethane	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
Bromoform	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
Bromomethane	ND	3.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
2-Butanone	ND	10		µg/L	1	11/11/2022 4:22:56 PM	R92544
Carbon disulfide	ND	10		µg/L	1	11/11/2022 4:22:56 PM	R92544
Carbon Tetrachloride	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
Chlorobenzene	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
Chloroethane	ND	2.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
Chloroform	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
Chloromethane	ND	3.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
2-Chlorotoluene	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
4-Chlorotoluene	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
cis-1,2-DCE	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
Dibromochloromethane	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
Dibromomethane	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211699-002 **Matrix:** AQUEOUS

Client Sample ID: MW-74
Collection Date: 11/9/2022 12:33:00 PM
Received Date: 11/10/2022 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
1,1-Dichloroethane	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
1,1-Dichloroethene	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
1,2-Dichloropropane	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
1,3-Dichloropropane	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
2,2-Dichloropropane	ND	2.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
1,1-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
Hexachlorobutadiene	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
2-Hexanone	ND	10		µg/L	1	11/11/2022 4:22:56 PM	R92544
Isopropylbenzene	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
4-Isopropyltoluene	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
4-Methyl-2-pentanone	ND	10		µg/L	1	11/11/2022 4:22:56 PM	R92544
Methylene Chloride	ND	3.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
n-Butylbenzene	ND	3.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
n-Propylbenzene	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
sec-Butylbenzene	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
Styrene	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
tert-Butylbenzene	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
trans-1,2-DCE	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
Trichlorofluoromethane	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
Vinyl chloride	ND	1.0		µg/L	1	11/11/2022 4:22:56 PM	R92544
Xylenes, Total	ND	1.5		µg/L	1	11/11/2022 4:22:56 PM	R92544
Surr: 1,2-Dichloroethane-d4	97.2	70-130		%Rec	1	11/11/2022 4:22:56 PM	R92544
Surr: 4-Bromofluorobenzene	108	70-130		%Rec	1	11/11/2022 4:22:56 PM	R92544
Surr: Dibromofluoromethane	106	70-130		%Rec	1	11/11/2022 4:22:56 PM	R92544
Surr: Toluene-d8	108	70-130		%Rec	1	11/11/2022 4:22:56 PM	R92544

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211699-003 **Matrix:** AQUEOUS

Client Sample ID: MW-76
Collection Date: 11/9/2022 1:59:00 PM
Received Date: 11/10/2022 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	12/15/2022 9:43:05 AM	A93348
Iron	ND	0.020		mg/L	1	12/15/2022 9:43:05 AM	A93348
Manganese	ND	0.0020		mg/L	1	12/15/2022 9:43:05 AM	A93348
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.1	1.0		µg/L	1	11/17/2022 3:21:00 AM	71449
Surr: 2-Fluorobiphenyl	62.5	15-107		%Rec	1	11/17/2022 3:21:00 AM	71449
EPA METHOD 8260B: VOLATILES						Analyst:	**RAA**
Benzene	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
Toluene	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
Ethylbenzene	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
Naphthalene	ND	2.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
1-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
2-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
Acetone	ND	10		µg/L	1	11/11/2022 4:50:04 PM	R92544
Bromobenzene	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
Bromodichloromethane	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
Bromoform	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
Bromomethane	ND	3.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
2-Butanone	ND	10		µg/L	1	11/11/2022 4:50:04 PM	R92544
Carbon disulfide	ND	10		µg/L	1	11/11/2022 4:50:04 PM	R92544
Carbon Tetrachloride	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
Chlorobenzene	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
Chloroethane	ND	2.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
Chloroform	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
Chloromethane	ND	3.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
2-Chlorotoluene	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
4-Chlorotoluene	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
cis-1,2-DCE	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
Dibromochloromethane	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
Dibromomethane	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211699-003 **Matrix:** AQUEOUS

Client Sample ID: MW-76
Collection Date: 11/9/2022 1:59:00 PM
Received Date: 11/10/2022 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
1,1-Dichloroethane	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
1,1-Dichloroethene	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
1,2-Dichloropropane	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
1,3-Dichloropropane	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
2,2-Dichloropropane	ND	2.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
1,1-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
Hexachlorobutadiene	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
2-Hexanone	ND	10		µg/L	1	11/11/2022 4:50:04 PM	R92544
Isopropylbenzene	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
4-Isopropyltoluene	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
4-Methyl-2-pentanone	ND	10		µg/L	1	11/11/2022 4:50:04 PM	R92544
Methylene Chloride	ND	3.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
n-Butylbenzene	ND	3.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
n-Propylbenzene	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
sec-Butylbenzene	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
Styrene	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
tert-Butylbenzene	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
trans-1,2-DCE	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
Trichlorofluoromethane	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
Vinyl chloride	ND	1.0		µg/L	1	11/11/2022 4:50:04 PM	R92544
Xylenes, Total	ND	1.5		µg/L	1	11/11/2022 4:50:04 PM	R92544
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	11/11/2022 4:50:04 PM	R92544
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	11/11/2022 4:50:04 PM	R92544
Surr: Dibromofluoromethane	102	70-130		%Rec	1	11/11/2022 4:50:04 PM	R92544
Surr: Toluene-d8	107	70-130		%Rec	1	11/11/2022 4:50:04 PM	R92544

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211699-004 **Matrix:** AQUEOUS

Client Sample ID: MW-75
Collection Date: 11/9/2022 3:11:00 PM
Received Date: 11/10/2022 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	12/15/2022 9:46:03 AM	A93348
Iron	0.046	0.020		mg/L	1	12/15/2022 9:46:03 AM	A93348
Manganese	0.0022	0.0020		mg/L	1	12/15/2022 9:46:03 AM	A93348
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	1.5	1.0		µg/L	1	11/17/2022 4:03:00 AM	71449
Surr: 2-Fluorobiphenyl	42.5	15-107		%Rec	1	11/17/2022 4:03:00 AM	71449
EPA METHOD 8260B: VOLATILES						Analyst:	**RAA**
Benzene	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
Toluene	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
Ethylbenzene	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
Naphthalene	ND	2.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
1-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
2-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
Acetone	ND	10		µg/L	1	11/11/2022 5:17:08 PM	R92544
Bromobenzene	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
Bromodichloromethane	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
Bromoform	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
Bromomethane	ND	3.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
2-Butanone	ND	10		µg/L	1	11/11/2022 5:17:08 PM	R92544
Carbon disulfide	ND	10		µg/L	1	11/11/2022 5:17:08 PM	R92544
Carbon Tetrachloride	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
Chlorobenzene	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
Chloroethane	ND	2.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
Chloroform	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
Chloromethane	ND	3.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
2-Chlorotoluene	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
4-Chlorotoluene	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
cis-1,2-DCE	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
Dibromochloromethane	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
Dibromomethane	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211699-004 **Matrix:** AQUEOUS

Client Sample ID: MW-75
Collection Date: 11/9/2022 3:11:00 PM
Received Date: 11/10/2022 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
1,1-Dichloroethane	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
1,1-Dichloroethene	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
1,2-Dichloropropane	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
1,3-Dichloropropane	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
2,2-Dichloropropane	ND	2.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
1,1-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
Hexachlorobutadiene	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
2-Hexanone	ND	10		µg/L	1	11/11/2022 5:17:08 PM	R92544
Isopropylbenzene	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
4-Isopropyltoluene	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
4-Methyl-2-pentanone	ND	10		µg/L	1	11/11/2022 5:17:08 PM	R92544
Methylene Chloride	ND	3.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
n-Butylbenzene	ND	3.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
n-Propylbenzene	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
sec-Butylbenzene	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
Styrene	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
tert-Butylbenzene	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
trans-1,2-DCE	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
Trichlorofluoromethane	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
Vinyl chloride	ND	1.0		µg/L	1	11/11/2022 5:17:08 PM	R92544
Xylenes, Total	ND	1.5		µg/L	1	11/11/2022 5:17:08 PM	R92544
Surr: 1,2-Dichloroethane-d4	96.6	70-130		%Rec	1	11/11/2022 5:17:08 PM	R92544
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	11/11/2022 5:17:08 PM	R92544
Surr: Dibromofluoromethane	97.3	70-130		%Rec	1	11/11/2022 5:17:08 PM	R92544
Surr: Toluene-d8	104	70-130		%Rec	1	11/11/2022 5:17:08 PM	R92544

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211699-005 **Matrix:** AQUEOUS

Client Sample ID: MW-9
Collection Date: 11/9/2022 8:55:00 AM
Received Date: 11/10/2022 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.15	0.0060	*	mg/L	1	12/15/2022 9:48:58 AM	A93348
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.17	0.0060	*	mg/L	1	11/21/2022 3:04:08 PM	71517
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.2	1.0		µg/L	1	11/17/2022 4:45:00 AM	71449
Surr: 2-Fluorobiphenyl	52.0	15-107		%Rec	1	11/17/2022 4:45:00 AM	71449
EPA METHOD 8260B: VOLATILES						Analyst:	**RAA**
Benzene	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
Toluene	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
Ethylbenzene	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
Naphthalene	ND	2.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
1-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
2-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
Acetone	ND	10		µg/L	1	11/11/2022 5:44:14 PM	R92544
Bromobenzene	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
Bromodichloromethane	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
Bromoform	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
Bromomethane	ND	3.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
2-Butanone	ND	10		µg/L	1	11/11/2022 5:44:14 PM	R92544
Carbon disulfide	ND	10		µg/L	1	11/11/2022 5:44:14 PM	R92544
Carbon Tetrachloride	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
Chlorobenzene	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
Chloroethane	ND	2.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
Chloroform	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
Chloromethane	ND	3.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
2-Chlorotoluene	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
4-Chlorotoluene	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
cis-1,2-DCE	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
Dibromochloromethane	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
Dibromomethane	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211699-005 **Matrix:** AQUEOUS

Client Sample ID: MW-9
Collection Date: 11/9/2022 8:55:00 AM
Received Date: 11/10/2022 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
1,1-Dichloroethane	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
1,1-Dichloroethene	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
1,2-Dichloropropane	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
1,3-Dichloropropane	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
2,2-Dichloropropane	ND	2.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
1,1-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
Hexachlorobutadiene	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
2-Hexanone	ND	10		µg/L	1	11/11/2022 5:44:14 PM	R92544
Isopropylbenzene	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
4-Isopropyltoluene	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
4-Methyl-2-pentanone	ND	10		µg/L	1	11/11/2022 5:44:14 PM	R92544
Methylene Chloride	ND	3.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
n-Butylbenzene	ND	3.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
n-Propylbenzene	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
sec-Butylbenzene	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
Styrene	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
tert-Butylbenzene	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
trans-1,2-DCE	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
Trichloroethene (TCE)	3.5	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
Trichlorofluoromethane	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
Vinyl chloride	ND	1.0		µg/L	1	11/11/2022 5:44:14 PM	R92544
Xylenes, Total	ND	1.5		µg/L	1	11/11/2022 5:44:14 PM	R92544
Surr: 1,2-Dichloroethane-d4	100	70-130		%Rec	1	11/11/2022 5:44:14 PM	R92544
Surr: 4-Bromofluorobenzene	110	70-130		%Rec	1	11/11/2022 5:44:14 PM	R92544
Surr: Dibromofluoromethane	105	70-130		%Rec	1	11/11/2022 5:44:14 PM	R92544
Surr: Toluene-d8	106	70-130		%Rec	1	11/11/2022 5:44:14 PM	R92544

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: MW-38
Project: Sparton Coors Rd
Collection Date: 11/9/2022 1:34:00 PM
Lab ID: 2211699-006
Matrix: AQUEOUS
Received Date: 11/10/2022 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.014	0.0060		mg/L	1	12/15/2022 9:50:26 AM	A93348
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.016	0.0060		mg/L	1	11/21/2022 3:05:39 PM	71517
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	11/21/2022 1:05:00 PM	71452
Surr: 2-Fluorobiphenyl	39.5	15-107		%Rec	1	11/21/2022 1:05:00 PM	71452
EPA METHOD 8260B: VOLATILES						Analyst:	**RAA**
Benzene	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
Toluene	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
Ethylbenzene	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
Naphthalene	ND	2.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
1-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
2-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
Acetone	ND	10		µg/L	1	11/11/2022 6:11:20 PM	R92544
Bromobenzene	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
Bromodichloromethane	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
Bromoform	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
Bromomethane	ND	3.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
2-Butanone	ND	10		µg/L	1	11/11/2022 6:11:20 PM	R92544
Carbon disulfide	ND	10		µg/L	1	11/11/2022 6:11:20 PM	R92544
Carbon Tetrachloride	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
Chlorobenzene	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
Chloroethane	ND	2.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
Chloroform	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
Chloromethane	ND	3.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
2-Chlorotoluene	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
4-Chlorotoluene	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
cis-1,2-DCE	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
Dibromochloromethane	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
Dibromomethane	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211699-006 **Matrix:** AQUEOUS

Client Sample ID: MW-38
Collection Date: 11/9/2022 1:34:00 PM
Received Date: 11/10/2022 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
1,1-Dichloroethane	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
1,1-Dichloroethene	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
1,2-Dichloropropane	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
1,3-Dichloropropane	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
2,2-Dichloropropane	ND	2.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
1,1-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
Hexachlorobutadiene	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
2-Hexanone	ND	10		µg/L	1	11/11/2022 6:11:20 PM	R92544
Isopropylbenzene	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
4-Isopropyltoluene	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
4-Methyl-2-pentanone	ND	10		µg/L	1	11/11/2022 6:11:20 PM	R92544
Methylene Chloride	ND	3.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
n-Butylbenzene	ND	3.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
n-Propylbenzene	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
sec-Butylbenzene	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
Styrene	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
tert-Butylbenzene	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
trans-1,2-DCE	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
Trichlorofluoromethane	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
Vinyl chloride	ND	1.0		µg/L	1	11/11/2022 6:11:20 PM	R92544
Xylenes, Total	ND	1.5		µg/L	1	11/11/2022 6:11:20 PM	R92544
Surr: 1,2-Dichloroethane-d4	104	70-130		%Rec	1	11/11/2022 6:11:20 PM	R92544
Surr: 4-Bromofluorobenzene	96.6	70-130		%Rec	1	11/11/2022 6:11:20 PM	R92544
Surr: Dibromofluoromethane	108	70-130		%Rec	1	11/11/2022 6:11:20 PM	R92544
Surr: Toluene-d8	103	70-130		%Rec	1	11/11/2022 6:11:20 PM	R92544

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211699-007 **Matrix:** AQUEOUS

Client Sample ID: MW-77
Collection Date: 11/9/2022 3:39:00 PM
Received Date: 11/10/2022 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.027	0.0060		mg/L	1	12/15/2022 9:51:53 AM	A93348
Iron	ND	0.020		mg/L	1	12/15/2022 9:51:53 AM	A93348
Manganese	ND	0.0020		mg/L	1	12/15/2022 9:51:53 AM	A93348
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	1.6	1.0		µg/L	1	11/21/2022 1:48:00 PM	71452
Surr: 2-Fluorobiphenyl	44.5	15-107		%Rec	1	11/21/2022 1:48:00 PM	71452
EPA METHOD 8260B: VOLATILES						Analyst:	**RAA**
Benzene	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
Toluene	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
Ethylbenzene	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
Naphthalene	ND	2.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
1-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
2-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
Acetone	ND	10		µg/L	1	11/11/2022 6:38:22 PM	R92544
Bromobenzene	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
Bromodichloromethane	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
Bromoform	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
Bromomethane	ND	3.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
2-Butanone	ND	10		µg/L	1	11/11/2022 6:38:22 PM	R92544
Carbon disulfide	ND	10		µg/L	1	11/11/2022 6:38:22 PM	R92544
Carbon Tetrachloride	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
Chlorobenzene	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
Chloroethane	ND	2.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
Chloroform	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
Chloromethane	ND	3.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
2-Chlorotoluene	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
4-Chlorotoluene	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
cis-1,2-DCE	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
Dibromochloromethane	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
Dibromomethane	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211699-007 **Matrix:** AQUEOUS

Client Sample ID: MW-77
Collection Date: 11/9/2022 3:39:00 PM
Received Date: 11/10/2022 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
1,1-Dichloroethane	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
1,1-Dichloroethene	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
1,2-Dichloropropane	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
1,3-Dichloropropane	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
2,2-Dichloropropane	ND	2.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
1,1-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
Hexachlorobutadiene	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
2-Hexanone	ND	10		µg/L	1	11/11/2022 6:38:22 PM	R92544
Isopropylbenzene	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
4-Isopropyltoluene	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
4-Methyl-2-pentanone	ND	10		µg/L	1	11/11/2022 6:38:22 PM	R92544
Methylene Chloride	ND	3.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
n-Butylbenzene	ND	3.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
n-Propylbenzene	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
sec-Butylbenzene	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
Styrene	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
tert-Butylbenzene	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
trans-1,2-DCE	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
Trichloroethene (TCE)	1.9	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
Trichlorofluoromethane	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
Vinyl chloride	ND	1.0		µg/L	1	11/11/2022 6:38:22 PM	R92544
Xylenes, Total	ND	1.5		µg/L	1	11/11/2022 6:38:22 PM	R92544
Surr: 1,2-Dichloroethane-d4	86.0	70-130		%Rec	1	11/11/2022 6:38:22 PM	R92544
Surr: 4-Bromofluorobenzene	104	70-130		%Rec	1	11/11/2022 6:38:22 PM	R92544
Surr: Dibromofluoromethane	103	70-130		%Rec	1	11/11/2022 6:38:22 PM	R92544
Surr: Toluene-d8	104	70-130		%Rec	1	11/11/2022 6:38:22 PM	R92544

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Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211699-008 **Matrix:** AQUEOUS

Client Sample ID: MW-77 DUP
Collection Date: 11/9/2022 3:39:00 PM
Received Date: 11/10/2022 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.025	0.0060		mg/L	1	12/15/2022 9:54:53 AM	A93348
Iron	ND	0.020		mg/L	1	12/15/2022 9:54:53 AM	A93348
Manganese	ND	0.0020		mg/L	1	12/15/2022 9:54:53 AM	A93348
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	1.4	1.0		µg/L	1	11/21/2022 2:32:00 PM	71452
Surr: 2-Fluorobiphenyl	37.5	15-107		%Rec	1	11/21/2022 2:32:00 PM	71452
EPA METHOD 8260B: VOLATILES						Analyst:	**RAA**
Benzene	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
Toluene	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
Ethylbenzene	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
Naphthalene	ND	2.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
1-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
2-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
Acetone	ND	10		µg/L	1	11/11/2022 7:05:26 PM	R92544
Bromobenzene	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
Bromodichloromethane	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
Bromoform	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
Bromomethane	ND	3.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
2-Butanone	ND	10		µg/L	1	11/11/2022 7:05:26 PM	R92544
Carbon disulfide	ND	10		µg/L	1	11/11/2022 7:05:26 PM	R92544
Carbon Tetrachloride	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
Chlorobenzene	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
Chloroethane	ND	2.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
Chloroform	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
Chloromethane	ND	3.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
2-Chlorotoluene	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
4-Chlorotoluene	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
cis-1,2-DCE	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
Dibromochloromethane	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
Dibromomethane	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211699-008 **Matrix:** AQUEOUS

Client Sample ID: MW-77 DUP
Collection Date: 11/9/2022 3:39:00 PM
Received Date: 11/10/2022 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
1,1-Dichloroethane	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
1,1-Dichloroethene	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
1,2-Dichloropropane	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
1,3-Dichloropropane	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
2,2-Dichloropropane	ND	2.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
1,1-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
Hexachlorobutadiene	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
2-Hexanone	ND	10		µg/L	1	11/11/2022 7:05:26 PM	R92544
Isopropylbenzene	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
4-Isopropyltoluene	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
4-Methyl-2-pentanone	ND	10		µg/L	1	11/11/2022 7:05:26 PM	R92544
Methylene Chloride	ND	3.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
n-Butylbenzene	ND	3.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
n-Propylbenzene	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
sec-Butylbenzene	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
Styrene	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
tert-Butylbenzene	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
trans-1,2-DCE	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
Trichloroethene (TCE)	2.8	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
Trichlorofluoromethane	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
Vinyl chloride	ND	1.0		µg/L	1	11/11/2022 7:05:26 PM	R92544
Xylenes, Total	ND	1.5		µg/L	1	11/11/2022 7:05:26 PM	R92544
Surr: 1,2-Dichloroethane-d4	96.5	70-130		%Rec	1	11/11/2022 7:05:26 PM	R92544
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	11/11/2022 7:05:26 PM	R92544
Surr: Dibromofluoromethane	101	70-130		%Rec	1	11/11/2022 7:05:26 PM	R92544
Surr: Toluene-d8	104	70-130		%Rec	1	11/11/2022 7:05:26 PM	R92544

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211699-009 **Matrix:** AQUEOUS

Client Sample ID: MW-80
Collection Date: 11/10/2022 10:51:00 AM
Received Date: 11/10/2022 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.0074	0.0060		mg/L	1	12/15/2022 10:02:21 AM	A93348
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.011	0.0060		mg/L	1	11/21/2022 3:07:10 PM	71517
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	3.9	1.0		µg/L	1	11/21/2022 3:16:00 PM	71452
Surr: 2-Fluorobiphenyl	38.5	15-107		%Rec	1	11/21/2022 3:16:00 PM	71452
EPA METHOD 8260B: VOLATILES						Analyst:	**RAA**
Benzene	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
Toluene	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
Ethylbenzene	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
Naphthalene	ND	2.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
1-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
2-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
Acetone	ND	10		µg/L	1	11/11/2022 7:32:29 PM	R92544
Bromobenzene	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
Bromodichloromethane	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
Bromoform	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
Bromomethane	ND	3.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
2-Butanone	ND	10		µg/L	1	11/11/2022 7:32:29 PM	R92544
Carbon disulfide	ND	10		µg/L	1	11/11/2022 7:32:29 PM	R92544
Carbon Tetrachloride	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
Chlorobenzene	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
Chloroethane	ND	2.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
Chloroform	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
Chloromethane	ND	3.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
2-Chlorotoluene	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
4-Chlorotoluene	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
cis-1,2-DCE	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
Dibromochloromethane	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
Dibromomethane	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
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Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211699-009 **Matrix:** AQUEOUS

Client Sample ID: MW-80
Collection Date: 11/10/2022 10:51:00 AM
Received Date: 11/10/2022 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
1,1-Dichloroethane	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
1,1-Dichloroethene	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
1,2-Dichloropropane	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
1,3-Dichloropropane	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
2,2-Dichloropropane	ND	2.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
1,1-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
Hexachlorobutadiene	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
2-Hexanone	ND	10		µg/L	1	11/11/2022 7:32:29 PM	R92544
Isopropylbenzene	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
4-Isopropyltoluene	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
4-Methyl-2-pentanone	ND	10		µg/L	1	11/11/2022 7:32:29 PM	R92544
Methylene Chloride	ND	3.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
n-Butylbenzene	ND	3.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
n-Propylbenzene	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
sec-Butylbenzene	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
Styrene	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
tert-Butylbenzene	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
trans-1,2-DCE	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
Trichlorofluoromethane	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
Vinyl chloride	ND	1.0		µg/L	1	11/11/2022 7:32:29 PM	R92544
Xylenes, Total	ND	1.5		µg/L	1	11/11/2022 7:32:29 PM	R92544
Surr: 1,2-Dichloroethane-d4	96.4	70-130		%Rec	1	11/11/2022 7:32:29 PM	R92544
Surr: 4-Bromofluorobenzene	98.1	70-130		%Rec	1	11/11/2022 7:32:29 PM	R92544
Surr: Dibromofluoromethane	109	70-130		%Rec	1	11/11/2022 7:32:29 PM	R92544
Surr: Toluene-d8	104	70-130		%Rec	1	11/11/2022 7:32:29 PM	R92544

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211699-010 **Matrix:** AQUEOUS

Client Sample ID: MW-80 DUP
Collection Date: 11/10/2022 10:51:00 AM
Received Date: 11/10/2022 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.0066	0.0060		mg/L	1	12/15/2022 10:03:49 AM	A93348
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.0096	0.0060		mg/L	1	11/21/2022 3:08:40 PM	71517
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	4.8	1.0		µg/L	1	11/21/2022 3:59:00 PM	71452
Surr: 2-Fluorobiphenyl	52.0	15-107		%Rec	1	11/21/2022 3:59:00 PM	71452
EPA METHOD 8260B: VOLATILES						Analyst:	**RAA**
Benzene	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
Toluene	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
Ethylbenzene	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
Naphthalene	ND	2.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
1-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
2-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
Acetone	ND	10		µg/L	1	11/11/2022 7:59:30 PM	R92544
Bromobenzene	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
Bromodichloromethane	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
Bromoform	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
Bromomethane	ND	3.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
2-Butanone	ND	10		µg/L	1	11/11/2022 7:59:30 PM	R92544
Carbon disulfide	ND	10		µg/L	1	11/11/2022 7:59:30 PM	R92544
Carbon Tetrachloride	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
Chlorobenzene	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
Chloroethane	ND	2.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
Chloroform	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
Chloromethane	ND	3.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
2-Chlorotoluene	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
4-Chlorotoluene	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
cis-1,2-DCE	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
Dibromochloromethane	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
Dibromomethane	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211699-010 **Matrix:** AQUEOUS

Client Sample ID: MW-80 DUP
Collection Date: 11/10/2022 10:51:00 AM
Received Date: 11/10/2022 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
1,1-Dichloroethane	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
1,1-Dichloroethene	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
1,2-Dichloropropane	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
1,3-Dichloropropane	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
2,2-Dichloropropane	ND	2.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
1,1-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
Hexachlorobutadiene	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
2-Hexanone	ND	10		µg/L	1	11/11/2022 7:59:30 PM	R92544
Isopropylbenzene	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
4-Isopropyltoluene	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
4-Methyl-2-pentanone	ND	10		µg/L	1	11/11/2022 7:59:30 PM	R92544
Methylene Chloride	ND	3.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
n-Butylbenzene	ND	3.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
n-Propylbenzene	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
sec-Butylbenzene	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
Styrene	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
tert-Butylbenzene	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
trans-1,2-DCE	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
Trichlorofluoromethane	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
Vinyl chloride	ND	1.0		µg/L	1	11/11/2022 7:59:30 PM	R92544
Xylenes, Total	ND	1.5		µg/L	1	11/11/2022 7:59:30 PM	R92544
Surr: 1,2-Dichloroethane-d4	104	70-130		%Rec	1	11/11/2022 7:59:30 PM	R92544
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	1	11/11/2022 7:59:30 PM	R92544
Surr: Dibromofluoromethane	105	70-130		%Rec	1	11/11/2022 7:59:30 PM	R92544
Surr: Toluene-d8	105	70-130		%Rec	1	11/11/2022 7:59:30 PM	R92544

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211699-011 **Matrix:** AQUEOUS

Client Sample ID: MW-20
Collection Date: 11/10/2022 12:08:00 PM
Received Date: 11/10/2022 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	12/15/2022 10:05:16 AM	A93348
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	11/21/2022 3:14:59 PM	71517
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	11/21/2022 4:43:00 PM	71452
Surr: 2-Fluorobiphenyl	47.5	15-107		%Rec	1	11/21/2022 4:43:00 PM	71452
EPA METHOD 8260B: VOLATILES						Analyst:	**RAA**
Benzene	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
Toluene	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
Ethylbenzene	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
Naphthalene	ND	2.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
1-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
2-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
Acetone	ND	10		µg/L	1	11/11/2022 8:26:31 PM	R92544
Bromobenzene	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
Bromodichloromethane	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
Bromoform	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
Bromomethane	ND	3.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
2-Butanone	ND	10		µg/L	1	11/11/2022 8:26:31 PM	R92544
Carbon disulfide	ND	10		µg/L	1	11/11/2022 8:26:31 PM	R92544
Carbon Tetrachloride	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
Chlorobenzene	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
Chloroethane	ND	2.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
Chloroform	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
Chloromethane	ND	3.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
2-Chlorotoluene	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
4-Chlorotoluene	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
cis-1,2-DCE	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
Dibromochloromethane	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
Dibromomethane	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211699-011 **Matrix:** AQUEOUS

Client Sample ID: MW-20
Collection Date: 11/10/2022 12:08:00 PM
Received Date: 11/10/2022 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
1,1-Dichloroethane	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
1,1-Dichloroethene	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
1,2-Dichloropropane	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
1,3-Dichloropropane	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
2,2-Dichloropropane	ND	2.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
1,1-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
Hexachlorobutadiene	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
2-Hexanone	ND	10		µg/L	1	11/11/2022 8:26:31 PM	R92544
Isopropylbenzene	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
4-Isopropyltoluene	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
4-Methyl-2-pentanone	ND	10		µg/L	1	11/11/2022 8:26:31 PM	R92544
Methylene Chloride	ND	3.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
n-Butylbenzene	ND	3.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
n-Propylbenzene	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
sec-Butylbenzene	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
Styrene	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
tert-Butylbenzene	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
trans-1,2-DCE	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
Trichlorofluoromethane	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
Vinyl chloride	ND	1.0		µg/L	1	11/11/2022 8:26:31 PM	R92544
Xylenes, Total	ND	1.5		µg/L	1	11/11/2022 8:26:31 PM	R92544
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	11/11/2022 8:26:31 PM	R92544
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	11/11/2022 8:26:31 PM	R92544
Surr: Dibromofluoromethane	112	70-130		%Rec	1	11/11/2022 8:26:31 PM	R92544
Surr: Toluene-d8	106	70-130		%Rec	1	11/11/2022 8:26:31 PM	R92544

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211699-012 **Matrix:** AQUEOUS

Client Sample ID: MW-18
Collection Date: 11/10/2022 12:23:00 PM
Received Date: 11/10/2022 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.035	0.0060		mg/L	1	12/15/2022 10:06:43 AM	A93348
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.037	0.0060		mg/L	1	11/21/2022 3:41:04 PM	71517
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.7	1.0		µg/L	1	11/21/2022 5:27:00 PM	71452
Surr: 2-Fluorobiphenyl	67.5	15-107		%Rec	1	11/21/2022 5:27:00 PM	71452
EPA METHOD 8260B: VOLATILES						Analyst:	**RAA**
Benzene	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
Toluene	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
Ethylbenzene	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
Naphthalene	ND	2.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
1-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
2-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
Acetone	ND	10		µg/L	1	11/11/2022 8:53:31 PM	R92544
Bromobenzene	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
Bromodichloromethane	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
Bromoform	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
Bromomethane	ND	3.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
2-Butanone	ND	10		µg/L	1	11/11/2022 8:53:31 PM	R92544
Carbon disulfide	ND	10		µg/L	1	11/11/2022 8:53:31 PM	R92544
Carbon Tetrachloride	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
Chlorobenzene	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
Chloroethane	ND	2.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
Chloroform	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
Chloromethane	ND	3.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
2-Chlorotoluene	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
4-Chlorotoluene	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
cis-1,2-DCE	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
Dibromochloromethane	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
Dibromomethane	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211699-012 **Matrix:** AQUEOUS

Client Sample ID: MW-18
Collection Date: 11/10/2022 12:23:00 PM
Received Date: 11/10/2022 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
1,1-Dichloroethane	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
1,1-Dichloroethene	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
1,2-Dichloropropane	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
1,3-Dichloropropane	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
2,2-Dichloropropane	ND	2.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
1,1-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
Hexachlorobutadiene	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
2-Hexanone	ND	10		µg/L	1	11/11/2022 8:53:31 PM	R92544
Isopropylbenzene	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
4-Isopropyltoluene	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
4-Methyl-2-pentanone	ND	10		µg/L	1	11/11/2022 8:53:31 PM	R92544
Methylene Chloride	ND	3.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
n-Butylbenzene	ND	3.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
n-Propylbenzene	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
sec-Butylbenzene	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
Styrene	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
tert-Butylbenzene	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
trans-1,2-DCE	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
Trichlorofluoromethane	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
Vinyl chloride	ND	1.0		µg/L	1	11/11/2022 8:53:31 PM	R92544
Xylenes, Total	ND	1.5		µg/L	1	11/11/2022 8:53:31 PM	R92544
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	11/11/2022 8:53:31 PM	R92544
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	11/11/2022 8:53:31 PM	R92544
Surr: Dibromofluoromethane	106	70-130		%Rec	1	11/11/2022 8:53:31 PM	R92544
Surr: Toluene-d8	105	70-130		%Rec	1	11/11/2022 8:53:31 PM	R92544

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton Coors Rd
Collection Date:
Lab ID: 2211699-013
Matrix: TRIP BLANK
Received Date: 11/10/2022 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
Benzene	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
Toluene	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
Ethylbenzene	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
Naphthalene	ND	2.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
1-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
2-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
Acetone	ND	10		µg/L	1	11/11/2022 9:20:32 PM	R92544
Bromobenzene	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
Bromodichloromethane	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
Bromoform	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
Bromomethane	ND	3.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
2-Butanone	ND	10		µg/L	1	11/11/2022 9:20:32 PM	R92544
Carbon disulfide	ND	10		µg/L	1	11/11/2022 9:20:32 PM	R92544
Carbon Tetrachloride	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
Chlorobenzene	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
Chloroethane	ND	2.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
Chloroform	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
Chloromethane	ND	3.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
2-Chlorotoluene	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
4-Chlorotoluene	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
cis-1,2-DCE	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
Dibromochloromethane	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
Dibromomethane	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
1,1-Dichloroethane	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
1,1-Dichloroethene	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
1,2-Dichloropropane	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
1,3-Dichloropropane	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
2,2-Dichloropropane	ND	2.0		µg/L	1	11/11/2022 9:20:32 PM	R92544

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton Coors Rd
Collection Date:
Lab ID: 2211699-013
Matrix: TRIP BLANK
Received Date: 11/10/2022 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
Hexachlorobutadiene	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
2-Hexanone	ND	10		µg/L	1	11/11/2022 9:20:32 PM	R92544
Isopropylbenzene	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
4-Isopropyltoluene	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
4-Methyl-2-pentanone	ND	10		µg/L	1	11/11/2022 9:20:32 PM	R92544
Methylene Chloride	ND	3.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
n-Butylbenzene	ND	3.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
n-Propylbenzene	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
sec-Butylbenzene	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
Styrene	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
tert-Butylbenzene	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
trans-1,2-DCE	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
Trichlorofluoromethane	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
Vinyl chloride	ND	1.0		µg/L	1	11/11/2022 9:20:32 PM	R92544
Xylenes, Total	ND	1.5		µg/L	1	11/11/2022 9:20:32 PM	R92544
Surr: 1,2-Dichloroethane-d4	100	70-130		%Rec	1	11/11/2022 9:20:32 PM	R92544
Surr: 4-Bromofluorobenzene	106	70-130		%Rec	1	11/11/2022 9:20:32 PM	R92544
Surr: Dibromofluoromethane	104	70-130		%Rec	1	11/11/2022 9:20:32 PM	R92544
Surr: Toluene-d8	106	70-130		%Rec	1	11/11/2022 9:20:32 PM	R92544

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211699-014 **Matrix:** AQUEOUS

Client Sample ID: MW-26
Collection Date: 11/10/2022 1:58:00 PM
Received Date: 11/10/2022 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.069	0.0060		mg/L	1	12/15/2022 10:08:14 AM	A93348
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.80	0.0060	*	mg/L	1	11/21/2022 3:42:33 PM	71517
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	1.9	1.0		µg/L	1	11/21/2022 6:11:00 PM	71452
Surr: 2-Fluorobiphenyl	40.5	15-107		%Rec	1	11/21/2022 6:11:00 PM	71452
EPA METHOD 8260B: VOLATILES						Analyst:	**RAA**
Benzene	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
Toluene	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
Ethylbenzene	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
Naphthalene	ND	2.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
1-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
2-Methylnaphthalene	ND	4.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
Acetone	ND	10		µg/L	1	11/11/2022 9:47:33 PM	R92544
Bromobenzene	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
Bromodichloromethane	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
Bromoform	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
Bromomethane	ND	3.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
2-Butanone	ND	10		µg/L	1	11/11/2022 9:47:33 PM	R92544
Carbon disulfide	ND	10		µg/L	1	11/11/2022 9:47:33 PM	R92544
Carbon Tetrachloride	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
Chlorobenzene	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
Chloroethane	ND	2.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
Chloroform	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
Chloromethane	ND	3.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
2-Chlorotoluene	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
4-Chlorotoluene	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
cis-1,2-DCE	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
Dibromochloromethane	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
Dibromomethane	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: MW-26
Project: Sparton Coors Rd
Collection Date: 11/10/2022 1:58:00 PM
Lab ID: 2211699-014
Matrix: AQUEOUS
Received Date: 11/10/2022 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
1,1-Dichloroethane	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
1,1-Dichloroethene	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
1,2-Dichloropropane	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
1,3-Dichloropropane	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
2,2-Dichloropropane	ND	2.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
1,1-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
Hexachlorobutadiene	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
2-Hexanone	ND	10		µg/L	1	11/11/2022 9:47:33 PM	R92544
Isopropylbenzene	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
4-Isopropyltoluene	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
4-Methyl-2-pentanone	ND	10		µg/L	1	11/11/2022 9:47:33 PM	R92544
Methylene Chloride	ND	3.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
n-Butylbenzene	ND	3.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
n-Propylbenzene	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
sec-Butylbenzene	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
Styrene	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
tert-Butylbenzene	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
trans-1,2-DCE	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
Trichloroethene (TCE)	8.0	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
Trichlorofluoromethane	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
Vinyl chloride	ND	1.0		µg/L	1	11/11/2022 9:47:33 PM	R92544
Xylenes, Total	ND	1.5		µg/L	1	11/11/2022 9:47:33 PM	R92544
Surr: 1,2-Dichloroethane-d4	106	70-130		%Rec	1	11/11/2022 9:47:33 PM	R92544
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	11/11/2022 9:47:33 PM	R92544
Surr: Dibromofluoromethane	112	70-130		%Rec	1	11/11/2022 9:47:33 PM	R92544
Surr: Toluene-d8	109	70-130		%Rec	1	11/11/2022 9:47:33 PM	R92544

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: MW-22
Project: Sparton Coors Rd
Collection Date: 11/10/2022 2:36:00 PM
Lab ID: 2211699-015
Matrix: AQUEOUS
Received Date: 11/10/2022 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.036	0.0060		mg/L	1	12/15/2022 10:09:43 AM	A93348
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.038	0.0060		mg/L	1	11/21/2022 3:44:00 PM	71517
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	1.7	1.0		µg/L	1	11/21/2022 6:55:00 PM	71452
Surr: 2-Fluorobiphenyl	42.5	15-107		%Rec	1	11/21/2022 6:55:00 PM	71452
EPA METHOD 8260B: VOLATILES						Analyst:	**RAA**
Benzene	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
Toluene	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
Ethylbenzene	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
Naphthalene	ND	2.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
1-Methylnaphthalene	ND	4.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
2-Methylnaphthalene	ND	4.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
Acetone	ND	10		µg/L	1	11/15/2022 4:42:51 PM	A92604
Bromobenzene	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
Bromodichloromethane	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
Bromoform	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
Bromomethane	ND	3.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
2-Butanone	ND	10		µg/L	1	11/15/2022 4:42:51 PM	A92604
Carbon disulfide	ND	10		µg/L	1	11/15/2022 4:42:51 PM	A92604
Carbon Tetrachloride	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
Chlorobenzene	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
Chloroethane	ND	2.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
Chloroform	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
Chloromethane	ND	3.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
2-Chlorotoluene	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
4-Chlorotoluene	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
cis-1,2-DCE	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
Dibromochloromethane	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
Dibromomethane	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: MW-22
Project: Sparton Coors Rd
Collection Date: 11/10/2022 2:36:00 PM
Lab ID: 2211699-015
Matrix: AQUEOUS
Received Date: 11/10/2022 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
1,1-Dichloroethane	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
1,1-Dichloroethene	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
1,2-Dichloropropane	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
1,3-Dichloropropane	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
2,2-Dichloropropane	ND	2.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
1,1-Dichloropropene	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
Hexachlorobutadiene	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
2-Hexanone	ND	10		µg/L	1	11/15/2022 4:42:51 PM	A92604
Isopropylbenzene	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
4-Isopropyltoluene	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
4-Methyl-2-pentanone	ND	10		µg/L	1	11/15/2022 4:42:51 PM	A92604
Methylene Chloride	ND	3.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
n-Butylbenzene	ND	3.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
n-Propylbenzene	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
sec-Butylbenzene	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
Styrene	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
tert-Butylbenzene	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
trans-1,2-DCE	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
Trichlorofluoromethane	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
Vinyl chloride	ND	1.0		µg/L	1	11/15/2022 4:42:51 PM	A92604
Xylenes, Total	ND	1.5		µg/L	1	11/15/2022 4:42:51 PM	A92604
Surr: 1,2-Dichloroethane-d4	97.8	70-130		%Rec	1	11/15/2022 4:42:51 PM	A92604
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	11/15/2022 4:42:51 PM	A92604
Surr: Dibromofluoromethane	106	70-130		%Rec	1	11/15/2022 4:42:51 PM	A92604
Surr: Toluene-d8	102	70-130		%Rec	1	11/15/2022 4:42:51 PM	A92604

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: MW-25
Project: Sparton Coors Rd
Collection Date: 11/10/2022 3:14:00 PM
Lab ID: 2211699-016
Matrix: AQUEOUS
Received Date: 11/10/2022 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.055	0.0060		mg/L	1	12/15/2022 10:11:12 AM	A93348
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.064	0.0060		mg/L	1	11/21/2022 3:45:32 PM	71517
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	1.7	1.0		µg/L	1	11/21/2022 7:38:00 PM	71452
Surr: 2-Fluorobiphenyl	52.5	15-107		%Rec	1	11/21/2022 7:38:00 PM	71452
EPA METHOD 8260B: VOLATILES						Analyst:	**RAA**
Benzene	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
Toluene	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
Ethylbenzene	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
Naphthalene	ND	2.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
1-Methylnaphthalene	ND	4.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
2-Methylnaphthalene	ND	4.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
Acetone	ND	10		µg/L	1	11/15/2022 5:09:43 PM	A92604
Bromobenzene	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
Bromodichloromethane	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
Bromoform	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
Bromomethane	ND	3.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
2-Butanone	ND	10		µg/L	1	11/15/2022 5:09:43 PM	A92604
Carbon disulfide	ND	10		µg/L	1	11/15/2022 5:09:43 PM	A92604
Carbon Tetrachloride	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
Chlorobenzene	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
Chloroethane	ND	2.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
Chloroform	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
Chloromethane	ND	3.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
2-Chlorotoluene	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
4-Chlorotoluene	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
cis-1,2-DCE	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
Dibromochloromethane	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
Dibromomethane	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211699-016 **Matrix:** AQUEOUS

Client Sample ID: MW-25
Collection Date: 11/10/2022 3:14:00 PM
Received Date: 11/10/2022 4:05:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **RAA**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
1,1-Dichloroethane	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
1,1-Dichloroethene	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
1,2-Dichloropropane	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
1,3-Dichloropropane	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
2,2-Dichloropropane	ND	2.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
1,1-Dichloropropene	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
Hexachlorobutadiene	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
2-Hexanone	ND	10		µg/L	1	11/15/2022 5:09:43 PM	A92604
Isopropylbenzene	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
4-Isopropyltoluene	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
4-Methyl-2-pentanone	ND	10		µg/L	1	11/15/2022 5:09:43 PM	A92604
Methylene Chloride	ND	3.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
n-Butylbenzene	ND	3.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
n-Propylbenzene	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
sec-Butylbenzene	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
Styrene	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
tert-Butylbenzene	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
trans-1,2-DCE	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
1,1,1-Trichloroethane	1.4	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
Trichloroethene (TCE)	39	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
Trichlorofluoromethane	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
Vinyl chloride	ND	1.0		µg/L	1	11/15/2022 5:09:43 PM	A92604
Xylenes, Total	ND	1.5		µg/L	1	11/15/2022 5:09:43 PM	A92604
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%Rec	1	11/15/2022 5:09:43 PM	A92604
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	11/15/2022 5:09:43 PM	A92604
Surr: Dibromofluoromethane	111	70-130		%Rec	1	11/15/2022 5:09:43 PM	A92604
Surr: Toluene-d8	103	70-130		%Rec	1	11/15/2022 5:09:43 PM	A92604

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211699**
20-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **MB-A** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **A93348** RunNo: **93348**
Prep Date: Analysis Date: **12/15/2022** SeqNo: **3365546** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID: **LLLCS-A** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **A93348** RunNo: **93348**
Prep Date: Analysis Date: **12/15/2022** SeqNo: **3365547** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060	0.006000	0	56.1	50	150			
Iron	0.024	0.020	0.02000	0	118	50	150			
Manganese	0.0022	0.0020	0.002000	0	110	50	150			

Sample ID: **LCS-A** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **A93348** RunNo: **93348**
Prep Date: Analysis Date: **12/15/2022** SeqNo: **3365548** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.49	0.0060	0.5000	0	97.2	85	115			
Iron	0.50	0.020	0.5000	0	99.6	85	115			
Manganese	0.51	0.0020	0.5000	0	102	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211699**
20-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **MB-71517** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **71517** RunNo: **92737**
Prep Date: **11/15/2022** Analysis Date: **11/21/2022** SeqNo: **3337531** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LCSLL-71517** SampType: **LCSLL** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC** Batch ID: **71517** RunNo: **92737**
Prep Date: **11/15/2022** Analysis Date: **11/21/2022** SeqNo: **3337532** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.0076	0.0060	0.006000	0	126	50	150			

Sample ID: **LCS-71517** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **71517** RunNo: **92737**
Prep Date: **11/15/2022** Analysis Date: **11/21/2022** SeqNo: **3337533** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.49	0.0060	0.5000	0	98.5	85	115			

Sample ID: **2211699-001CMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MW-79** Batch ID: **71517** RunNo: **92737**
Prep Date: **11/15/2022** Analysis Date: **11/21/2022** SeqNo: **3337535** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.49	0.0060	0.5000	0	97.7	70	130			

Sample ID: **2211699-001CMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MW-79** Batch ID: **71517** RunNo: **92737**
Prep Date: **11/15/2022** Analysis Date: **11/21/2022** SeqNo: **3337536** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.48	0.0060	0.5000	0	95.7	70	130	2.10	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211699**
20-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R92544** RunNo: **92544**
Prep Date: Analysis Date: **11/11/2022** SeqNo: **3327079** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	70	130			
Toluene	20	1.0	20.00	0	98.8	70	130			
Chlorobenzene	19	1.0	20.00	0	97.3	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	87.9	70	130			
Trichloroethene (TCE)	18	1.0	20.00	0	90.1	70	130			
Surr: 1,2-Dichloroethane-d4	9.9		10.00		99.3	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	11		10.00		112	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Sample ID: **2211699-001a ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MW-79** Batch ID: **R92544** RunNo: **92544**
Prep Date: Analysis Date: **11/11/2022** SeqNo: **3327081** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	109	70	130			
Toluene	20	1.0	20.00	0	102	70	130			
Chlorobenzene	20	1.0	20.00	0	101	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	100	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0.4368	96.6	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		103	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	11		10.00		111	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID: **2211699-001a msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MW-79** Batch ID: **R92544** RunNo: **92544**
Prep Date: Analysis Date: **11/11/2022** SeqNo: **3327082** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	97.6	70	130	11.4	20	
Toluene	20	1.0	20.00	0	98.7	70	130	3.36	20	
Chlorobenzene	19	1.0	20.00	0	96.5	70	130	4.64	20	
1,1-Dichloroethene	18	1.0	20.00	0	88.5	70	130	12.3	20	
Trichloroethene (TCE)	19	1.0	20.00	0.4368	91.0	70	130	5.82	20	
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130	0	0	
Surr: 4-Bromofluorobenzene	11		10.00		110	70	130	0	0	
Surr: Dibromofluoromethane	11		10.00		108	70	130	0	0	
Surr: Toluene-d8	10		10.00		102	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211699**
20-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**					
Client ID: **PBW**	Batch ID: **R92544**	RunNo: **92544**					
Prep Date:	Analysis Date: **11/11/2022**	SeqNo: **3327096**	Units: **µg/L**				

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211699**
20-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R92544** RunNo: **92544**
Prep Date: Analysis Date: **11/11/2022** SeqNo: **3327096** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	11		10.00		109	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	11		10.00		110	70	130			
Surr: Toluene-d8	11		10.00		107	70	130			

Sample ID: **100ng lcs4** SampType: **LCS4** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **A92604** RunNo: **92604**
Prep Date: Analysis Date: **11/15/2022** SeqNo: **3330740** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	98.8	70	130			
Toluene	21	1.0	20.00	0	107	70	130			
Ethylbenzene	20	1.0	20.00	0	98.8	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211699**
20-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **100ng lcs4** SampType: **LCS4** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **A92604** RunNo: **92604**
Prep Date: Analysis Date: **11/15/2022** SeqNo: **3330740** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	39	1.0	40.00	0	97.0	70	130			
1,2,4-Trimethylbenzene	21	1.0	20.00	0	105	70	130			
1,3,5-Trimethylbenzene	20	1.0	20.00	0	98.6	70	130			
1,2-Dichloroethane (EDC)	18	1.0	20.00	0	89.3	70	130			
1,2-Dibromoethane (EDB)	19	1.0	20.00	0	93.0	70	130			
Naphthalene	18	2.0	20.00	0	89.1	70	130			
1-Methylnaphthalene	18	4.0	20.00	0	90.7	60.3	126			
2-Methylnaphthalene	18	4.0	20.00	0	89.8	59	127			
Acetone	38	10	40.00	0	94.6	53.2	126			
Bromobenzene	22	1.0	20.00	0	108	70	130			
Bromodichloromethane	19	1.0	20.00	0	95.6	70	130			
Bromoform	23	1.0	20.00	0	114	70	130			
Bromomethane	17	3.0	20.00	0	86.5	15	213			
2-Butanone	45	10	40.00	0	112	59.4	136			
Carbon disulfide	30	10	40.00	0	74.8	70	130			
Carbon Tetrachloride	20	1.0	20.00	0	99.3	70	130			
Chlorobenzene	19	1.0	20.00	0	97.0	70	130			
Chloroethane	18	2.0	20.00	0	90.7	69.5	131			
Chloroform	20	1.0	20.00	0	99.6	70	130			
Chloromethane	18	3.0	20.00	0	89.9	56.9	143			
2-Chlorotoluene	20	1.0	20.00	0	101	70	130			
4-Chlorotoluene	20	1.0	20.00	0	101	70	130			
cis-1,2-DCE	16	1.0	20.00	0	81.5	70	130			
cis-1,3-Dichloropropene	20	1.0	20.00	0	102	70	130			
1,2-Dibromo-3-chloropropane	19	2.0	20.00	0	97.0	62.3	135			
Dibromochloromethane	19	1.0	20.00	0	94.3	70	130			
Dibromomethane	19	1.0	20.00	0	94.9	70	130			
1,2-Dichlorobenzene	21	1.0	20.00	0	103	70	130			
1,3-Dichlorobenzene	20	1.0	20.00	0	99.6	70	130			
1,4-Dichlorobenzene	19	1.0	20.00	0	96.8	70	130			
Dichlorodifluoromethane	22	1.0	20.00	0	110	41	159			
1,1-Dichloroethane	21	1.0	20.00	0	103	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	91.1	70	130			
1,2-Dichloropropane	19	1.0	20.00	0	92.9	70	130			
1,3-Dichloropropane	19	1.0	20.00	0	96.7	70	130			
2,2-Dichloropropane	21	2.0	20.00	0	106	70	130			
1,1-Dichloropropene	19	1.0	20.00	0	97.4	70	130			
Hexachlorobutadiene	19	1.0	20.00	0	93.7	63.6	129			
2-Hexanone	42	10	40.00	0	106	63.2	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211699**
20-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **100ng lcs4** SampType: **LCS4** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **BatchQC** Batch ID: **A92604** RunNo: **92604**
Prep Date: Analysis Date: **11/15/2022** SeqNo: **3330740** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Isopropylbenzene	19	1.0	20.00	0	94.9	70	130			
4-Isopropyltoluene	20	1.0	20.00	0	101	70	130			
4-Methyl-2-pentanone	33	10	40.00	0	82.3	64.7	132			
Methylene Chloride	20	3.0	20.00	0	102	70	130			
n-Butylbenzene	20	3.0	20.00	0	98.7	70	130			
n-Propylbenzene	20	1.0	20.00	0	97.8	70	130			
sec-Butylbenzene	19	1.0	20.00	0	97.3	70	130			
Styrene	19	1.0	20.00	0	96.3	70	130			
tert-Butylbenzene	20	1.0	20.00	0	99.3	70	130			
1,1,1,2-Tetrachloroethane	19	1.0	20.00	0	94.3	70	130			
1,1,2,2-Tetrachloroethane	21	2.0	20.00	0	105	65.8	138			
Tetrachloroethene (PCE)	21	1.0	20.00	0	103	70	130			
trans-1,2-DCE	20	1.0	20.00	0	99.3	70	130			
trans-1,3-Dichloropropene	20	1.0	20.00	0	100	70	130			
1,2,3-Trichlorobenzene	19	1.0	20.00	0	96.2	70	130			
1,2,4-Trichlorobenzene	19	1.0	20.00	0	93.6	70	130			
1,1,1-Trichloroethane	20	1.0	20.00	0	97.9	70	130			
1,1,2-Trichloroethane	20	1.0	20.00	0	101	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	95.2	70	130			
Trichlorofluoromethane	19	1.0	20.00	0	94.0	70	130			
1,2,3-Trichloropropane	21	2.0	20.00	0	106	70	130			
Vinyl chloride	19	1.0	20.00	0	94.5	70	130			
Xylenes, Total	58	1.5	60.00	0	96.9	70	130			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.9	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **A92604** RunNo: **92604**
Prep Date: Analysis Date: **11/15/2022** SeqNo: **3330744** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211699**
20-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **A92604**	RunNo: **92604**	
Prep Date:	Analysis Date: **11/15/2022**	SeqNo: **3330744**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211699**
20-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **A92604**	RunNo: **92604**	
Prep Date:	Analysis Date: **11/15/2022**	SeqNo: **3330744**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.1		10.00		91.2	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	10		10.00		101	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211699**
20-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb-71449** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **71449** RunNo: **92659**
Prep Date: **11/11/2022** Analysis Date: **11/16/2022** SeqNo: **3333294** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	1.7		4.000		42.5	15	108			
Surr: 2,4,6-Tribromophenol	3.3		8.000		41.8	15	112			
Surr: 2-Fluorobiphenyl	1.6		4.000		39.5	15	107			
Surr: 4-Terphenyl-d14	3.3		4.000		82.0	15	166			

Sample ID: **lcs-71449** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **71449** RunNo: **92659**
Prep Date: **11/11/2022** Analysis Date: **11/16/2022** SeqNo: **3333295** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.60	0.10	2.000	0	30.0	15	60.5			
Surr: Nitrobenzene-d5	3.1		5.000		61.6	15	108			
Surr: 2,4,6-Tribromophenol	5.4		10.00		54.0	15	112			
Surr: 2-Fluorobiphenyl	2.3		5.000		46.4	15	107			
Surr: 4-Terphenyl-d14	5.1		5.000		102	15	166			

Sample ID: **lcsd-71449** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **71449** RunNo: **92659**
Prep Date: **11/11/2022** Analysis Date: **11/16/2022** SeqNo: **3333296** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.64	0.10	2.000	0	32.0	15	60.5	6.45	29.7	
Surr: Nitrobenzene-d5	3.2		5.000		64.4	15	108	0	0	
Surr: 2,4,6-Tribromophenol	5.5		10.00		54.6	15	112	0	0	
Surr: 2-Fluorobiphenyl	2.3		5.000		46.0	15	107	0	0	
Surr: 4-Terphenyl-d14	5.4		5.000		108	15	166	0	0	

Sample ID: **mb-71452** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **71452** RunNo: **92740**
Prep Date: **11/11/2022** Analysis Date: **11/21/2022** SeqNo: **3337646** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	2.2		4.000		55.0	15	108			
Surr: 2,4,6-Tribromophenol	4.6		8.000		58.0	15	112			
Surr: 2-Fluorobiphenyl	1.5		4.000		38.5	15	107			
Surr: 4-Terphenyl-d14	4.2		4.000		104	15	166			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211699**
20-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **lcs-71452** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **71452** RunNo: **92740**
Prep Date: **11/11/2022** Analysis Date: **11/21/2022** SeqNo: **3337647** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.50	0.10	2.000	0	25.0	15	60.5			
Surr: Nitrobenzene-d5	2.9		5.000		57.6	15	108			
Surr: 2,4,6-Tribromophenol	5.7		10.00		57.0	15	112			
Surr: 2-Fluorobiphenyl	2.0		5.000		40.8	15	107			
Surr: 4-Terphenyl-d14	4.7		5.000		94.4	15	166			

Sample ID: **lcsd-71452** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **71452** RunNo: **92740**
Prep Date: **11/11/2022** Analysis Date: **11/21/2022** SeqNo: **3337648** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.52	0.10	2.000	0	26.0	15	60.5	3.92	29.7	
Surr: Nitrobenzene-d5	3.2		5.000		64.4	15	108	0	0	
Surr: 2,4,6-Tribromophenol	7.4		10.00		74.0	15	112	0	0	
Surr: 2-Fluorobiphenyl	2.1		5.000		42.8	15	107	0	0	
Surr: 4-Terphenyl-d14	5.3		5.000		106	15	166	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **EA Engineering** Work Order Number: **2211699** RcptNo: **1**

Received By: **Juan Rojas** **11/10/2022 4:05:00 PM**

Completed By: **Cheyenne Cason** **11/11/2022 7:57:59 AM**

Reviewed By: JN 11/11/22

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☑ NA ☐
   Samples were collected the same day and chilled.
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 25
(<2 or >12 unless noted)
Adjusted? No
Checked by: TMe 11/11/22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.2	Good	Not Present			
2	13.3	Good	Not Present			
3	4.9	Good	Not Present			

Chain-of-Custody Record

Client: Sparton Technologies, inc.
EA Engineering, Science and Technology
Mailing Address: 320 Gold Ave SW #1300
Albuquerque, NM 87102
Phone #: 505-715-4154
email or Fax#: r marley@eaest.com
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: Sparton Coors Rd
Project #: Bills to Sparton Direct
Project Manager: Bob Marley, EA
Sampler: Scott Miles/Tyanna Watchman
On Ice: ☒ Yes ☐ No
# of Coolers: 3
Cooler Temp (including CF): See Remarks (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 221699	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	VOCs 8260B	1,4 Dioxane, 8270 SIM	Total Chromium	Dissolved Chromium	Dissolved Metals (Cr, Fe, Mn)
11-9-22	1051	Aq	MW-79	1x1L Amber, 3xVOA 1x125ml HDPE, 1x250ml HDPE	none, HCl HNO3	001											X	X	X	X	
	1233		MW-74	1x1L Amber 3xVOA 1x125ml HDPE	none, HCl, HNO3	002											X	X			X
	1359		MW-76			003											X	X			X
	1511		MW-75			004											X	X			X
	0855		MW-9	1x1L Amber 3xVOA 1x125ml HDPE 1x250ml HDPE	none HCl HNO3	005											X	X	X	X	
	1334		MW-38			006											X	X	X	X	
	1539		MW-77	1x1L Amber 3xVOA 1x125ml HDPE	none HCl HNO3	007											X	X			X
	1539		MW-77DUP			008											X	X			X
11-10-22	1051		MW-80			009											X	X	X	X	
	1051		MW-80 DUP			010											X	X	X	X	
	1208		MW-20			011											X	X	X	X	
	1223		MW-18			012											X	X	X	X	

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
11-10-22	1605	Tyanna Watchman		COO	11/10/22	16:05
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks:
5.0+0.2=5.2
4.7+0.2=4.9
13.1+0.2=13.3

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: Sparton Technologies, inc.
EA Engineering, Science and Technology
Mailing Address: 320 Gold Ave SW #1300
Albuquerque, NM 87102
Phone #: 505-715-4154
email or Fax#: r marley@eaest.com
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: Sparton Coors Rd
Project #: Bills to Sparton direct
Project Manager: Bob Marley, EA
Sampler: Scott Miles / Tyanna Watchman
On Ice: ☒ Yes ☐ No
# of Coolers: 3
Cooler Temp (including CF): See Remarks (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2211699	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	VOCs 8260B	1,4 Dioxane 8270 SIM	Total Chromium	Dissolved Chromium	Dissolved Metals (Cr, Fe, Mn)
		Aq	Trip Blank	2x VOA	HCl	013											X				
~~11-10-22 1358~~				3xVOA, 1xIL Amber, 1x125ml HDPE, 1x250ml HDPE	None, HNO_3, HCl																
11-10-22	1358	GW	MW-26	VOA 3	HCl	014											X				
			MW-26	1xIL Amber, 1x125mL HDPE	None, HNO_3	↓												X		X	
			MW-26	1x250mL HDPE	HNO_3	↓													X		
	1436	Aq	MW-22	3xVOA, 1xIL Amber, 1x125ml HDPE, 1x250ml HDPE	None, HCl, HNO_3	015											X	X	X	X	
	1514	↓	MW-25	3 VOA, 1xIL Amber	HCl, None	016											X	X			
	1514	↓	MW 25	1x125mL HDPE, 1x250mL HDPE	HNO_3, HNO_3	↓													X	X	

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
11-10-22	1605	Tyanna Watchman	[signature]	UPS	11/10/22	1605
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks:
5.0 + 0.2 = 5.2
4.7 + 0.2 = 4.9
13.1 + 0.2 = 13.3

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

December 27, 2022

Bob Marley
EA Engineering
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL:
FAX:

RE: Sparton Coors Rd OrderNo.: 2211880

Dear Bob Marley:

Hall Environmental Analysis Laboratory received 8 sample(s) on 11/15/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2211880**
Date Reported: **12/27/2022**

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211880-001 **Matrix:** AQUEOUS

Client Sample ID: MW-56
Collection Date: 11/14/2022 11:31:00 AM
Received Date: 11/15/2022 4:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.043	0.0060		mg/L	1	12/15/2022 10:48:16 AM	B93348
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.048	0.0060		mg/L	1	11/22/2022 8:28:57 PM	71549
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	4.7	1.0		µg/L	1	12/1/2022 4:01:00 AM	71563
Surr: 2-Fluorobiphenyl	28.5	15-107		%Rec	1	12/1/2022 4:01:00 AM	71563
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
Toluene	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
Ethylbenzene	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
Naphthalene	ND	2.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
1-Methylnaphthalene	ND	4.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
2-Methylnaphthalene	ND	4.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
Acetone	ND	10		µg/L	1	11/17/2022 11:58:24 AM	R92675
Bromobenzene	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
Bromodichloromethane	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
Bromoform	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
Bromomethane	ND	3.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
2-Butanone	ND	10		µg/L	1	11/17/2022 11:58:24 AM	R92675
Carbon disulfide	ND	10		µg/L	1	11/17/2022 11:58:24 AM	R92675
Carbon Tetrachloride	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
Chlorobenzene	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
Chloroethane	ND	2.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
Chloroform	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
Chloromethane	ND	3.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
2-Chlorotoluene	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
4-Chlorotoluene	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
cis-1,2-DCE	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
Dibromochloromethane	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
Dibromomethane	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211880-001 **Matrix:** AQUEOUS

Client Sample ID: MW-56
Collection Date: 11/14/2022 11:31:00 AM
Received Date: 11/15/2022 4:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
1,1-Dichloroethane	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
1,1-Dichloroethene	4.8	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
1,2-Dichloropropane	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
1,3-Dichloropropane	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
2,2-Dichloropropane	ND	2.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
1,1-Dichloropropene	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
Hexachlorobutadiene	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
2-Hexanone	ND	10		µg/L	1	11/17/2022 11:58:24 AM	R92675
Isopropylbenzene	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
4-Isopropyltoluene	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
4-Methyl-2-pentanone	ND	10		µg/L	1	11/17/2022 11:58:24 AM	R92675
Methylene Chloride	ND	3.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
n-Butylbenzene	ND	3.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
n-Propylbenzene	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
sec-Butylbenzene	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
Styrene	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
tert-Butylbenzene	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
trans-1,2-DCE	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
Trichloroethene (TCE)	180	10		µg/L	10	11/18/2022 11:17:36 AM	W92708
Trichlorofluoromethane	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
Vinyl chloride	ND	1.0		µg/L	1	11/17/2022 11:58:24 AM	R92675
Xylenes, Total	ND	1.5		µg/L	1	11/17/2022 11:58:24 AM	R92675
Surr: 1,2-Dichloroethane-d4	77.7	70-130		%Rec	1	11/17/2022 11:58:24 AM	R92675
Surr: 4-Bromofluorobenzene	92.7	70-130		%Rec	1	11/17/2022 11:58:24 AM	R92675
Surr: Dibromofluoromethane	106	70-130		%Rec	1	11/17/2022 11:58:24 AM	R92675
Surr: Toluene-d8	88.6	70-130		%Rec	1	11/17/2022 11:58:24 AM	R92675

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211880-002 **Matrix:** AQUEOUS

Client Sample ID: MW-55
Collection Date: 11/14/2022 12:31:00 PM
Received Date: 11/15/2022 4:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.011	0.0060		mg/L	1	12/15/2022 10:52:46 AM	B93348
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.016	0.0060		mg/L	1	11/22/2022 8:38:04 PM	71549
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	12/1/2022 4:43:00 AM	71563
Surr: 2-Fluorobiphenyl	24.0	15-107		%Rec	1	12/1/2022 4:43:00 AM	71563
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
Toluene	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
Ethylbenzene	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
Naphthalene	ND	2.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
1-Methylnaphthalene	ND	4.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
2-Methylnaphthalene	ND	4.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
Acetone	ND	10		µg/L	1	11/17/2022 1:24:41 PM	R92675
Bromobenzene	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
Bromodichloromethane	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
Bromoform	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
Bromomethane	ND	3.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
2-Butanone	ND	10		µg/L	1	11/17/2022 1:24:41 PM	R92675
Carbon disulfide	ND	10		µg/L	1	11/17/2022 1:24:41 PM	R92675
Carbon Tetrachloride	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
Chlorobenzene	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
Chloroethane	ND	2.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
Chloroform	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
Chloromethane	ND	3.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
2-Chlorotoluene	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
4-Chlorotoluene	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
cis-1,2-DCE	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
Dibromochloromethane	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
Dibromomethane	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211880-002 **Matrix:** AQUEOUS

Client Sample ID: MW-55
Collection Date: 11/14/2022 12:31:00 PM
Received Date: 11/15/2022 4:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
1,1-Dichloroethane	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
1,1-Dichloroethene	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
1,2-Dichloropropane	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
1,3-Dichloropropane	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
2,2-Dichloropropane	ND	2.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
1,1-Dichloropropene	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
Hexachlorobutadiene	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
2-Hexanone	ND	10		µg/L	1	11/17/2022 1:24:41 PM	R92675
Isopropylbenzene	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
4-Isopropyltoluene	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
4-Methyl-2-pentanone	ND	10		µg/L	1	11/17/2022 1:24:41 PM	R92675
Methylene Chloride	ND	3.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
n-Butylbenzene	ND	3.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
n-Propylbenzene	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
sec-Butylbenzene	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
Styrene	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
tert-Butylbenzene	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
trans-1,2-DCE	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
Trichloroethene (TCE)	15	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
Trichlorofluoromethane	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
Vinyl chloride	ND	1.0		µg/L	1	11/17/2022 1:24:41 PM	R92675
Xylenes, Total	ND	1.5		µg/L	1	11/17/2022 1:24:41 PM	R92675
Surr: 1,2-Dichloroethane-d4	88.3	70-130		%Rec	1	11/17/2022 1:24:41 PM	R92675
Surr: 4-Bromofluorobenzene	90.6	70-130		%Rec	1	11/17/2022 1:24:41 PM	R92675
Surr: Dibromofluoromethane	111	70-130		%Rec	1	11/17/2022 1:24:41 PM	R92675
Surr: Toluene-d8	89.4	70-130		%Rec	1	11/17/2022 1:24:41 PM	R92675

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211880-003 **Matrix:** AQUEOUS

Client Sample ID: MW-56 Dup
Collection Date: 11/14/2022 11:31:00 AM
Received Date: 11/15/2022 4:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.045	0.0060		mg/L	1	12/19/2022 6:28:45 PM	B93414
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.046	0.0060		mg/L	1	11/22/2022 8:40:52 PM	71549
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	5.6	1.0		µg/L	1	12/1/2022 5:26:00 AM	71563
Surr: 2-Fluorobiphenyl	22.5	15-107		%Rec	1	12/1/2022 5:26:00 AM	71563
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
Toluene	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
Ethylbenzene	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
Naphthalene	ND	2.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
1-Methylnaphthalene	ND	4.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
2-Methylnaphthalene	ND	4.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
Acetone	ND	10		µg/L	1	11/17/2022 1:53:29 PM	R92675
Bromobenzene	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
Bromodichloromethane	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
Bromoform	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
Bromomethane	ND	3.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
2-Butanone	ND	10		µg/L	1	11/17/2022 1:53:29 PM	R92675
Carbon disulfide	ND	10		µg/L	1	11/17/2022 1:53:29 PM	R92675
Carbon Tetrachloride	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
Chlorobenzene	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
Chloroethane	ND	2.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
Chloroform	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
Chloromethane	ND	3.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
2-Chlorotoluene	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
4-Chlorotoluene	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
cis-1,2-DCE	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
Dibromochloromethane	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
Dibromomethane	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211880-003 **Matrix:** AQUEOUS

Client Sample ID: MW-56 Dup
Collection Date: 11/14/2022 11:31:00 AM
Received Date: 11/15/2022 4:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
1,1-Dichloroethane	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
1,1-Dichloroethene	5.1	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
1,2-Dichloropropane	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
1,3-Dichloropropane	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
2,2-Dichloropropane	ND	2.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
1,1-Dichloropropene	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
Hexachlorobutadiene	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
2-Hexanone	ND	10		µg/L	1	11/17/2022 1:53:29 PM	R92675
Isopropylbenzene	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
4-Isopropyltoluene	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
4-Methyl-2-pentanone	ND	10		µg/L	1	11/17/2022 1:53:29 PM	R92675
Methylene Chloride	ND	3.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
n-Butylbenzene	ND	3.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
n-Propylbenzene	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
sec-Butylbenzene	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
Styrene	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
tert-Butylbenzene	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
trans-1,2-DCE	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
Trichloroethene (TCE)	180	10		µg/L	10	11/18/2022 11:46:24 AM	W92708
Trichlorofluoromethane	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
Vinyl chloride	ND	1.0		µg/L	1	11/17/2022 1:53:29 PM	R92675
Xylenes, Total	ND	1.5		µg/L	1	11/17/2022 1:53:29 PM	R92675
Surr: 1,2-Dichloroethane-d4	76.6	70-130		%Rec	1	11/17/2022 1:53:29 PM	R92675
Surr: 4-Bromofluorobenzene	93.3	70-130		%Rec	1	11/17/2022 1:53:29 PM	R92675
Surr: Dibromofluoromethane	107	70-130		%Rec	1	11/17/2022 1:53:29 PM	R92675
Surr: Toluene-d8	88.5	70-130		%Rec	1	11/17/2022 1:53:29 PM	R92675

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211880-004 **Matrix:** AQUEOUS

Client Sample ID: MW-67
Collection Date: 11/14/2022 3:01:00 PM
Received Date: 11/15/2022 4:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	12/19/2022 6:30:52 PM	B93414
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	11/22/2022 8:43:45 PM	71549
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	12/1/2022 6:08:00 AM	71563
Surr: 2-Fluorobiphenyl	22.0	15-107		%Rec	1	12/1/2022 6:08:00 AM	71563
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
Toluene	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
Ethylbenzene	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
Naphthalene	ND	2.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
1-Methylnaphthalene	ND	4.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
2-Methylnaphthalene	ND	4.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
Acetone	ND	10		µg/L	1	11/17/2022 2:22:18 PM	R92675
Bromobenzene	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
Bromodichloromethane	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
Bromoform	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
Bromomethane	ND	3.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
2-Butanone	ND	10		µg/L	1	11/17/2022 2:22:18 PM	R92675
Carbon disulfide	ND	10		µg/L	1	11/17/2022 2:22:18 PM	R92675
Carbon Tetrachloride	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
Chlorobenzene	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
Chloroethane	ND	2.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
Chloroform	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
Chloromethane	ND	3.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
2-Chlorotoluene	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
4-Chlorotoluene	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
cis-1,2-DCE	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
Dibromochloromethane	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
Dibromomethane	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211880-004 **Matrix:** AQUEOUS

Client Sample ID: MW-67
Collection Date: 11/14/2022 3:01:00 PM
Received Date: 11/15/2022 4:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
1,1-Dichloroethane	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
1,1-Dichloroethene	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
1,2-Dichloropropane	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
1,3-Dichloropropane	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
2,2-Dichloropropane	ND	2.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
1,1-Dichloropropene	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
Hexachlorobutadiene	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
2-Hexanone	ND	10		µg/L	1	11/17/2022 2:22:18 PM	R92675
Isopropylbenzene	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
4-Isopropyltoluene	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
4-Methyl-2-pentanone	ND	10		µg/L	1	11/17/2022 2:22:18 PM	R92675
Methylene Chloride	ND	3.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
n-Butylbenzene	ND	3.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
n-Propylbenzene	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
sec-Butylbenzene	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
Styrene	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
tert-Butylbenzene	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
trans-1,2-DCE	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
Trichlorofluoromethane	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
Vinyl chloride	ND	1.0		µg/L	1	11/17/2022 2:22:18 PM	R92675
Xylenes, Total	ND	1.5		µg/L	1	11/17/2022 2:22:18 PM	R92675
Surr: 1,2-Dichloroethane-d4	105	70-130		%Rec	1	11/17/2022 2:22:18 PM	R92675
Surr: 4-Bromofluorobenzene	94.7	70-130		%Rec	1	11/17/2022 2:22:18 PM	R92675
Surr: Dibromofluoromethane	111	70-130		%Rec	1	11/17/2022 2:22:18 PM	R92675
Surr: Toluene-d8	88.5	70-130		%Rec	1	11/17/2022 2:22:18 PM	R92675

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211880-005 **Matrix:** AQUEOUS

Client Sample ID: MW-29
Collection Date: 11/15/2022 1:27:00 PM
Received Date: 11/15/2022 4:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	12/19/2022 6:33:04 PM	B93414
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	11/22/2022 8:46:42 PM	71549
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	12/1/2022 6:50:00 AM	71563
Surr: 2-Fluorobiphenyl	18.5	15-107		%Rec	1	12/1/2022 6:50:00 AM	71563
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
Toluene	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
Ethylbenzene	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
Naphthalene	ND	2.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
1-Methylnaphthalene	ND	4.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
2-Methylnaphthalene	ND	4.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
Acetone	ND	10		µg/L	1	11/17/2022 2:51:06 PM	R92675
Bromobenzene	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
Bromodichloromethane	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
Bromoform	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
Bromomethane	ND	3.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
2-Butanone	ND	10		µg/L	1	11/17/2022 2:51:06 PM	R92675
Carbon disulfide	ND	10		µg/L	1	11/17/2022 2:51:06 PM	R92675
Carbon Tetrachloride	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
Chlorobenzene	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
Chloroethane	ND	2.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
Chloroform	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
Chloromethane	ND	3.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
2-Chlorotoluene	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
4-Chlorotoluene	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
cis-1,2-DCE	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
Dibromochloromethane	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
Dibromomethane	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211880-005 **Matrix:** AQUEOUS

Client Sample ID: MW-29
Collection Date: 11/15/2022 1:27:00 PM
Received Date: 11/15/2022 4:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
1,1-Dichloroethane	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
1,1-Dichloroethene	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
1,2-Dichloropropane	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
1,3-Dichloropropane	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
2,2-Dichloropropane	ND	2.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
1,1-Dichloropropene	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
Hexachlorobutadiene	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
2-Hexanone	ND	10		µg/L	1	11/17/2022 2:51:06 PM	R92675
Isopropylbenzene	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
4-Isopropyltoluene	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
4-Methyl-2-pentanone	ND	10		µg/L	1	11/17/2022 2:51:06 PM	R92675
Methylene Chloride	ND	3.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
n-Butylbenzene	ND	3.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
n-Propylbenzene	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
sec-Butylbenzene	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
Styrene	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
tert-Butylbenzene	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
trans-1,2-DCE	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
Trichloroethene (TCE)	1.0	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
Trichlorofluoromethane	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
Vinyl chloride	ND	1.0		µg/L	1	11/17/2022 2:51:06 PM	R92675
Xylenes, Total	ND	1.5		µg/L	1	11/17/2022 2:51:06 PM	R92675
Surr: 1,2-Dichloroethane-d4	105	70-130		%Rec	1	11/17/2022 2:51:06 PM	R92675
Surr: 4-Bromofluorobenzene	94.0	70-130		%Rec	1	11/17/2022 2:51:06 PM	R92675
Surr: Dibromofluoromethane	109	70-130		%Rec	1	11/17/2022 2:51:06 PM	R92675
Surr: Toluene-d8	89.2	70-130		%Rec	1	11/17/2022 2:51:06 PM	R92675

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211880-006 **Matrix:** AQUEOUS

Client Sample ID: MW-29 Dup
Collection Date: 11/15/2022 1:27:00 PM
Received Date: 11/15/2022 4:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	12/19/2022 6:35:11 PM	B93414
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	11/22/2022 8:59:25 PM	71549
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	12/1/2022 7:33:00 AM	71563
Surr: 2-Fluorobiphenyl	35.0	15-107		%Rec	1	12/1/2022 7:33:00 AM	71563
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
Toluene	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
Ethylbenzene	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
Naphthalene	ND	2.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
1-Methylnaphthalene	ND	4.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
2-Methylnaphthalene	ND	4.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
Acetone	ND	10		µg/L	1	11/17/2022 3:19:55 PM	R92675
Bromobenzene	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
Bromodichloromethane	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
Bromoform	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
Bromomethane	ND	3.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
2-Butanone	ND	10		µg/L	1	11/17/2022 3:19:55 PM	R92675
Carbon disulfide	ND	10		µg/L	1	11/17/2022 3:19:55 PM	R92675
Carbon Tetrachloride	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
Chlorobenzene	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
Chloroethane	ND	2.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
Chloroform	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
Chloromethane	ND	3.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
2-Chlorotoluene	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
4-Chlorotoluene	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
cis-1,2-DCE	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
Dibromochloromethane	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
Dibromomethane	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211880-006 **Matrix:** AQUEOUS

Client Sample ID: MW-29 Dup
Collection Date: 11/15/2022 1:27:00 PM
Received Date: 11/15/2022 4:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
1,1-Dichloroethane	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
1,1-Dichloroethene	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
1,2-Dichloropropane	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
1,3-Dichloropropane	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
2,2-Dichloropropane	ND	2.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
1,1-Dichloropropene	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
Hexachlorobutadiene	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
2-Hexanone	ND	10		µg/L	1	11/17/2022 3:19:55 PM	R92675
Isopropylbenzene	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
4-Isopropyltoluene	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
4-Methyl-2-pentanone	ND	10		µg/L	1	11/17/2022 3:19:55 PM	R92675
Methylene Chloride	ND	3.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
n-Butylbenzene	ND	3.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
n-Propylbenzene	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
sec-Butylbenzene	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
Styrene	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
tert-Butylbenzene	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
trans-1,2-DCE	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
Trichlorofluoromethane	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
Vinyl chloride	ND	1.0		µg/L	1	11/17/2022 3:19:55 PM	R92675
Xylenes, Total	ND	1.5		µg/L	1	11/17/2022 3:19:55 PM	R92675
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	11/17/2022 3:19:55 PM	R92675
Surr: 4-Bromofluorobenzene	92.4	70-130		%Rec	1	11/17/2022 3:19:55 PM	R92675
Surr: Dibromofluoromethane	110	70-130		%Rec	1	11/17/2022 3:19:55 PM	R92675
Surr: Toluene-d8	88.8	70-130		%Rec	1	11/17/2022 3:19:55 PM	R92675

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211880-007 **Matrix:** AQUEOUS

Client Sample ID: MW-62R
Collection Date: 11/15/2022 2:51:00 PM
Received Date: 11/15/2022 4:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	12/19/2022 6:37:17 PM	B93414
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	11/22/2022 9:02:14 PM	71549
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	12/1/2022 8:15:00 AM	71563
Surr: 2-Fluorobiphenyl	13.5	15-107	S	%Rec	1	12/1/2022 8:15:00 AM	71563
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
Toluene	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
Ethylbenzene	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
Naphthalene	ND	2.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
1-Methylnaphthalene	ND	4.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
2-Methylnaphthalene	ND	4.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
Acetone	ND	10		µg/L	1	11/17/2022 3:48:40 PM	R92675
Bromobenzene	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
Bromodichloromethane	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
Bromoform	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
Bromomethane	ND	3.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
2-Butanone	ND	10		µg/L	1	11/17/2022 3:48:40 PM	R92675
Carbon disulfide	ND	10		µg/L	1	11/17/2022 3:48:40 PM	R92675
Carbon Tetrachloride	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
Chlorobenzene	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
Chloroethane	ND	2.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
Chloroform	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
Chloromethane	ND	3.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
2-Chlorotoluene	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
4-Chlorotoluene	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
cis-1,2-DCE	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
Dibromochloromethane	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
Dibromomethane	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211880-007 **Matrix:** AQUEOUS

Client Sample ID: MW-62R
Collection Date: 11/15/2022 2:51:00 PM
Received Date: 11/15/2022 4:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
1,1-Dichloroethane	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
1,1-Dichloroethene	3.2	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
1,2-Dichloropropane	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
1,3-Dichloropropane	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
2,2-Dichloropropane	ND	2.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
1,1-Dichloropropene	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
Hexachlorobutadiene	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
2-Hexanone	ND	10		µg/L	1	11/17/2022 3:48:40 PM	R92675
Isopropylbenzene	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
4-Isopropyltoluene	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
4-Methyl-2-pentanone	ND	10		µg/L	1	11/17/2022 3:48:40 PM	R92675
Methylene Chloride	ND	3.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
n-Butylbenzene	ND	3.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
n-Propylbenzene	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
sec-Butylbenzene	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
Styrene	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
tert-Butylbenzene	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
trans-1,2-DCE	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
Trichloroethene (TCE)	4.1	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
Trichlorofluoromethane	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
Vinyl chloride	ND	1.0		µg/L	1	11/17/2022 3:48:40 PM	R92675
Xylenes, Total	ND	1.5		µg/L	1	11/17/2022 3:48:40 PM	R92675
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	11/17/2022 3:48:40 PM	R92675
Surr: 4-Bromofluorobenzene	95.9	70-130		%Rec	1	11/17/2022 3:48:40 PM	R92675
Surr: Dibromofluoromethane	111	70-130		%Rec	1	11/17/2022 3:48:40 PM	R92675
Surr: Toluene-d8	87.9	70-130		%Rec	1	11/17/2022 3:48:40 PM	R92675

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton Coors Rd
Collection Date:
Lab ID: 2211880-008
Matrix: TRIP BLANK
Received Date: 11/15/2022 4:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
Toluene	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
Ethylbenzene	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
Naphthalene	ND	2.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
1-Methylnaphthalene	ND	4.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
2-Methylnaphthalene	ND	4.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
Acetone	ND	10		µg/L	1	11/17/2022 4:17:30 PM	R92675
Bromobenzene	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
Bromodichloromethane	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
Bromoform	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
Bromomethane	ND	3.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
2-Butanone	ND	10		µg/L	1	11/17/2022 4:17:30 PM	R92675
Carbon disulfide	ND	10		µg/L	1	11/17/2022 4:17:30 PM	R92675
Carbon Tetrachloride	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
Chlorobenzene	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
Chloroethane	ND	2.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
Chloroform	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
Chloromethane	ND	3.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
2-Chlorotoluene	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
4-Chlorotoluene	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
cis-1,2-DCE	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
Dibromochloromethane	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
Dibromomethane	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
1,1-Dichloroethane	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
1,1-Dichloroethene	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
1,2-Dichloropropane	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
1,3-Dichloropropane	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
2,2-Dichloropropane	ND	2.0		µg/L	1	11/17/2022 4:17:30 PM	R92675

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton Coors Rd
Collection Date:
Lab ID: 2211880-008
Matrix: TRIP BLANK
Received Date: 11/15/2022 4:26:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
Hexachlorobutadiene	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
2-Hexanone	ND	10		µg/L	1	11/17/2022 4:17:30 PM	R92675
Isopropylbenzene	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
4-Isopropyltoluene	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
4-Methyl-2-pentanone	ND	10		µg/L	1	11/17/2022 4:17:30 PM	R92675
Methylene Chloride	ND	3.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
n-Butylbenzene	ND	3.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
n-Propylbenzene	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
sec-Butylbenzene	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
Styrene	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
tert-Butylbenzene	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
trans-1,2-DCE	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
Trichlorofluoromethane	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
Vinyl chloride	ND	1.0		µg/L	1	11/17/2022 4:17:30 PM	R92675
Xylenes, Total	ND	1.5		µg/L	1	11/17/2022 4:17:30 PM	R92675
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	11/17/2022 4:17:30 PM	R92675
Surr: 4-Bromofluorobenzene	96.3	70-130		%Rec	1	11/17/2022 4:17:30 PM	R92675
Surr: Dibromofluoromethane	110	70-130		%Rec	1	11/17/2022 4:17:30 PM	R92675
Surr: Toluene-d8	89.3	70-130		%Rec	1	11/17/2022 4:17:30 PM	R92675

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211880**
27-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **MB-B** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **B93348** RunNo: **93348**
Prep Date: Analysis Date: **12/15/2022** SeqNo: **3365549** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LLLCS-B** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **B93348** RunNo: **93348**
Prep Date: Analysis Date: **12/15/2022** SeqNo: **3365550** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060	0.006000	0	87.4	50	150			

Sample ID: **LCS-B** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **B93348** RunNo: **93348**
Prep Date: Analysis Date: **12/15/2022** SeqNo: **3365551** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.49	0.0060	0.5000	0	99.0	85	115			

Sample ID: **2211880-001DMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MW-56** Batch ID: **B93348** RunNo: **93348**
Prep Date: Analysis Date: **12/15/2022** SeqNo: **3365605** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.54	0.0060	0.5000	0.04285	100	70	130			

Sample ID: **2211880-001DMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MW-56** Batch ID: **B93348** RunNo: **93348**
Prep Date: Analysis Date: **12/15/2022** SeqNo: **3365606** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.54	0.0060	0.5000	0.04285	99.0	70	130	1.09	20	

Sample ID: **MB-B** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **B93414** RunNo: **93414**
Prep Date: Analysis Date: **12/19/2022** SeqNo: **3368739** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211880**
27-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **LLLCS-B** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **B93414** RunNo: **93414**
Prep Date: Analysis Date: **12/19/2022** SeqNo: **3368740** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060	0.006000	0	81.7	50	150			

Sample ID: **LCS-B** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **B93414** RunNo: **93414**
Prep Date: Analysis Date: **12/19/2022** SeqNo: **3368741** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.48	0.0060	0.5000	0	96.8	85	115			

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211880**
27-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **MB-71549** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **71549** RunNo: **92779**
Prep Date: **11/16/2022** Analysis Date: **11/22/2022** SeqNo: **3339526** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LCSLL-71549** SampType: **LCSLL** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC** Batch ID: **71549** RunNo: **92779**
Prep Date: **11/16/2022** Analysis Date: **11/22/2022** SeqNo: **3339527** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060	0.006000	0	98.9	50	150			

Sample ID: **LCS-71549** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **71549** RunNo: **92779**
Prep Date: **11/16/2022** Analysis Date: **11/22/2022** SeqNo: **3339528** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.47	0.0060	0.5000	0	93.3	85	115			

Sample ID: **2211880-001CMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MW-56** Batch ID: **71549** RunNo: **92779**
Prep Date: **11/16/2022** Analysis Date: **11/22/2022** SeqNo: **3339547** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.50	0.0060	0.5000	0.04785	91.4	70	130			

Sample ID: **2211880-001CMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MW-56** Batch ID: **71549** RunNo: **92779**
Prep Date: **11/16/2022** Analysis Date: **11/22/2022** SeqNo: **3339548** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.51	0.0060	0.5000	0.04785	91.9	70	130	0.496	20	

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211880**
27-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R92675** RunNo: **92675**
Prep Date: Analysis Date: **11/17/2022** SeqNo: **3334090** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	70	130			
Toluene	19	1.0	20.00	0	96.0	70	130			
Chlorobenzene	19	1.0	20.00	0	95.0	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	97.4	70	130			
Trichloroethene (TCE)	21	1.0	20.00	0	106	70	130			
Surr: 1,2-Dichloroethane-d4	8.8		10.00		87.9	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		94.5	70	130			
Surr: Dibromofluoromethane	11		10.00		108	70	130			
Surr: Toluene-d8	8.9		10.00		88.6	70	130			

Sample ID: **2211880-001ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MW-56** Batch ID: **R92675** RunNo: **92675**
Prep Date: Analysis Date: **11/17/2022** SeqNo: **3334092** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	70	130			
Toluene	19	1.0	20.00	0	96.9	70	130			
Chlorobenzene	19	1.0	20.00	0	96.2	70	130			
1,1-Dichloroethene	25	1.0	20.00	4.771	102	70	130			
Trichloroethene (TCE)	180	1.0	20.00	157.5	89.8	70	130			E
Surr: 1,2-Dichloroethane-d4	7.8		10.00		77.7	70	130			
Surr: 4-Bromofluorobenzene	9.2		10.00		91.9	70	130			
Surr: Dibromofluoromethane	11		10.00		108	70	130			
Surr: Toluene-d8	8.8		10.00		87.9	70	130			

Sample ID: **2211880-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MW-56** Batch ID: **R92675** RunNo: **92675**
Prep Date: Analysis Date: **11/17/2022** SeqNo: **3334093** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	94.0	70	130	11.3	20	
Toluene	18	1.0	20.00	0	89.3	70	130	8.21	20	
Chlorobenzene	18	1.0	20.00	0	89.1	70	130	7.62	20	
1,1-Dichloroethene	22	1.0	20.00	4.771	88.6	70	130	11.7	20	
Trichloroethene (TCE)	170	1.0	20.00	157.5	39.8	70	130	5.87	20	ES
Surr: 1,2-Dichloroethane-d4	6.8		10.00		67.8	70	130	0	0	S
Surr: 4-Bromofluorobenzene	9.1		10.00		90.7	70	130	0	0	
Surr: Dibromofluoromethane	11		10.00		107	70	130	0	0	
Surr: Toluene-d8	8.7		10.00		86.8	70	130	0	0	

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211880**
27-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R92675**	RunNo: **92675**	
Prep Date:	Analysis Date: **11/17/2022**	SeqNo: **3334104**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

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ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211880**
27-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R92675** RunNo: **92675**
Prep Date: Analysis Date: **11/17/2022** SeqNo: **3334104** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		101	70	130			
Surr: 4-Bromofluorobenzene	9.2		10.00		92.1	70	130			
Surr: Dibromofluoromethane	11		10.00		108	70	130			
Surr: Toluene-d8	8.7		10.00		86.6	70	130			

Sample ID: **100ng LCS** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **W92708** RunNo: **92708**
Prep Date: Analysis Date: **11/18/2022** SeqNo: **3336194** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	21	1.0	20.00	0	103	70	130			
Surr: 1,2-Dichloroethane-d4	8.5		10.00		84.5	70	130			
Surr: 4-Bromofluorobenzene	9.2		10.00		92.1	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211880**
27-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **100ng LCS** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **W92708** RunNo: **92708**
Prep Date: Analysis Date: **11/18/2022** SeqNo: **3336194** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Dibromofluoromethane	11		10.00		109	70	130			
Surr: Toluene-d8	8.9		10.00		88.5	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **W92708** RunNo: **92708**
Prep Date: Analysis Date: **11/18/2022** SeqNo: **3336197** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	ND	1.0								
Surr: 1,2-Dichloroethane-d4	10		10.00		102	70	130			
Surr: 4-Bromofluorobenzene	9.3		10.00		93.0	70	130			
Surr: Dibromofluoromethane	11		10.00		110	70	130			
Surr: Toluene-d8	8.7		10.00		87.1	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211880**
27-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb-71563** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **71563** RunNo: **92927**
Prep Date: **11/17/2022** Analysis Date: **11/30/2022** SeqNo: **3346005** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	2.1		4.000		53.5	15	108			
Surr: 2,4,6-Tribromophenol	3.8		8.000		47.2	15	112			
Surr: 2-Fluorobiphenyl	1.4		4.000		35.0	15	107			
Surr: 4-Terphenyl-d14	3.7		4.000		93.0	15	166			

Sample ID: **lcs-71563** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **71563** RunNo: **92927**
Prep Date: **11/17/2022** Analysis Date: **11/30/2022** SeqNo: **3346006** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0	2.000	0	32.0	15	60.5			
Surr: Nitrobenzene-d5	2.7		5.000		53.2	15	108			
Surr: 2,4,6-Tribromophenol	4.8		10.00		47.6	15	112			
Surr: 2-Fluorobiphenyl	1.6		5.000		32.8	15	107			
Surr: 4-Terphenyl-d14	5.8		5.000		117	15	166			

Sample ID: **lcsd-71563** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **71563** RunNo: **92927**
Prep Date: **11/17/2022** Analysis Date: **11/30/2022** SeqNo: **3346007** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0	2.000	0	38.0	15	60.5	0	29.7	
Surr: Nitrobenzene-d5	3.2		5.000		64.8	15	108	0	0	
Surr: 2,4,6-Tribromophenol	4.9		10.00		49.2	15	112	0	0	
Surr: 2-Fluorobiphenyl	2.1		5.000		42.4	15	107	0	0	
Surr: 4-Terphenyl-d14	5.3		5.000		107	15	166	0	0	

Sample ID: **mb-71815** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **71815** RunNo: **93090**
Prep Date: **12/2/2022** Analysis Date: **12/7/2022** SeqNo: **3352795** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Nitrobenzene-d5	1.7		4.000		41.5	15	108			
Surr: 2,4,6-Tribromophenol	3.2		8.000		40.2	15	112			
Surr: 2-Fluorobiphenyl	1.2		4.000		29.0	15	107			
Surr: 4-Terphenyl-d14	2.6		4.000		65.5	15	166			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211880**
27-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **lcs-71815** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **71815** RunNo: **93090**
Prep Date: **12/2/2022** Analysis Date: **12/7/2022** SeqNo: **3352796** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: Nitrobenzene-d5	3.0		5.000		59.2	15	108			
Surr: 2,4,6-Tribromophenol	6.0		10.00		59.8	15	112			
Surr: 2-Fluorobiphenyl	2.2		5.000		44.8	15	107			
Surr: 4-Terphenyl-d14	4.4		5.000		88.0	15	166			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: EA Engineering Work Order Number: 2211880 RcptNo: 1

Received By: Juan Rojas 11/15/2022 4:26:00 PM

Completed By: Sean Livingston 11/16/2022 8:15:06 AM

Reviewed By: JN 11/16/22

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☑ NA ☐
   Samples were collected the same day and chilled.
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 14
(<2 or >12 unless noted)
Adjusted? NO
Checked by: KPG 11-16-22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	8.1	Good				
2	0.6	Good				

Chain-of-Custody Record

Client: Sparton Technologies, inc
EA Engineering, Science and Technology
Mailing Address: 320 Gold Ave SW #1300
Albuquerque, NM 87102
Phone #: 505-715-4154
email or Fax#: r marley@eaest.com
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: Sparton Coors Rd
Project #: Bills to Sparton direct
Project Manager: Bob Marley, EA
Sampler: Scott Miles
On Ice: ☒ Yes ☐ No
# of Coolers: 2
Cooler Temp (including CF): 8.1-0=8.1 (°C)
0.6-0=0.6

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2211840	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	VOCs 8260B	1,4 Dioxane 8270 SIM	Total Chromium	Dissolved Chromium		
11-14-22	1131	Aq	MW-56	3x 1L Amber 3x VOA 1x DS w/ HDPE 1x 250 w/ HDPE	none HCl HNO3	001											X	X	X	X		
	1231		MW-55			002											X	X	X	X		
	1131		MW-56 DUP			003											X	X	X	X		
	1501		MW-67			004											X	X	X	X		
11-15-22	1327		MW-29			005											X	X	X	X		
	1327		MW-29 DUP			006											X	X	X	X		
	1451		MW-62R			007											X	X	X	X		
			Trip Blank	2x VOAs	HCl	008											X					

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
11-15-22	1626				11/15/22	16:26
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

December 27, 2022

Bob Marley
EA Engineering
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL:
FAX:

RE: Sparton Coors Rd OrderNo.: 2211B03

Dear Bob Marley:

Hall Environmental Analysis Laboratory received 8 sample(s) on 11/17/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2211B03**
Date Reported: **12/27/2022**

CLIENT: EA Engineering
Client Sample ID: MW-68
Project: Sparton Coors Rd
Collection Date: 11/16/2022 11:53:00 AM
Lab ID: 2211B03-001
Matrix: AQUEOUS
Received Date: 11/17/2022 3:35:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	12/19/2022 7:11:22 PM	C93414
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	12/5/2022 8:57:08 PM	71781
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
Toluene	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
Ethylbenzene	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
Naphthalene	ND	2.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
1-Methylnaphthalene	ND	4.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
2-Methylnaphthalene	ND	4.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
Acetone	ND	10		µg/L	1	11/22/2022 4:25:00 AM	R92728
Bromobenzene	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
Bromodichloromethane	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
Bromoform	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
Bromomethane	ND	3.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
2-Butanone	ND	10		µg/L	1	11/22/2022 4:25:00 AM	R92728
Carbon disulfide	ND	10		µg/L	1	11/22/2022 4:25:00 AM	R92728
Carbon Tetrachloride	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
Chlorobenzene	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
Chloroethane	ND	2.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
Chloroform	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
Chloromethane	ND	3.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
2-Chlorotoluene	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
4-Chlorotoluene	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
cis-1,2-DCE	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
Dibromochloromethane	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
Dibromomethane	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211B03-001 **Matrix:** AQUEOUS

Client Sample ID: MW-68
Collection Date: 11/16/2022 11:53:00 AM
Received Date: 11/17/2022 3:35:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
1,1-Dichloroethane	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
1,1-Dichloroethene	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
1,2-Dichloropropane	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
1,3-Dichloropropane	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
2,2-Dichloropropane	ND	2.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
1,1-Dichloropropene	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
Hexachlorobutadiene	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
2-Hexanone	ND	10		µg/L	1	11/22/2022 4:25:00 AM	R92728
Isopropylbenzene	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
4-Isopropyltoluene	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
4-Methyl-2-pentanone	ND	10		µg/L	1	11/22/2022 4:25:00 AM	R92728
Methylene Chloride	ND	3.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
n-Butylbenzene	ND	3.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
n-Propylbenzene	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
sec-Butylbenzene	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
Styrene	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
tert-Butylbenzene	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
trans-1,2-DCE	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
Trichlorofluoromethane	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
Vinyl chloride	ND	1.0		µg/L	1	11/22/2022 4:25:00 AM	R92728
Xylenes, Total	ND	1.5		µg/L	1	11/22/2022 4:25:00 AM	R92728
Surr: 1,2-Dichloroethane-d4	91.3	70-130		%Rec	1	11/22/2022 4:25:00 AM	R92728
Surr: 4-Bromofluorobenzene	97.9	70-130		%Rec	1	11/22/2022 4:25:00 AM	R92728
Surr: Dibromofluoromethane	96.4	70-130		%Rec	1	11/22/2022 4:25:00 AM	R92728
Surr: Toluene-d8	95.1	70-130		%Rec	1	11/22/2022 4:25:00 AM	R92728

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: MW-69
Project: Sparton Coors Rd
Collection Date: 11/16/2022 12:31:00 PM
Lab ID: 2211B03-002
Matrix: AQUEOUS
Received Date: 11/17/2022 3:35:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.013	0.0060		mg/L	1	12/19/2022 7:27:46 PM	C93414
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.011	0.0060		mg/L	1	12/5/2022 8:59:15 PM	71781
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
Toluene	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
Ethylbenzene	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
Naphthalene	ND	2.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
1-Methylnaphthalene	ND	4.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
2-Methylnaphthalene	ND	4.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
Acetone	ND	10		µg/L	1	11/22/2022 4:48:00 AM	R92728
Bromobenzene	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
Bromodichloromethane	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
Bromoform	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
Bromomethane	ND	3.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
2-Butanone	ND	10		µg/L	1	11/22/2022 4:48:00 AM	R92728
Carbon disulfide	ND	10		µg/L	1	11/22/2022 4:48:00 AM	R92728
Carbon Tetrachloride	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
Chlorobenzene	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
Chloroethane	ND	2.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
Chloroform	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
Chloromethane	ND	3.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
2-Chlorotoluene	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
4-Chlorotoluene	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
cis-1,2-DCE	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
Dibromochloromethane	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
Dibromomethane	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211B03-002 **Matrix:** AQUEOUS

Client Sample ID: MW-69
Collection Date: 11/16/2022 12:31:00 PM
Received Date: 11/17/2022 3:35:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
1,1-Dichloroethane	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
1,1-Dichloroethene	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
1,2-Dichloropropane	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
1,3-Dichloropropane	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
2,2-Dichloropropane	ND	2.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
1,1-Dichloropropene	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
Hexachlorobutadiene	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
2-Hexanone	ND	10		µg/L	1	11/22/2022 4:48:00 AM	R92728
Isopropylbenzene	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
4-Isopropyltoluene	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
4-Methyl-2-pentanone	ND	10		µg/L	1	11/22/2022 4:48:00 AM	R92728
Methylene Chloride	ND	3.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
n-Butylbenzene	ND	3.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
n-Propylbenzene	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
sec-Butylbenzene	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
Styrene	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
tert-Butylbenzene	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
trans-1,2-DCE	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
Trichlorofluoromethane	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
Vinyl chloride	ND	1.0		µg/L	1	11/22/2022 4:48:00 AM	R92728
Xylenes, Total	ND	1.5		µg/L	1	11/22/2022 4:48:00 AM	R92728
Surr: 1,2-Dichloroethane-d4	92.2	70-130		%Rec	1	11/22/2022 4:48:00 AM	R92728
Surr: 4-Bromofluorobenzene	95.1	70-130		%Rec	1	11/22/2022 4:48:00 AM	R92728
Surr: Dibromofluoromethane	97.4	70-130		%Rec	1	11/22/2022 4:48:00 AM	R92728
Surr: Toluene-d8	94.4	70-130		%Rec	1	11/22/2022 4:48:00 AM	R92728

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211B03-003 **Matrix:** AQUEOUS

Client Sample ID: MW-51
Collection Date: 11/16/2022 2:10:00 PM
Received Date: 11/17/2022 3:35:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.033	0.0060		mg/L	1	12/19/2022 7:30:06 PM	C93414
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.039	0.0060		mg/L	1	12/5/2022 9:01:21 PM	71781
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
Toluene	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
Ethylbenzene	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
Naphthalene	ND	2.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
1-Methylnaphthalene	ND	4.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
2-Methylnaphthalene	ND	4.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
Acetone	ND	10		µg/L	1	11/22/2022 5:11:00 AM	R92728
Bromobenzene	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
Bromodichloromethane	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
Bromoform	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
Bromomethane	ND	3.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
2-Butanone	ND	10		µg/L	1	11/22/2022 5:11:00 AM	R92728
Carbon disulfide	ND	10		µg/L	1	11/22/2022 5:11:00 AM	R92728
Carbon Tetrachloride	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
Chlorobenzene	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
Chloroethane	ND	2.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
Chloroform	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
Chloromethane	ND	3.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
2-Chlorotoluene	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
4-Chlorotoluene	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
cis-1,2-DCE	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
Dibromochloromethane	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
Dibromomethane	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211B03-003 **Matrix:** AQUEOUS

Client Sample ID: MW-51
Collection Date: 11/16/2022 2:10:00 PM
Received Date: 11/17/2022 3:35:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
1,1-Dichloroethane	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
1,1-Dichloroethene	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
1,2-Dichloropropane	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
1,3-Dichloropropane	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
2,2-Dichloropropane	ND	2.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
1,1-Dichloropropene	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
Hexachlorobutadiene	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
2-Hexanone	ND	10		µg/L	1	11/22/2022 5:11:00 AM	R92728
Isopropylbenzene	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
4-Isopropyltoluene	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
4-Methyl-2-pentanone	ND	10		µg/L	1	11/22/2022 5:11:00 AM	R92728
Methylene Chloride	ND	3.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
n-Butylbenzene	ND	3.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
n-Propylbenzene	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
sec-Butylbenzene	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
Styrene	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
tert-Butylbenzene	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
trans-1,2-DCE	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
Trichlorofluoromethane	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
Vinyl chloride	ND	1.0		µg/L	1	11/22/2022 5:11:00 AM	R92728
Xylenes, Total	ND	1.5		µg/L	1	11/22/2022 5:11:00 AM	R92728
Surr: 1,2-Dichloroethane-d4	92.7	70-130		%Rec	1	11/22/2022 5:11:00 AM	R92728
Surr: 4-Bromofluorobenzene	94.1	70-130		%Rec	1	11/22/2022 5:11:00 AM	R92728
Surr: Dibromofluoromethane	96.3	70-130		%Rec	1	11/22/2022 5:11:00 AM	R92728
Surr: Toluene-d8	93.3	70-130		%Rec	1	11/22/2022 5:11:00 AM	R92728

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211B03-004 **Matrix:** AQUEOUS

Client Sample ID: MW-59
Collection Date: 11/16/2022 3:03:00 PM
Received Date: 11/17/2022 3:35:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.035	0.0060		mg/L	1	12/19/2022 7:32:13 PM	C93414
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.040	0.0060		mg/L	1	12/5/2022 9:03:24 PM	71781
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
Toluene	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
Ethylbenzene	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
Naphthalene	ND	2.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
1-Methylnaphthalene	ND	4.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
2-Methylnaphthalene	ND	4.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
Acetone	ND	10		µg/L	1	11/22/2022 5:34:00 AM	R92728
Bromobenzene	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
Bromodichloromethane	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
Bromoform	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
Bromomethane	ND	3.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
2-Butanone	ND	10		µg/L	1	11/22/2022 5:34:00 AM	R92728
Carbon disulfide	ND	10		µg/L	1	11/22/2022 5:34:00 AM	R92728
Carbon Tetrachloride	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
Chlorobenzene	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
Chloroethane	ND	2.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
Chloroform	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
Chloromethane	ND	3.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
2-Chlorotoluene	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
4-Chlorotoluene	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
cis-1,2-DCE	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
Dibromochloromethane	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
Dibromomethane	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211B03-004 **Matrix:** AQUEOUS

Client Sample ID: MW-59
Collection Date: 11/16/2022 3:03:00 PM
Received Date: 11/17/2022 3:35:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
1,1-Dichloroethane	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
1,1-Dichloroethene	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
1,2-Dichloropropane	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
1,3-Dichloropropane	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
2,2-Dichloropropane	ND	2.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
1,1-Dichloropropene	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
Hexachlorobutadiene	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
2-Hexanone	ND	10		µg/L	1	11/22/2022 5:34:00 AM	R92728
Isopropylbenzene	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
4-Isopropyltoluene	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
4-Methyl-2-pentanone	ND	10		µg/L	1	11/22/2022 5:34:00 AM	R92728
Methylene Chloride	ND	3.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
n-Butylbenzene	ND	3.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
n-Propylbenzene	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
sec-Butylbenzene	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
Styrene	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
tert-Butylbenzene	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
trans-1,2-DCE	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
Trichlorofluoromethane	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
Vinyl chloride	ND	1.0		µg/L	1	11/22/2022 5:34:00 AM	R92728
Xylenes, Total	ND	1.5		µg/L	1	11/22/2022 5:34:00 AM	R92728
Surr: 1,2-Dichloroethane-d4	90.7	70-130		%Rec	1	11/22/2022 5:34:00 AM	R92728
Surr: 4-Bromofluorobenzene	96.9	70-130		%Rec	1	11/22/2022 5:34:00 AM	R92728
Surr: Dibromofluoromethane	96.8	70-130		%Rec	1	11/22/2022 5:34:00 AM	R92728
Surr: Toluene-d8	94.2	70-130		%Rec	1	11/22/2022 5:34:00 AM	R92728

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211B03-005 **Matrix:** AQUEOUS

Client Sample ID: MW-34
Collection Date: 11/17/2022 10:51:00 AM
Received Date: 11/17/2022 3:35:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.0063	0.0060		mg/L	1	12/19/2022 7:34:20 PM	C93414
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.17	0.0060	*	mg/L	1	12/5/2022 9:05:29 PM	71781
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
Toluene	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
Ethylbenzene	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
Naphthalene	ND	2.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
1-Methylnaphthalene	ND	4.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
2-Methylnaphthalene	ND	4.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
Acetone	ND	10		µg/L	1	11/22/2022 5:56:00 AM	R92728
Bromobenzene	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
Bromodichloromethane	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
Bromoform	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
Bromomethane	ND	3.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
2-Butanone	ND	10		µg/L	1	11/22/2022 5:56:00 AM	R92728
Carbon disulfide	ND	10		µg/L	1	11/22/2022 5:56:00 AM	R92728
Carbon Tetrachloride	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
Chlorobenzene	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
Chloroethane	ND	2.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
Chloroform	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
Chloromethane	ND	3.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
2-Chlorotoluene	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
4-Chlorotoluene	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
cis-1,2-DCE	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
Dibromochloromethane	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
Dibromomethane	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211B03-005 **Matrix:** AQUEOUS

Client Sample ID: MW-34
Collection Date: 11/17/2022 10:51:00 AM
Received Date: 11/17/2022 3:35:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
1,1-Dichloroethane	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
1,1-Dichloroethene	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
1,2-Dichloropropane	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
1,3-Dichloropropane	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
2,2-Dichloropropane	ND	2.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
1,1-Dichloropropene	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
Hexachlorobutadiene	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
2-Hexanone	ND	10		µg/L	1	11/22/2022 5:56:00 AM	R92728
Isopropylbenzene	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
4-Isopropyltoluene	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
4-Methyl-2-pentanone	ND	10		µg/L	1	11/22/2022 5:56:00 AM	R92728
Methylene Chloride	ND	3.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
n-Butylbenzene	ND	3.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
n-Propylbenzene	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
sec-Butylbenzene	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
Styrene	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
tert-Butylbenzene	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
trans-1,2-DCE	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
Trichlorofluoromethane	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
Vinyl chloride	ND	1.0		µg/L	1	11/22/2022 5:56:00 AM	R92728
Xylenes, Total	ND	1.5		µg/L	1	11/22/2022 5:56:00 AM	R92728
Surr: 1,2-Dichloroethane-d4	92.2	70-130		%Rec	1	11/22/2022 5:56:00 AM	R92728
Surr: 4-Bromofluorobenzene	93.7	70-130		%Rec	1	11/22/2022 5:56:00 AM	R92728
Surr: Dibromofluoromethane	95.7	70-130		%Rec	1	11/22/2022 5:56:00 AM	R92728
Surr: Toluene-d8	92.9	70-130		%Rec	1	11/22/2022 5:56:00 AM	R92728

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211B03-006 **Matrix:** AQUEOUS

Client Sample ID: MW-46
Collection Date: 11/17/2022 1:26:00 PM
Received Date: 11/17/2022 3:35:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.026	0.0060		mg/L	1	12/19/2022 7:36:27 PM	C93414
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.029	0.0060		mg/L	1	12/5/2022 9:07:25 PM	71781
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
Toluene	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
Ethylbenzene	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
Naphthalene	ND	2.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
1-Methylnaphthalene	ND	4.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
2-Methylnaphthalene	ND	4.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
Acetone	ND	10		µg/L	1	11/22/2022 6:19:00 AM	R92728
Bromobenzene	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
Bromodichloromethane	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
Bromoform	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
Bromomethane	ND	3.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
2-Butanone	ND	10		µg/L	1	11/22/2022 6:19:00 AM	R92728
Carbon disulfide	ND	10		µg/L	1	11/22/2022 6:19:00 AM	R92728
Carbon Tetrachloride	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
Chlorobenzene	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
Chloroethane	ND	2.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
Chloroform	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
Chloromethane	ND	3.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
2-Chlorotoluene	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
4-Chlorotoluene	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
cis-1,2-DCE	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
Dibromochloromethane	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
Dibromomethane	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211B03-006 **Matrix:** AQUEOUS

Client Sample ID: MW-46
Collection Date: 11/17/2022 1:26:00 PM
Received Date: 11/17/2022 3:35:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
1,1-Dichloroethane	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
1,1-Dichloroethene	8.0	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
1,2-Dichloropropane	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
1,3-Dichloropropane	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
2,2-Dichloropropane	ND	2.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
1,1-Dichloropropene	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
Hexachlorobutadiene	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
2-Hexanone	ND	10		µg/L	1	11/22/2022 6:19:00 AM	R92728
Isopropylbenzene	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
4-Isopropyltoluene	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
4-Methyl-2-pentanone	ND	10		µg/L	1	11/22/2022 6:19:00 AM	R92728
Methylene Chloride	ND	3.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
n-Butylbenzene	ND	3.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
n-Propylbenzene	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
sec-Butylbenzene	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
Styrene	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
tert-Butylbenzene	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
trans-1,2-DCE	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
Trichloroethene (TCE)	47	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
Trichlorofluoromethane	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
Vinyl chloride	ND	1.0		µg/L	1	11/22/2022 6:19:00 AM	R92728
Xylenes, Total	ND	1.5		µg/L	1	11/22/2022 6:19:00 AM	R92728
Surr: 1,2-Dichloroethane-d4	93.2	70-130		%Rec	1	11/22/2022 6:19:00 AM	R92728
Surr: 4-Bromofluorobenzene	97.4	70-130		%Rec	1	11/22/2022 6:19:00 AM	R92728
Surr: Dibromofluoromethane	96.9	70-130		%Rec	1	11/22/2022 6:19:00 AM	R92728
Surr: Toluene-d8	96.6	70-130		%Rec	1	11/22/2022 6:19:00 AM	R92728

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211B03-007 **Matrix:** AQUEOUS

Client Sample ID: MW-16
Collection Date: 11/17/2022 2:41:00 PM
Received Date: 11/17/2022 3:35:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	0.075	0.0060		mg/L	1	12/19/2022 7:38:34 PM	C93414
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.089	0.0060		mg/L	1	12/5/2022 9:09:30 PM	71781
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
Toluene	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
Ethylbenzene	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
Naphthalene	ND	2.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
1-Methylnaphthalene	ND	4.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
2-Methylnaphthalene	ND	4.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
Acetone	ND	10		µg/L	1	11/22/2022 6:43:00 AM	R92728
Bromobenzene	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
Bromodichloromethane	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
Bromoform	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
Bromomethane	ND	3.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
2-Butanone	ND	10		µg/L	1	11/22/2022 6:43:00 AM	R92728
Carbon disulfide	ND	10		µg/L	1	11/22/2022 6:43:00 AM	R92728
Carbon Tetrachloride	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
Chlorobenzene	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
Chloroethane	ND	2.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
Chloroform	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
Chloromethane	ND	3.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
2-Chlorotoluene	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
4-Chlorotoluene	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
cis-1,2-DCE	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
Dibromochloromethane	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
Dibromomethane	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211B03-007 **Matrix:** AQUEOUS

Client Sample ID: MW-16
Collection Date: 11/17/2022 2:41:00 PM
Received Date: 11/17/2022 3:35:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
1,1-Dichloroethane	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
1,1-Dichloroethene	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
1,2-Dichloropropane	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
1,3-Dichloropropane	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
2,2-Dichloropropane	ND	2.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
1,1-Dichloropropene	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
Hexachlorobutadiene	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
2-Hexanone	ND	10		µg/L	1	11/22/2022 6:43:00 AM	R92728
Isopropylbenzene	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
4-Isopropyltoluene	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
4-Methyl-2-pentanone	ND	10		µg/L	1	11/22/2022 6:43:00 AM	R92728
Methylene Chloride	ND	3.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
n-Butylbenzene	ND	3.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
n-Propylbenzene	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
sec-Butylbenzene	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
Styrene	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
tert-Butylbenzene	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
trans-1,2-DCE	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
Trichloroethene (TCE)	2.1	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
Trichlorofluoromethane	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
Vinyl chloride	ND	1.0		µg/L	1	11/22/2022 6:43:00 AM	R92728
Xylenes, Total	ND	1.5		µg/L	1	11/22/2022 6:43:00 AM	R92728
Surr: 1,2-Dichloroethane-d4	96.2	70-130		%Rec	1	11/22/2022 6:43:00 AM	R92728
Surr: 4-Bromofluorobenzene	93.8	70-130		%Rec	1	11/22/2022 6:43:00 AM	R92728
Surr: Dibromofluoromethane	96.8	70-130		%Rec	1	11/22/2022 6:43:00 AM	R92728
Surr: Toluene-d8	93.8	70-130		%Rec	1	11/22/2022 6:43:00 AM	R92728

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton Coors Rd
Collection Date:
Lab ID: 2211B03-008
Matrix: TRIP BLANK
Received Date: 11/17/2022 3:35:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
Toluene	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
Ethylbenzene	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
Naphthalene	ND	2.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
1-Methylnaphthalene	ND	4.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
2-Methylnaphthalene	ND	4.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
Acetone	ND	10		µg/L	1	11/22/2022 7:06:00 AM	R92728
Bromobenzene	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
Bromodichloromethane	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
Bromoform	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
Bromomethane	ND	3.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
2-Butanone	ND	10		µg/L	1	11/22/2022 7:06:00 AM	R92728
Carbon disulfide	ND	10		µg/L	1	11/22/2022 7:06:00 AM	R92728
Carbon Tetrachloride	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
Chlorobenzene	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
Chloroethane	ND	2.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
Chloroform	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
Chloromethane	ND	3.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
2-Chlorotoluene	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
4-Chlorotoluene	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
cis-1,2-DCE	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
Dibromochloromethane	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
Dibromomethane	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
1,1-Dichloroethane	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
1,1-Dichloroethene	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
1,2-Dichloropropane	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
1,3-Dichloropropane	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
2,2-Dichloropropane	ND	2.0		µg/L	1	11/22/2022 7:06:00 AM	R92728

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton Coors Rd
Collection Date:
Lab ID: 2211B03-008
Matrix: TRIP BLANK
Received Date: 11/17/2022 3:35:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
Hexachlorobutadiene	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
2-Hexanone	ND	10		µg/L	1	11/22/2022 7:06:00 AM	R92728
Isopropylbenzene	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
4-Isopropyltoluene	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
4-Methyl-2-pentanone	ND	10		µg/L	1	11/22/2022 7:06:00 AM	R92728
Methylene Chloride	ND	3.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
n-Butylbenzene	ND	3.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
n-Propylbenzene	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
sec-Butylbenzene	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
Styrene	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
tert-Butylbenzene	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
trans-1,2-DCE	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
Trichlorofluoromethane	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
Vinyl chloride	ND	1.0		µg/L	1	11/22/2022 7:06:00 AM	R92728
Xylenes, Total	ND	1.5		µg/L	1	11/22/2022 7:06:00 AM	R92728
Surr: 1,2-Dichloroethane-d4	95.4	70-130		%Rec	1	11/22/2022 7:06:00 AM	R92728
Surr: 4-Bromofluorobenzene	96.5	70-130		%Rec	1	11/22/2022 7:06:00 AM	R92728
Surr: Dibromofluoromethane	98.8	70-130		%Rec	1	11/22/2022 7:06:00 AM	R92728
Surr: Toluene-d8	93.9	70-130		%Rec	1	11/22/2022 7:06:00 AM	R92728

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

ANALYTICAL REPORT

November 28, 2022

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

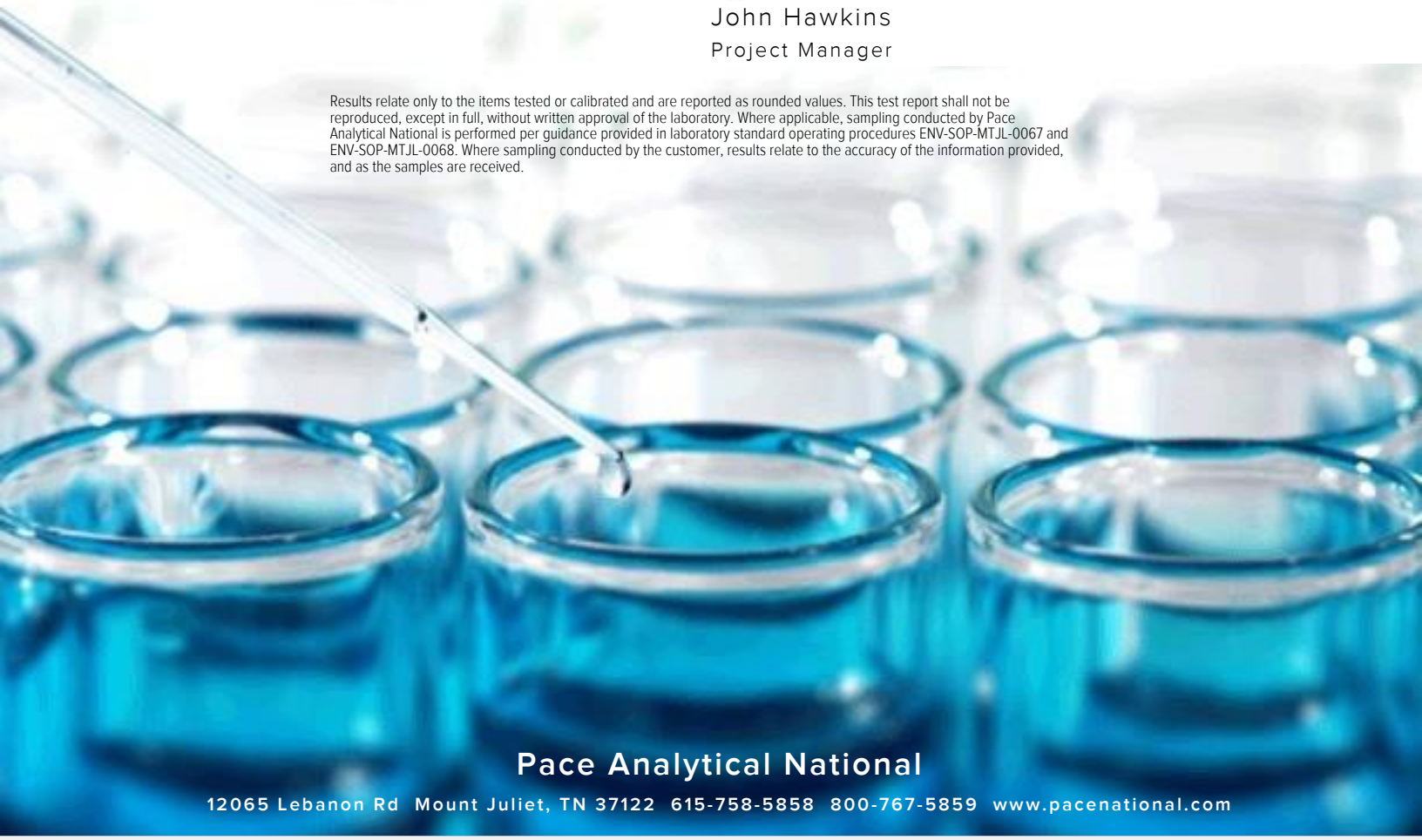
Hall Environmental Analysis Laboratory

Sample Delivery Group:	L1560067
Samples Received:	11/19/2022
Project Number:	
Description:	
Report To:	Andy Freeman 4901 Hawkins NE Albuquerque, NM 87109

Entire Report Reviewed By:

John Hawkins
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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2211B03-001B MW-68 L1560067-01 GW

Collected by	Collected date/time	Received date/time
	11/16/22 11:53	11/19/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG1962895	1	11/22/22 04:12	11/22/22 20:50	AGW	Mt. Juliet, TN

2211B03-002B MW-69 L1560067-02 GW

Collected by	Collected date/time	Received date/time
	11/16/22 11:53	11/19/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG1962895	1	11/22/22 04:12	11/22/22 21:08	AGW	Mt. Juliet, TN

2211B03-003B MW-51 L1560067-03 GW

Collected by	Collected date/time	Received date/time
	11/16/22 11:53	11/19/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG1962895	1	11/22/22 04:12	11/22/22 21:28	AGW	Mt. Juliet, TN

2211B03-004B MW-59 L1560067-04 GW

Collected by	Collected date/time	Received date/time
	11/16/22 11:53	11/19/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG1962895	1	11/22/22 04:12	11/22/22 21:47	AGW	Mt. Juliet, TN

2211B03-005B MW-34 L1560067-05 GW

Collected by	Collected date/time	Received date/time
	11/16/22 11:53	11/19/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG1962895	1	11/22/22 04:12	11/22/22 22:06	AGW	Mt. Juliet, TN

2211B03-006B MW-46 L1560067-06 GW

Collected by	Collected date/time	Received date/time
	11/16/22 11:53	11/19/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG1962895	1	11/22/22 04:12	11/22/22 22:25	AGW	Mt. Juliet, TN

2211B03-007B MW-16 L1560067-07 GW

Collected by	Collected date/time	Received date/time
	11/16/22 11:53	11/19/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM	WG1962895	1	11/22/22 04:12	11/22/22 22:44	AGW	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

John V Hawkins

John Hawkins
Project Manager

Sample Delivery Group (SDG) Narrative

An aliquot for analysis was taken from the original container received due to volume requirements of the laboratory's procedure. Rinsing of the original sample container for inclusion in the sample extraction was not performed.

Lab Sample ID	Project Sample ID	Method
L1560067-01	2211B03-001B MW-68	8270E-SIM
L1560067-02	2211B03-002B MW-69	8270E-SIM
L1560067-03	2211B03-003B MW-51	8270E-SIM
L1560067-04	2211B03-004B MW-59	8270E-SIM
L1560067-05	2211B03-005B MW-34	8270E-SIM
L1560067-06	2211B03-006B MW-46	8270E-SIM
L1560067-07	2211B03-007B MW-16	8270E-SIM

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	0.522		0.0447	0.400	1	11/22/2022 20:50	WG1962895
(S) Nitrobenzene-d5	*70.2*			*10.0-120*		*11/22/2022 20:50*	WG1962895

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	14.4		0.0447	0.400	1	11/22/2022 21:08	WG1962895
(S) Nitrobenzene-d5	*69.2*			*10.0-120*		*11/22/2022 21:08*	WG1962895

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	5.36		0.0447	0.400	1	11/22/2022 21:28	WG1962895
(S) Nitrobenzene-d5	*65.3*			*10.0-120*		*11/22/2022 21:28*	WG1962895

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	5.37		0.0447	0.400	1	11/22/2022 21:47	WG1962895
(S) Nitrobenzene-d5	*71.2*			*10.0-120*		*11/22/2022 21:47*	WG1962895

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	0.148	J	0.0447	0.400	1	11/22/2022 22:06	WG1962895
(S) Nitrobenzene-d5	*75.5*			*10.0-120*		*11/22/2022 22:06*	WG1962895

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	11.0		0.0447	0.400	1	11/22/2022 22:25	WG1962895
(S) Nitrobenzene-d5	*66.5*			*10.0-120*		*11/22/2022 22:25*	WG1962895

Semi Volatile Organic Compounds (GC/MS) by Method 8270E-SIM

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	11.3		0.0447	0.400	1	11/22/2022 22:44	WG1962895
(S) Nitrobenzene-d5	*52.8*			*10.0-120*		*11/22/2022 22:44*	WG1962895

Method Blank (MB)

(MB) R3864696-3 11/22/22 18:55

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
1,4-Dioxane	U		0.0447	0.400
(S) Nitrobenzene-d5	*70.8*			*10.0-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3864696-1 11/22/22 18:17 • (LCSD) R3864696-2 11/22/22 18:36

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,4-Dioxane	50.0	45.2	44.6	90.4	89.2	73.0-146			1.34	20
(S) Nitrobenzene-d5				*75.6*	*71.0*	*10.0-120*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

CHAIN OF CUSTODY RECORD

PAGE: 1 OF: 1

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975
FAX: 505-345-4107
Website: www.hallenvironmental.com

L156 0067

SUB CONTRATOR: Pace TN	COMPANY: PACE TN	PHONE: (800) 767-5859	FAX: (615) 758-5859
ADDRESS: 12065 Lebanon Rd		ACCOUNT #:	EMAIL:
CITY, STATE, ZIP: Mt. Juliet, TN 37122			

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS	
1	2211B03-001B	MW-68	250 ABMER UNPRES	Aqueous	11/16/2022 11:53:00 AM	1	8270SIMS 1,4 Dioxane	-01
2	2211B03-002B	MW-~~59~~ 69	250 ABMER UNPRES	Aqueous	11/16/2022 12:31:00 PM	1	8270SIMS 1,4 Dioxane	-02
3	2211B03-003B	MW-51	250 ABMER UNPRES	Aqueous	11/16/2022 2:10:00 PM	1	8270SIMS 1,4 Dioxane	-03
4	2211B03-004B	MW-59	250 ABMER UNPRES	Aqueous	11/16/2022 3:03:00 PM	1	8270SIMS 1,4 Dioxane	-04
5	2211B03-005B	MW-34	250 ABMER UNPRES	Aqueous	11/17/2022 10:51:00 AM	1	8270SIMS 1,4 Dioxane	-05
6	2211B03-006B	MW-46	250 ABMER UNPRES	Aqueous	11/17/2022 1:26:00 PM	1	8270SIMS 1,4 Dioxane	-06
7	2211B03-007B	MW-16	250 ABMER UNPRES	Aqueous	11/17/2022 2:41:00 PM	1	8270SIMS 1,4 Dioxane	-07

JN 11/18/22

D167

Sample Receipt Checklist

COC Seal Present/Intact: __Y__N
COC Signed/Accurate: __Y__N
Bottles arrive intact: __Y__N
Correct bottles used: __Y__N
Sufficient volume sent: __Y__N
~~RAD Screen <0.5 mR/hr:~~ __Y__N

If Applicable
VOA Zero Headspace: __Y__N
Pres.Correct/Check: __Y__N

NOTB NCIAG
Received 1.3 to = 1.3

Fedex
6040 5527 5149

SPECIAL INSTRUCTIONS / COMMENTS:

Please include the LAB ID and the CLIENT SAMPLE ID on all final reports. Please e-mail results to lab@hallenvironmental.com. Please return all coolers and blue ice. Thank you.

Relinquished By:	Date:	Time:	Received By:	Date:	Time:
CMC	11/17/2022	4:25 PM	[illegible]	11/19	0900
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

TAT: Standard ☑ RUSH Next BD ☐ 2nd BD ☐ 3rd BD ☐

REPORT TRANSMITTAL DESIRED:
☐ HARDCOPY (extra cost) ☐ FAX ☐ EMAIL ☐ ONLINE

FOR LAB USE ONLY
Temp of samples _____ °C Attempt to Cool ? _____
Comments: _____

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211B03**
27-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **MB-C** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **C93414** RunNo: **93414**
Prep Date: Analysis Date: **12/19/2022** SeqNo: **3368742** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LLLCS-C** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **C93414** RunNo: **93414**
Prep Date: Analysis Date: **12/19/2022** SeqNo: **3368743** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060	0.006000	0	82.2	50	150			

Sample ID: **LCS-C** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **C93414** RunNo: **93414**
Prep Date: Analysis Date: **12/19/2022** SeqNo: **3368744** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.48	0.0060	0.5000	0	96.6	85	115			

Sample ID: **2211B03-001DMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MW-68** Batch ID: **C93414** RunNo: **93414**
Prep Date: Analysis Date: **12/19/2022** SeqNo: **3368860** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.46	0.0060	0.5000	0	92.9	70	130			

Sample ID: **2211B03-001DMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MW-68** Batch ID: **C93414** RunNo: **93414**
Prep Date: Analysis Date: **12/19/2022** SeqNo: **3368864** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.45	0.0060	0.5000	0	91.0	70	130	2.03	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211B03**
27-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **2211B03-007CMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MW-16** Batch ID: **71781** RunNo: **93026**
Prep Date: **11/30/2022** Analysis Date: **12/5/2022** SeqNo: **3350264** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.60	0.0060	0.5000	0.08884	103	70	130			

Sample ID: **2211B03-007CMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MW-16** Batch ID: **71781** RunNo: **93026**
Prep Date: **11/30/2022** Analysis Date: **12/5/2022** SeqNo: **3350265** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.59	0.0060	0.5000	0.08884	101	70	130	1.93	20	

Sample ID: **MB-71781** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **71781** RunNo: **93026**
Prep Date: **11/30/2022** Analysis Date: **12/5/2022** SeqNo: **3350269** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LCSLL-71781** SampType: **LCSLL** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC** Batch ID: **71781** RunNo: **93026**
Prep Date: **11/30/2022** Analysis Date: **12/5/2022** SeqNo: **3350270** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.0060	0.0060	0.006000	0	100	50	150			

Sample ID: **LCS-71781** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **71781** RunNo: **93026**
Prep Date: **11/30/2022** Analysis Date: **12/5/2022** SeqNo: **3350271** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.51	0.0060	0.5000	0	102	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211B03**
27-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R92728** RunNo: **92728**
Prep Date: Analysis Date: **11/21/2022** SeqNo: **3337497** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	95.8	70	130			
Toluene	20	1.0	20.00	0	102	70	130			
Chlorobenzene	21	1.0	20.00	0	107	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	96.6	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	93.8	70	130			
Surr: 1,2-Dichloroethane-d4	9.6		10.00		96.5	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		98.4	70	130			
Surr: Dibromofluoromethane	9.4		10.00		93.9	70	130			
Surr: Toluene-d8	9.5		10.00		94.8	70	130			

Sample ID: **mb 2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R92728** RunNo: **92728**
Prep Date: Analysis Date: **11/21/2022** SeqNo: **3337498** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211B03**
27-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb 2**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R92728**	RunNo: **92728**	
Prep Date:	Analysis Date: **11/21/2022**	SeqNo: **3337498**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211B03**
27-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb 2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R92728** RunNo: **92728**
Prep Date: Analysis Date: **11/21/2022** SeqNo: **3337498** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.9		10.00		99.1	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		94.6	70	130			
Surr: Dibromofluoromethane	9.9		10.00		99.2	70	130			
Surr: Toluene-d8	9.5		10.00		94.9	70	130			

Sample ID: **100ng lcs 2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R92728** RunNo: **92728**
Prep Date: Analysis Date: **11/22/2022** SeqNo: **3338644** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	100	70	130			
Toluene	21	1.0	20.00	0	107	70	130			
Chlorobenzene	23	1.0	20.00	0	113	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	98.1	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	97.8	70	130			
Surr: 1,2-Dichloroethane-d4	9.2		10.00		91.8	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		99.7	70	130			
Surr: Dibromofluoromethane	9.6		10.00		95.9	70	130			
Surr: Toluene-d8	9.7		10.00		97.0	70	130			

Sample ID: **mb 3** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R92728** RunNo: **92728**
Prep Date: Analysis Date: **11/22/2022** SeqNo: **3338645** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211B03**
27-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb 3**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R92728**	RunNo: **92728**	
Prep Date:	Analysis Date: **11/22/2022**	SeqNo: **3338645**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211B03**
27-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb 3** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R92728** RunNo: **92728**
Prep Date: Analysis Date: **11/22/2022** SeqNo: **3338645** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.3		10.00		92.8	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		96.2	70	130			
Surr: Dibromofluoromethane	9.8		10.00		97.9	70	130			
Surr: Toluene-d8	9.5		10.00		95.5	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **EA Engineering** Work Order Number: **2211B03** RcptNo: **1**

Received By: **Kasandra Jimena Garcia** **11/17/2022 3:35:00 PM** KJG

Completed By: **Cheyenne Cason** **11/17/2022 4:12:56 PM** Chel

Reviewed By: KRA 11-18-22

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☑ NA ☐
   Samples were collected the same day and chilled.
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 14 (<2 or >12 unless noted)
Adjusted? NO
Checked by: JN 11/18/22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

Poured off ~250mls from 1 L Amber into 250ml amber for sub analysis and backup -- JN 11/18/22.

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.4	Good				
2	2.3	Good				

Chain-of-Custody Record

Client: Sparton Technologies, inc.
EA Engineering, Science and Technology
Mailing Address: 320 Gold Ave SW #1300
Albuquerque, NM 87102
Phone #: 505-715-4154
email or Fax#: r marley@eaest.com
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: Sparton Coors Rd
Project #: Bills to Sparton direct
Project Manager: Bob Marley, EA
Sampler: Scott Miles
On Ice: ☑ Yes ☐ No
# of Coolers: 2
Cooler Temp (including CF): 5.4-0=5.4 (°C)
2.3-0=2.3

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2211303	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	VOCs 8260B	1,4 Dioxane 8270 SIM	Total Chromium	Dissolved Metals (Cr, Fe, Mn)	Dissolved Cr
11-16-22	1153	Aq	MW-68	1x1L Amber, 3x VOA 1x125ml HDPE, 1x250ml HDPE	none HNO3 HCl	001											X	X	X	X	X
	1231		MW-69			002											X	X	X	X	X
	1410		MW-51			003											X	X	X	X	X
	1503		MW-59			004											X	X	X		X
11-17-22	1051		MW-34			005											X	X	X		X
	1326		MW-46			006											X	X	X		X
	1441		MW-16			007											X	X	X		X
			Trip Blank	2x VOA	HCl	008											X				

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
11-17-22	1555				11-17-22	15:55
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

December 27, 2022

Bob Marley
EA Engineering
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL:
FAX:

RE: Sparton Coors Rd OrderNo.: 2211B94

Dear Bob Marley:

Hall Environmental Analysis Laboratory received 2 sample(s) on 11/18/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2211B94**
Date Reported: **12/27/2022**

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211B94-001 **Matrix:** AQUEOUS

Client Sample ID: MW-52R
Collection Date: 11/18/2022 1:33:00 PM
Received Date: 11/18/2022 3:13:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	12/19/2022 7:40:35 PM	C93414
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	12/2/2022 4:53:55 PM	71668
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	12/2/2022 12:18:00 AM	71650
Surr: 2-Fluorobiphenyl	55.0	15-107		%Rec	1	12/2/2022 12:18:00 AM	71650
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
Toluene	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
Ethylbenzene	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
Naphthalene	ND	2.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
1-Methylnaphthalene	ND	4.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
2-Methylnaphthalene	ND	4.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
Acetone	ND	10		µg/L	1	11/28/2022 8:24:05 PM	R92849
Bromobenzene	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
Bromodichloromethane	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
Bromoform	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
Bromomethane	ND	3.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
2-Butanone	ND	10		µg/L	1	11/28/2022 8:24:05 PM	R92849
Carbon disulfide	ND	10		µg/L	1	11/28/2022 8:24:05 PM	R92849
Carbon Tetrachloride	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
Chlorobenzene	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
Chloroethane	ND	2.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
Chloroform	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
Chloromethane	ND	3.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
2-Chlorotoluene	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
4-Chlorotoluene	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
cis-1,2-DCE	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
Dibromochloromethane	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
Dibromomethane	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211B94-001 **Matrix:** AQUEOUS

Client Sample ID: MW-52R
Collection Date: 11/18/2022 1:33:00 PM
Received Date: 11/18/2022 3:13:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
1,1-Dichloroethane	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
1,1-Dichloroethene	16	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
1,2-Dichloropropane	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
1,3-Dichloropropane	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
2,2-Dichloropropane	ND	2.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
1,1-Dichloropropene	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
Hexachlorobutadiene	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
2-Hexanone	ND	10		µg/L	1	11/28/2022 8:24:05 PM	R92849
Isopropylbenzene	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
4-Isopropyltoluene	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
4-Methyl-2-pentanone	ND	10		µg/L	1	11/28/2022 8:24:05 PM	R92849
Methylene Chloride	ND	3.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
n-Butylbenzene	ND	3.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
n-Propylbenzene	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
sec-Butylbenzene	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
Styrene	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
tert-Butylbenzene	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
trans-1,2-DCE	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
Trichloroethene (TCE)	10	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
Trichlorofluoromethane	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
Vinyl chloride	ND	1.0		µg/L	1	11/28/2022 8:24:05 PM	R92849
Xylenes, Total	ND	1.5		µg/L	1	11/28/2022 8:24:05 PM	R92849
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	11/28/2022 8:24:05 PM	R92849
Surr: 4-Bromofluorobenzene	88.4	70-130		%Rec	1	11/28/2022 8:24:05 PM	R92849
Surr: Dibromofluoromethane	108	70-130		%Rec	1	11/28/2022 8:24:05 PM	R92849
Surr: Toluene-d8	87.9	70-130		%Rec	1	11/28/2022 8:24:05 PM	R92849

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton Coors Rd
Collection Date:
Lab ID: 2211B94-002
Matrix: TRIP BLANK
Received Date: 11/18/2022 3:13:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
Toluene	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
Ethylbenzene	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
Naphthalene	ND	2.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
1-Methylnaphthalene	ND	4.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
2-Methylnaphthalene	ND	4.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
Acetone	ND	10		µg/L	1	11/28/2022 8:52:50 PM	R92849
Bromobenzene	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
Bromodichloromethane	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
Bromoform	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
Bromomethane	ND	3.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
2-Butanone	ND	10		µg/L	1	11/28/2022 8:52:50 PM	R92849
Carbon disulfide	ND	10		µg/L	1	11/28/2022 8:52:50 PM	R92849
Carbon Tetrachloride	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
Chlorobenzene	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
Chloroethane	ND	2.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
Chloroform	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
Chloromethane	ND	3.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
2-Chlorotoluene	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
4-Chlorotoluene	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
cis-1,2-DCE	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
Dibromochloromethane	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
Dibromomethane	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
1,1-Dichloroethane	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
1,1-Dichloroethene	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
1,2-Dichloropropane	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
1,3-Dichloropropane	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
2,2-Dichloropropane	ND	2.0		µg/L	1	11/28/2022 8:52:50 PM	R92849

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton Coors Rd
Collection Date:
Lab ID: 2211B94-002
Matrix: TRIP BLANK
Received Date: 11/18/2022 3:13:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
Hexachlorobutadiene	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
2-Hexanone	ND	10		µg/L	1	11/28/2022 8:52:50 PM	R92849
Isopropylbenzene	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
4-Isopropyltoluene	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
4-Methyl-2-pentanone	ND	10		µg/L	1	11/28/2022 8:52:50 PM	R92849
Methylene Chloride	ND	3.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
n-Butylbenzene	ND	3.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
n-Propylbenzene	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
sec-Butylbenzene	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
Styrene	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
tert-Butylbenzene	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
trans-1,2-DCE	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
Trichlorofluoromethane	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
Vinyl chloride	ND	1.0		µg/L	1	11/28/2022 8:52:50 PM	R92849
Xylenes, Total	ND	1.5		µg/L	1	11/28/2022 8:52:50 PM	R92849
Surr: 1,2-Dichloroethane-d4	107	70-130		%Rec	1	11/28/2022 8:52:50 PM	R92849
Surr: 4-Bromofluorobenzene	89.4	70-130		%Rec	1	11/28/2022 8:52:50 PM	R92849
Surr: Dibromofluoromethane	111	70-130		%Rec	1	11/28/2022 8:52:50 PM	R92849
Surr: Toluene-d8	88.5	70-130		%Rec	1	11/28/2022 8:52:50 PM	R92849

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211B94**
27-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **MB-C** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **C93414** RunNo: **93414**
Prep Date: Analysis Date: **12/19/2022** SeqNo: **3368742** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LLLCS-C** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **C93414** RunNo: **93414**
Prep Date: Analysis Date: **12/19/2022** SeqNo: **3368743** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060	0.006000	0	82.2	50	150			

Sample ID: **LCS-C** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **C93414** RunNo: **93414**
Prep Date: Analysis Date: **12/19/2022** SeqNo: **3368744** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.48	0.0060	0.5000	0	96.6	85	115			

Sample ID: **2211B94-001DMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MW-52R** Batch ID: **C93414** RunNo: **93414**
Prep Date: Analysis Date: **12/19/2022** SeqNo: **3368872** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.49	0.0060	0.5000	0.002588	97.1	70	130			

Sample ID: **2211B94-001DMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MW-52R** Batch ID: **C93414** RunNo: **93414**
Prep Date: Analysis Date: **12/19/2022** SeqNo: **3368873** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.47	0.0060	0.5000	0.002588	93.9	70	130	3.23	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211B94**
27-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **MB-71668** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **71668** RunNo: **92925**
Prep Date: **11/22/2022** Analysis Date: **11/30/2022** SeqNo: **3345894** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LCSLL-71668** SampType: **LCSLL** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC** Batch ID: **71668** RunNo: **92925**
Prep Date: **11/22/2022** Analysis Date: **11/30/2022** SeqNo: **3345895** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.0061	0.0060	0.006000	0	102	50	150			

Sample ID: **LCS-71668** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **71668** RunNo: **92925**
Prep Date: **11/22/2022** Analysis Date: **11/30/2022** SeqNo: **3345896** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.47	0.0060	0.5000	0	94.4	85	115			

Sample ID: **2211B94-001CMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MW-52R** Batch ID: **71668** RunNo: **92997**
Prep Date: **11/22/2022** Analysis Date: **12/2/2022** SeqNo: **3348681** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.45	0.0060	0.5000	0.002760	89.2	70	130			

Sample ID: **2211B94-001CMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MW-52R** Batch ID: **71668** RunNo: **92997**
Prep Date: **11/22/2022** Analysis Date: **12/2/2022** SeqNo: **3348682** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.45	0.0060	0.5000	0.002760	89.7	70	130	0.560	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211B94**
27-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R92849** RunNo: **92849**
Prep Date: Analysis Date: **11/28/2022** SeqNo: **3342509** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	94.6	70	130			
Toluene	18	1.0	20.00	0	91.9	70	130			
Chlorobenzene	18	1.0	20.00	0	91.7	70	130			
1,1-Dichloroethene	17	1.0	20.00	0	84.2	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	96.9	70	130			
Surr: 1,2-Dichloroethane-d4	8.7		10.00		87.5	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		96.1	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	9.0		10.00		89.6	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R92849** RunNo: **92849**
Prep Date: Analysis Date: **11/28/2022** SeqNo: **3342515** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211B94**
27-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R92849**	RunNo: **92849**	
Prep Date:	Analysis Date: **11/28/2022**	SeqNo: **3342515**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211B94**
27-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R92849** RunNo: **92849**
Prep Date: Analysis Date: **11/28/2022** SeqNo: **3342515** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	10		10.00		99.9	70	130			
Surr: 4-Bromofluorobenzene	9.2		10.00		91.7	70	130			
Surr: Dibromofluoromethane	10		10.00		105	70	130			
Surr: Toluene-d8	8.8		10.00		88.3	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211B94**
27-Dec-22

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb-71650** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **71650** RunNo: **92956**
Prep Date: **11/22/2022** Analysis Date: **12/1/2022** SeqNo: **3347021** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	2.4		4.000		60.0	15	108			
Surr: 2,4,6-Tribromophenol	4.5		8.000		56.0	15	112			
Surr: 2-Fluorobiphenyl	2.4		4.000		61.0	15	107			
Surr: 4-Terphenyl-d14	3.8		4.000		96.0	15	166			

Sample ID: **lcs-71650** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **71650** RunNo: **92956**
Prep Date: **11/22/2022** Analysis Date: **12/1/2022** SeqNo: **3347023** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0	2.000	0	36.0	15	60.5			
Surr: Nitrobenzene-d5	3.5		5.000		69.2	15	108			
Surr: 2,4,6-Tribromophenol	6.2		10.00		61.6	15	112			
Surr: 2-Fluorobiphenyl	2.6		5.000		51.2	15	107			
Surr: 4-Terphenyl-d14	4.9		5.000		98.8	15	166			

Sample ID: **lcsd-71650** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **71650** RunNo: **92956**
Prep Date: **11/22/2022** Analysis Date: **12/1/2022** SeqNo: **3347024** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0	2.000	0	33.0	15	60.5	0	29.7	
Surr: Nitrobenzene-d5	3.4		5.000		67.6	15	108	0	0	
Surr: 2,4,6-Tribromophenol	5.9		10.00		58.8	15	112	0	0	
Surr: 2-Fluorobiphenyl	2.6		5.000		52.8	15	107	0	0	
Surr: 4-Terphenyl-d14	5.0		5.000		100	15	166	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: EA Engineering Work Order Number: 2211B94 RcptNo: 1

Received By: Kasandra Jimena Garcia 11/18/2022 3:13:00 PM

Completed By: Sean Livingston 11/21/2022 9:30:45 AM

Reviewed By: JN 11/21/22

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☑ NA ☐
   Samples were collected the same day and chilled.
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 2
(<2 or >12 unless noted)
Adjusted? NO
Checked by: KPG 11-21-22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	7.5	Good				

Chain-of-Custody Record

Client: Sparton Technologies, inc.
EA Engineering, Science and Technology
Mailing Address: 320 Gold Ave SW #1300
Albuquerque, NM 87102
Phone #: 505-715-4154
email or Fax#: rmarley@eaest.com
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: Sparton Coors Rd
Project #: Bills to Sparton direct
Project Manager: Bob Marley, EA
Sampler: Scott Miles
On Ice: ☑ Yes ☐ No
# of Coolers: 1
Cooler Temp (Including CF): 7.7-0.2=7.5 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2211B94	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	VOCs 8260B	1,4 Dioxane, 8270 SIM	Total Chromium	Dissolved Chromium
11-18-22	1333	Aq	MW-52R	1x1L Amber 3x VOA 1x125ml HDPE 1x250ml HDPE	none HCl HNO_3	001											X	X	X	X
		↓	Trip Blank	2x VOA	HCl	002											X			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
11-18-22	1513	[signature]	[signature]	ODO	11-18-22	15:13
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

January 05, 2023

Bob Marley
EA Engineering
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL:
FAX

RE: Sparton Coors Rd OrderNo.: 2211C82

Dear Bob Marley:

Hall Environmental Analysis Laboratory received 4 sample(s) on 11/22/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2211C82**
Date Reported: **1/5/2023**

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211C82-001 **Matrix:** AQUEOUS

Client Sample ID: MW-49
Collection Date: 11/21/2022 12:04:00 PM
Received Date: 11/22/2022 12:54:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Chromium	ND	0.0060		mg/L	1	12/21/2022 3:19:19 PM	D93505
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	12/5/2022 9:15:29 PM	71814
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	12/2/2022 5:22:00 AM	71695
Surr: 2-Fluorobiphenyl	36.0	15-107		%Rec	1	12/2/2022 5:22:00 AM	71695
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
Toluene	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
Ethylbenzene	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
Naphthalene	ND	2.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
1-Methylnaphthalene	ND	4.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
2-Methylnaphthalene	ND	4.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
Acetone	ND	10		µg/L	1	11/29/2022 6:32:00 PM	R92888
Bromobenzene	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
Bromodichloromethane	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
Bromoform	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
Bromomethane	ND	3.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
2-Butanone	ND	10		µg/L	1	11/29/2022 6:32:00 PM	R92888
Carbon disulfide	ND	10		µg/L	1	11/29/2022 6:32:00 PM	R92888
Carbon Tetrachloride	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
Chlorobenzene	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
Chloroethane	ND	2.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
Chloroform	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
Chloromethane	ND	3.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
2-Chlorotoluene	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
4-Chlorotoluene	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
cis-1,2-DCE	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
Dibromochloromethane	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
Dibromomethane	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211C82-001 **Matrix:** AQUEOUS

Client Sample ID: MW-49
Collection Date: 11/21/2022 12:04:00 PM
Received Date: 11/22/2022 12:54:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
1,1-Dichloroethane	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
1,1-Dichloroethene	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
1,2-Dichloropropane	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
1,3-Dichloropropane	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
2,2-Dichloropropane	ND	2.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
1,1-Dichloropropene	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
Hexachlorobutadiene	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
2-Hexanone	ND	10		µg/L	1	11/29/2022 6:32:00 PM	R92888
Isopropylbenzene	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
4-Isopropyltoluene	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
4-Methyl-2-pentanone	ND	10		µg/L	1	11/29/2022 6:32:00 PM	R92888
Methylene Chloride	ND	3.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
n-Butylbenzene	ND	3.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
n-Propylbenzene	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
sec-Butylbenzene	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
Styrene	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
tert-Butylbenzene	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
trans-1,2-DCE	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
Trichlorofluoromethane	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
Vinyl chloride	ND	1.0		µg/L	1	11/29/2022 6:32:00 PM	R92888
Xylenes, Total	ND	1.5		µg/L	1	11/29/2022 6:32:00 PM	R92888
Surr: 1,2-Dichloroethane-d4	114	70-130		%Rec	1	11/29/2022 6:32:00 PM	R92888
Surr: 4-Bromofluorobenzene	85.9	70-130		%Rec	1	11/29/2022 6:32:00 PM	R92888
Surr: Dibromofluoromethane	111	70-130		%Rec	1	11/29/2022 6:32:00 PM	R92888
Surr: Toluene-d8	88.6	70-130		%Rec	1	11/29/2022 6:32:00 PM	R92888

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211C82-002 **Matrix:** AQUEOUS

Client Sample ID: MW-70
Collection Date: 11/21/2022 1:41:00 PM
Received Date: 11/22/2022 12:54:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Chromium	ND	0.0060		mg/L	1	12/21/2022 3:29:10 PM	D93505
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	12/5/2022 9:24:05 PM	71814
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	12/2/2022 6:08:00 AM	71695
Surr: 2-Fluorobiphenyl	42.5	15-107		%Rec	1	12/2/2022 6:08:00 AM	71695
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
Toluene	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
Ethylbenzene	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
Naphthalene	ND	2.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
1-Methylnaphthalene	ND	4.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
2-Methylnaphthalene	ND	4.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
Acetone	ND	10		µg/L	1	11/29/2022 7:00:37 PM	R92888
Bromobenzene	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
Bromodichloromethane	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
Bromoform	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
Bromomethane	ND	3.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
2-Butanone	ND	10		µg/L	1	11/29/2022 7:00:37 PM	R92888
Carbon disulfide	ND	10		µg/L	1	11/29/2022 7:00:37 PM	R92888
Carbon Tetrachloride	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
Chlorobenzene	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
Chloroethane	ND	2.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
Chloroform	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
Chloromethane	ND	3.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
2-Chlorotoluene	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
4-Chlorotoluene	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
cis-1,2-DCE	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
Dibromochloromethane	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
Dibromomethane	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211C82-002 **Matrix:** AQUEOUS

Client Sample ID: MW-70
Collection Date: 11/21/2022 1:41:00 PM
Received Date: 11/22/2022 12:54:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
1,1-Dichloroethane	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
1,1-Dichloroethene	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
1,2-Dichloropropane	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
1,3-Dichloropropane	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
2,2-Dichloropropane	ND	2.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
1,1-Dichloropropene	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
Hexachlorobutadiene	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
2-Hexanone	ND	10		µg/L	1	11/29/2022 7:00:37 PM	R92888
Isopropylbenzene	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
4-Isopropyltoluene	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
4-Methyl-2-pentanone	ND	10		µg/L	1	11/29/2022 7:00:37 PM	R92888
Methylene Chloride	ND	3.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
n-Butylbenzene	ND	3.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
n-Propylbenzene	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
sec-Butylbenzene	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
Styrene	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
tert-Butylbenzene	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
trans-1,2-DCE	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
Trichlorofluoromethane	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
Vinyl chloride	ND	1.0		µg/L	1	11/29/2022 7:00:37 PM	R92888
Xylenes, Total	ND	1.5		µg/L	1	11/29/2022 7:00:37 PM	R92888
Surr: 1,2-Dichloroethane-d4	110	70-130		%Rec	1	11/29/2022 7:00:37 PM	R92888
Surr: 4-Bromofluorobenzene	83.8	70-130		%Rec	1	11/29/2022 7:00:37 PM	R92888
Surr: Dibromofluoromethane	112	70-130		%Rec	1	11/29/2022 7:00:37 PM	R92888
Surr: Toluene-d8	86.9	70-130		%Rec	1	11/29/2022 7:00:37 PM	R92888

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: MW-60
Project: Sparton Coors Rd
Collection Date: 11/22/2022 11:40:00 AM
Lab ID: 2211C82-003
Matrix: AQUEOUS
Received Date: 11/22/2022 12:54:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Chromium	0.017	0.0060		mg/L	1	12/21/2022 3:30:49 PM	D93505
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.068	0.0060		mg/L	1	12/5/2022 9:26:11 PM	71814
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	4.2	1.0		µg/L	1	12/2/2022 6:53:00 AM	71695
Surr: 2-Fluorobiphenyl	31.0	15-107		%Rec	1	12/2/2022 6:53:00 AM	71695
EPA METHOD 8260B: VOLATILES						Analyst:	**JR**
Benzene	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
Toluene	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
Ethylbenzene	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
Naphthalene	ND	2.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
1-Methylnaphthalene	ND	4.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
2-Methylnaphthalene	ND	4.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
Acetone	ND	10		µg/L	1	11/29/2022 7:29:14 PM	R92888
Bromobenzene	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
Bromodichloromethane	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
Bromoform	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
Bromomethane	ND	3.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
2-Butanone	ND	10		µg/L	1	11/29/2022 7:29:14 PM	R92888
Carbon disulfide	ND	10		µg/L	1	11/29/2022 7:29:14 PM	R92888
Carbon Tetrachloride	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
Chlorobenzene	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
Chloroethane	ND	2.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
Chloroform	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
Chloromethane	ND	3.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
2-Chlorotoluene	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
4-Chlorotoluene	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
cis-1,2-DCE	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
Dibromochloromethane	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
Dibromomethane	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2211C82-003 **Matrix:** AQUEOUS

Client Sample ID: MW-60
Collection Date: 11/22/2022 11:40:00 AM
Received Date: 11/22/2022 12:54:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
1,1-Dichloroethane	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
1,1-Dichloroethene	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
1,2-Dichloropropane	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
1,3-Dichloropropane	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
2,2-Dichloropropane	ND	2.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
1,1-Dichloropropene	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
Hexachlorobutadiene	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
2-Hexanone	ND	10		µg/L	1	11/29/2022 7:29:14 PM	R92888
Isopropylbenzene	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
4-Isopropyltoluene	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
4-Methyl-2-pentanone	ND	10		µg/L	1	11/29/2022 7:29:14 PM	R92888
Methylene Chloride	ND	3.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
n-Butylbenzene	ND	3.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
n-Propylbenzene	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
sec-Butylbenzene	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
Styrene	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
tert-Butylbenzene	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
trans-1,2-DCE	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
Trichloroethene (TCE)	18	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
Trichlorofluoromethane	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
Vinyl chloride	ND	1.0		µg/L	1	11/29/2022 7:29:14 PM	R92888
Xylenes, Total	ND	1.5		µg/L	1	11/29/2022 7:29:14 PM	R92888
Surr: 1,2-Dichloroethane-d4	90.3	70-130		%Rec	1	11/29/2022 7:29:14 PM	R92888
Surr: 4-Bromofluorobenzene	85.4	70-130		%Rec	1	11/29/2022 7:29:14 PM	R92888
Surr: Dibromofluoromethane	112	70-130		%Rec	1	11/29/2022 7:29:14 PM	R92888
Surr: Toluene-d8	86.6	70-130		%Rec	1	11/29/2022 7:29:14 PM	R92888

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton Coors Rd
Collection Date:
Lab ID: 2211C82-004
Matrix: TRIP BLANK
Received Date: 11/22/2022 12:54:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
Benzene	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
Toluene	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
Ethylbenzene	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
Naphthalene	ND	2.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
1-Methylnaphthalene	ND	4.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
2-Methylnaphthalene	ND	4.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
Acetone	ND	10		µg/L	1	11/29/2022 7:57:52 PM	R92888
Bromobenzene	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
Bromodichloromethane	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
Bromoform	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
Bromomethane	ND	3.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
2-Butanone	ND	10		µg/L	1	11/29/2022 7:57:52 PM	R92888
Carbon disulfide	ND	10		µg/L	1	11/29/2022 7:57:52 PM	R92888
Carbon Tetrachloride	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
Chlorobenzene	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
Chloroethane	ND	2.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
Chloroform	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
Chloromethane	ND	3.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
2-Chlorotoluene	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
4-Chlorotoluene	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
cis-1,2-DCE	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
Dibromochloromethane	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
Dibromomethane	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
1,1-Dichloroethane	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
1,1-Dichloroethene	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
1,2-Dichloropropane	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
1,3-Dichloropropane	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
2,2-Dichloropropane	ND	2.0		µg/L	1	11/29/2022 7:57:52 PM	R92888

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton Coors Rd
Collection Date:
Lab ID: 2211C82-004
Matrix: TRIP BLANK
Received Date: 11/22/2022 12:54:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JR**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
Hexachlorobutadiene	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
2-Hexanone	ND	10		µg/L	1	11/29/2022 7:57:52 PM	R92888
Isopropylbenzene	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
4-Isopropyltoluene	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
4-Methyl-2-pentanone	ND	10		µg/L	1	11/29/2022 7:57:52 PM	R92888
Methylene Chloride	ND	3.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
n-Butylbenzene	ND	3.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
n-Propylbenzene	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
sec-Butylbenzene	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
Styrene	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
tert-Butylbenzene	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
trans-1,2-DCE	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
Trichlorofluoromethane	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
Vinyl chloride	ND	1.0		µg/L	1	11/29/2022 7:57:52 PM	R92888
Xylenes, Total	ND	1.5		µg/L	1	11/29/2022 7:57:52 PM	R92888
Surr: 1,2-Dichloroethane-d4	116	70-130		%Rec	1	11/29/2022 7:57:52 PM	R92888
Surr: 4-Bromofluorobenzene	85.8	70-130		%Rec	1	11/29/2022 7:57:52 PM	R92888
Surr: Dibromofluoromethane	113	70-130		%Rec	1	11/29/2022 7:57:52 PM	R92888
Surr: Toluene-d8	87.5	70-130		%Rec	1	11/29/2022 7:57:52 PM	R92888

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211C82**
05-Jan-23

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **MB-D** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **D93505** RunNo: **93505**
Prep Date: Analysis Date: **12/21/2022** SeqNo: **3373037** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LCS-D** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **D93505** RunNo: **93505**
Prep Date: Analysis Date: **12/21/2022** SeqNo: **3373039** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.52	0.0060	0.5000	0	104	85	115			

Sample ID: **LLLCS-D** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **D93505** RunNo: **93505**
Prep Date: Analysis Date: **12/21/2022** SeqNo: **3373040** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060	0.006000	0	67.1	50	150			

Sample ID: **2211C82-001DMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MW-49** Batch ID: **D93505** RunNo: **93505**
Prep Date: Analysis Date: **12/21/2022** SeqNo: **3373105** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.53	0.0060	0.5000	0	105	70	130			

Sample ID: **2211C82-001DMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MW-49** Batch ID: **D93505** RunNo: **93505**
Prep Date: Analysis Date: **12/21/2022** SeqNo: **3373109** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.47	0.0060	0.5000	0	94.3	70	130	10.9	20	

Qualifiers:

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ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211C82**
05-Jan-23

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **MB-71814** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **71814** RunNo: **93026**
Prep Date: **12/2/2022** Analysis Date: **12/5/2022** SeqNo: **3350242** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LCSLL-71814** SampType: **LCSLL** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC** Batch ID: **71814** RunNo: **93026**
Prep Date: **12/2/2022** Analysis Date: **12/5/2022** SeqNo: **3350243** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060	0.006000	0	94.3	50	150			

Sample ID: **LCS-71814** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **71814** RunNo: **93026**
Prep Date: **12/2/2022** Analysis Date: **12/5/2022** SeqNo: **3350244** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.52	0.0060	0.5000	0	103	85	115			

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211C82**
05-Jan-23

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R92888** RunNo: **92888**
Prep Date: Analysis Date: **11/29/2022** SeqNo: **3344130** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	107	70	130			
Toluene	19	1.0	20.00	0	93.1	70	130			
Chlorobenzene	19	1.0	20.00	0	93.9	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	97.0	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	102	70	130			
Surr: 1,2-Dichloroethane-d4	8.9		10.00		89.1	70	130			
Surr: 4-Bromofluorobenzene	8.7		10.00		86.6	70	130			
Surr: Dibromofluoromethane	11		10.00		110	70	130			
Surr: Toluene-d8	8.8		10.00		88.5	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R92888** RunNo: **92888**
Prep Date: Analysis Date: **11/29/2022** SeqNo: **3344146** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
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ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211C82**
05-Jan-23

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R92888**	RunNo: **92888**	
Prep Date:	Analysis Date: **11/29/2022**	SeqNo: **3344146**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211C82**
05-Jan-23

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb**		SampType: **MBLK**			TestCode: **EPA Method 8260B: VOLATILES**					
Client ID: **PBW**		Batch ID: **R92888**			RunNo: **92888**					
Prep Date:		Analysis Date: **11/29/2022**			SeqNo: **3344146**		Units: **µg/L**			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	11		10.00		108	70	130			
Surr: 4-Bromofluorobenzene	8.6		10.00		86.0	70	130			
Surr: Dibromofluoromethane	11		10.00		110	70	130			
Surr: Toluene-d8	8.8		10.00		88.1	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211C82**
05-Jan-23

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb-71695** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **71695** RunNo: **92956**
Prep Date: **11/23/2022** Analysis Date: **12/2/2022** SeqNo: **3347029** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	2.2		4.000		55.5	15	108			
Surr: 2,4,6-Tribromophenol	4.5		8.000		56.0	15	112			
Surr: 2-Fluorobiphenyl	1.9		4.000		47.0	15	107			
Surr: 4-Terphenyl-d14	3.8		4.000		94.0	15	166			

Sample ID: **lcs-71695** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **71695** RunNo: **92956**
Prep Date: **11/23/2022** Analysis Date: **12/2/2022** SeqNo: **3347030** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0	2.000	0	25.0	15	60.5			
Surr: Nitrobenzene-d5	2.8		5.000		56.4	15	108			
Surr: 2,4,6-Tribromophenol	5.5		10.00		54.8	15	112			
Surr: 2-Fluorobiphenyl	2.2		5.000		44.4	15	107			
Surr: 4-Terphenyl-d14	4.6		5.000		91.6	15	166			

Sample ID: **lcsd-71695** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **71695** RunNo: **92956**
Prep Date: **11/23/2022** Analysis Date: **12/2/2022** SeqNo: **3347031** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0	2.000	0	27.0	15	60.5	0	29.7	
Surr: Nitrobenzene-d5	2.9		5.000		58.0	15	108	0	0	
Surr: 2,4,6-Tribromophenol	5.5		10.00		55.2	15	112	0	0	
Surr: 2-Fluorobiphenyl	2.8		5.000		56.4	15	107	0	0	
Surr: 4-Terphenyl-d14	5.1		5.000		102	15	166	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: EA Engineering Work Order Number: **2211C82** RcptNo: 1

Received By: **Kasandra Jimena Garcia** 11/22/2022 12:54:00 PM

Completed By: **Sean Livingston** 11/22/2022 2:03:10 PM

Reviewed By: 11-22-22

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 6 (<2 or >12 unless noted)
Adjusted? NO
Checked by: KPU 11-22-22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.3	Good				

Chain-of-Custody Record

Client: Sparton Technologies
EA Engineering, Science and Technology
Mailing Address: 320 Gold Ave SW #1300
Albuquerque, NM 87102
Phone #: 505 715 4154
email or Fax#: r marley@eaest.com
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: Sparton Coors Rd
Project #: Bills to Sparton Direct
Project Manager: Bob Marley, EA
Sampler: Scott Miles
On Ice: ☑ Yes ☐ No
# of Coolers: 1
Cooler Temp(including CF): 2.4 -0.1 = 2.3(°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2211C82	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	VOCs 8260B	1,4 Dioxane 8270 SIM	Total Chromium	Dissolved Chromium
11-21-22	1204	Aq	MW-49	1x1L Amber, 1x125ml HDPE 1x250ml HDPE, 3xVOA	none, HNO_3 HCl	001											X	X	X	X
↓	1341	↓	MW-70	↓	↓	002											X	X	X	X
11-22-22	1140	↓	MW-60	↓	↓	003											X	X	X	X
		↓	Trip Blank	2xVOA	HCl	004											X			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
11-22-22	1254			UPS	11.22.22	12:54
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

January 05, 2023

Bob Marley
EA Engineering
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL:
FAX

RE: Sparton Coors Rd OrderNo.: 2212043

Dear Bob Marley:

Hall Environmental Analysis Laboratory received 7 sample(s) on 12/1/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2212043**
Date Reported: **1/5/2023**

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2212043-001 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent
Collection Date: 12/1/2022 8:45:00 AM
Received Date: 12/1/2022 11:32:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Chromium	0.036	0.0060		mg/L	1	12/21/2022 3:39:12 PM	D93505
Iron	ND	0.020		mg/L	1	12/21/2022 3:39:12 PM	D93505
Manganese	0.031	0.0020		mg/L	1	12/21/2022 3:39:12 PM	D93505
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.044	0.0060		mg/L	1	12/8/2022 3:35:17 PM	71870
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	2.2	1.0		µg/L	1	12/7/2022 3:04:00 PM	71815
Surr: 2-Fluorobiphenyl	39.5	15-107		%Rec	1	12/7/2022 3:04:00 PM	71815
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
Toluene	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
Ethylbenzene	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
Naphthalene	ND	2.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
1-Methylnaphthalene	ND	4.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
2-Methylnaphthalene	ND	4.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
Acetone	ND	10		µg/L	1	12/5/2022 5:41:00 PM	R93028
Bromobenzene	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
Bromodichloromethane	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
Bromoform	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
Bromomethane	ND	3.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
2-Butanone	ND	10		µg/L	1	12/5/2022 5:41:00 PM	R93028
Carbon disulfide	ND	10		µg/L	1	12/5/2022 5:41:00 PM	R93028
Carbon Tetrachloride	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
Chlorobenzene	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
Chloroethane	ND	2.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
Chloroform	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
Chloromethane	ND	3.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
2-Chlorotoluene	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
4-Chlorotoluene	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
cis-1,2-DCE	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
Dibromochloromethane	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2212043-001 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent
Collection Date: 12/1/2022 8:45:00 AM
Received Date: 12/1/2022 11:32:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Dibromomethane	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
1,1-Dichloroethane	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
1,1-Dichloroethene	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
1,2-Dichloropropane	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
1,3-Dichloropropane	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
2,2-Dichloropropane	ND	2.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
1,1-Dichloropropene	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
Hexachlorobutadiene	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
2-Hexanone	ND	10		µg/L	1	12/5/2022 5:41:00 PM	R93028
Isopropylbenzene	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
4-Isopropyltoluene	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
4-Methyl-2-pentanone	ND	10		µg/L	1	12/5/2022 5:41:00 PM	R93028
Methylene Chloride	ND	3.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
n-Butylbenzene	ND	3.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
n-Propylbenzene	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
sec-Butylbenzene	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
Styrene	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
tert-Butylbenzene	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
trans-1,2-DCE	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
Trichlorofluoromethane	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
Vinyl chloride	ND	1.0		µg/L	1	12/5/2022 5:41:00 PM	R93028
Xylenes, Total	ND	1.5		µg/L	1	12/5/2022 5:41:00 PM	R93028
Surr: 1,2-Dichloroethane-d4	91.1	70-130		%Rec	1	12/5/2022 5:41:00 PM	R93028
Surr: 4-Bromofluorobenzene	97.0	70-130		%Rec	1	12/5/2022 5:41:00 PM	R93028
Surr: Dibromofluoromethane	95.9	70-130		%Rec	1	12/5/2022 5:41:00 PM	R93028

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2212043-001
Matrix: AQUEOUS
Client Sample ID: CW-2 Effluent
Collection Date: 12/1/2022 8:45:00 AM
Received Date: 12/1/2022 11:32:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Surr: Toluene-d8	94.9	70-130		%Rec	1	12/5/2022 5:41:00 PM	R93028

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2212043-002 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Influent
Collection Date: 12/1/2022 8:55:00 AM
Received Date: 12/1/2022 11:32:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Chromium	0.037	0.0060		mg/L	1	12/21/2022 3:42:30 PM	D93505
Iron	ND	0.020		mg/L	1	12/21/2022 3:42:30 PM	D93505
Manganese	0.036	0.0020		mg/L	1	12/21/2022 3:42:30 PM	D93505
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.044	0.0060		mg/L	1	12/8/2022 3:36:51 PM	71870
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	1.7	1.0		µg/L	1	12/7/2022 3:51:00 PM	71815
Surr: 2-Fluorobiphenyl	29.5	15-107		%Rec	1	12/7/2022 3:51:00 PM	71815
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
Toluene	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
Ethylbenzene	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
Naphthalene	ND	2.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
1-Methylnaphthalene	ND	4.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
2-Methylnaphthalene	ND	4.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
Acetone	ND	10		µg/L	1	12/5/2022 6:04:00 PM	R93028
Bromobenzene	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
Bromodichloromethane	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
Bromoform	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
Bromomethane	ND	3.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
2-Butanone	ND	10		µg/L	1	12/5/2022 6:04:00 PM	R93028
Carbon disulfide	ND	10		µg/L	1	12/5/2022 6:04:00 PM	R93028
Carbon Tetrachloride	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
Chlorobenzene	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
Chloroethane	ND	2.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
Chloroform	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
Chloromethane	ND	3.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
2-Chlorotoluene	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
4-Chlorotoluene	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
cis-1,2-DCE	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
Dibromochloromethane	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2212043-002 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Influent
Collection Date: 12/1/2022 8:55:00 AM
Received Date: 12/1/2022 11:32:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dibromomethane	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
1,1-Dichloroethane	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
1,1-Dichloroethene	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
1,2-Dichloropropane	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
1,3-Dichloropropane	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
2,2-Dichloropropane	ND	2.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
1,1-Dichloropropene	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
Hexachlorobutadiene	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
2-Hexanone	ND	10		µg/L	1	12/5/2022 6:04:00 PM	R93028
Isopropylbenzene	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
4-Isopropyltoluene	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
4-Methyl-2-pentanone	ND	10		µg/L	1	12/5/2022 6:04:00 PM	R93028
Methylene Chloride	ND	3.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
n-Butylbenzene	ND	3.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
n-Propylbenzene	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
sec-Butylbenzene	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
Styrene	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
tert-Butylbenzene	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
trans-1,2-DCE	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
Trichloroethene (TCE)	4.2	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
Trichlorofluoromethane	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
Vinyl chloride	ND	1.0		µg/L	1	12/5/2022 6:04:00 PM	R93028
Xylenes, Total	ND	1.5		µg/L	1	12/5/2022 6:04:00 PM	R93028
Surr: 1,2-Dichloroethane-d4	89.6	70-130		%Rec	1	12/5/2022 6:04:00 PM	R93028
Surr: 4-Bromofluorobenzene	95.8	70-130		%Rec	1	12/5/2022 6:04:00 PM	R93028
Surr: Dibromofluoromethane	93.8	70-130		%Rec	1	12/5/2022 6:04:00 PM	R93028

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2212043-002
Matrix: AQUEOUS
Client Sample ID: CW-2 Influent
Collection Date: 12/1/2022 8:55:00 AM
Received Date: 12/1/2022 11:32:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Surr: Toluene-d8	92.4	70-130		%Rec	1	12/5/2022 6:04:00 PM	R93028

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2212043-003 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Effluent
Collection Date: 12/1/2022 10:42:00 AM
Received Date: 12/1/2022 11:32:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Chromium	ND	0.0060		mg/L	1	12/21/2022 3:52:10 PM	D93505
Iron	ND	0.020		mg/L	1	12/21/2022 3:52:10 PM	D93505
Manganese	ND	0.0020		mg/L	1	12/21/2022 3:52:10 PM	D93505
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	12/8/2022 3:38:26 PM	71870
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	1.5	1.0		µg/L	1	12/7/2022 4:36:00 PM	71815
Surr: 2-Fluorobiphenyl	37.5	15-107		%Rec	1	12/7/2022 4:36:00 PM	71815
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
Toluene	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
Ethylbenzene	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
Naphthalene	ND	2.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
1-Methylnaphthalene	ND	4.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
2-Methylnaphthalene	ND	4.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
Acetone	ND	10		µg/L	1	12/5/2022 6:27:00 PM	R93028
Bromobenzene	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
Bromodichloromethane	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
Bromoform	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
Bromomethane	ND	3.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
2-Butanone	ND	10		µg/L	1	12/5/2022 6:27:00 PM	R93028
Carbon disulfide	ND	10		µg/L	1	12/5/2022 6:27:00 PM	R93028
Carbon Tetrachloride	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
Chlorobenzene	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
Chloroethane	ND	2.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
Chloroform	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
Chloromethane	ND	3.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
2-Chlorotoluene	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
4-Chlorotoluene	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
cis-1,2-DCE	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
Dibromochloromethane	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2212043-003 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Effluent
Collection Date: 12/1/2022 10:42:00 AM
Received Date: 12/1/2022 11:32:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dibromomethane	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
1,1-Dichloroethane	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
1,1-Dichloroethene	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
1,2-Dichloropropane	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
1,3-Dichloropropane	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
2,2-Dichloropropane	ND	2.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
1,1-Dichloropropene	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
Hexachlorobutadiene	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
2-Hexanone	ND	10		µg/L	1	12/5/2022 6:27:00 PM	R93028
Isopropylbenzene	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
4-Isopropyltoluene	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
4-Methyl-2-pentanone	ND	10		µg/L	1	12/5/2022 6:27:00 PM	R93028
Methylene Chloride	ND	3.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
n-Butylbenzene	ND	3.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
n-Propylbenzene	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
sec-Butylbenzene	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
Styrene	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
tert-Butylbenzene	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
trans-1,2-DCE	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
Trichlorofluoromethane	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
Vinyl chloride	ND	1.0		µg/L	1	12/5/2022 6:27:00 PM	R93028
Xylenes, Total	ND	1.5		µg/L	1	12/5/2022 6:27:00 PM	R93028
Surr: 1,2-Dichloroethane-d4	92.8	70-130		%Rec	1	12/5/2022 6:27:00 PM	R93028
Surr: 4-Bromofluorobenzene	98.4	70-130		%Rec	1	12/5/2022 6:27:00 PM	R93028
Surr: Dibromofluoromethane	97.3	70-130		%Rec	1	12/5/2022 6:27:00 PM	R93028

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2212043-003 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Effluent
Collection Date: 12/1/2022 10:42:00 AM
Received Date: 12/1/2022 11:32:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Surr: Toluene-d8	93.0	70-130		%Rec	1	12/5/2022 6:27:00 PM	R93028

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2212043-004 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Influent
Collection Date: 12/1/2022 10:53:00 AM
Received Date: 12/1/2022 11:32:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Chromium	ND	0.0060		mg/L	1	12/21/2022 3:55:31 PM	D93505
Iron	ND	0.020		mg/L	1	12/21/2022 3:55:31 PM	D93505
Manganese	ND	0.0020		mg/L	1	12/21/2022 3:55:31 PM	D93505
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	12/8/2022 3:47:28 PM	71870
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	1.4	1.0		µg/L	1	12/7/2022 5:22:00 PM	71815
Surr: 2-Fluorobiphenyl	33.5	15-107		%Rec	1	12/7/2022 5:22:00 PM	71815
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
Toluene	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
Ethylbenzene	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
Naphthalene	ND	2.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
1-Methylnaphthalene	ND	4.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
2-Methylnaphthalene	ND	4.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
Acetone	ND	10		µg/L	1	12/5/2022 6:50:00 PM	R93028
Bromobenzene	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
Bromodichloromethane	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
Bromoform	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
Bromomethane	ND	3.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
2-Butanone	ND	10		µg/L	1	12/5/2022 6:50:00 PM	R93028
Carbon disulfide	ND	10		µg/L	1	12/5/2022 6:50:00 PM	R93028
Carbon Tetrachloride	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
Chlorobenzene	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
Chloroethane	ND	2.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
Chloroform	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
Chloromethane	ND	3.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
2-Chlorotoluene	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
4-Chlorotoluene	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
cis-1,2-DCE	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
Dibromochloromethane	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2212043-004 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Influent
Collection Date: 12/1/2022 10:53:00 AM
Received Date: 12/1/2022 11:32:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Dibromomethane	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
1,1-Dichloroethane	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
1,1-Dichloroethene	15	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
1,2-Dichloropropane	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
1,3-Dichloropropane	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
2,2-Dichloropropane	ND	2.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
1,1-Dichloropropene	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
Hexachlorobutadiene	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
2-Hexanone	ND	10		µg/L	1	12/5/2022 6:50:00 PM	R93028
Isopropylbenzene	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
4-Isopropyltoluene	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
4-Methyl-2-pentanone	ND	10		µg/L	1	12/5/2022 6:50:00 PM	R93028
Methylene Chloride	ND	3.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
n-Butylbenzene	ND	3.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
n-Propylbenzene	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
sec-Butylbenzene	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
Styrene	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
tert-Butylbenzene	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
trans-1,2-DCE	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
Trichloroethene (TCE)	120	5.0		µg/L	5	12/8/2022 1:32:00 PM	R93145
Trichlorofluoromethane	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
Vinyl chloride	ND	1.0		µg/L	1	12/5/2022 6:50:00 PM	R93028
Xylenes, Total	ND	1.5		µg/L	1	12/5/2022 6:50:00 PM	R93028
Surr: 1,2-Dichloroethane-d4	93.5	70-130		%Rec	1	12/5/2022 6:50:00 PM	R93028
Surr: 4-Bromofluorobenzene	97.1	70-130		%Rec	1	12/5/2022 6:50:00 PM	R93028
Surr: Dibromofluoromethane	95.6	70-130		%Rec	1	12/5/2022 6:50:00 PM	R93028

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2212043-004 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Influent
Collection Date: 12/1/2022 10:53:00 AM
Received Date: 12/1/2022 11:32:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Surr: Toluene-d8	96.3	70-130		%Rec	1	12/5/2022 6:50:00 PM	R93028

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2212043-005 **Matrix:** AQUEOUS

Client Sample ID: CW-2 Effluent Duplicate
Collection Date: 12/1/2022 8:45:00 AM
Received Date: 12/1/2022 11:32:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst: **DAM**	
1,4-Dioxane	2.1	1.0		µg/L	1	12/9/2022 4:54:00 PM	71867
Surr: 2-Fluorobiphenyl	49.5	15-107		%Rec	1	12/9/2022 4:54:00 PM	71867

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton Coors Rd
Lab ID: 2212043-006 **Matrix:** AQUEOUS

Client Sample ID: CW-1 Effluent Duplicate
Collection Date: 12/1/2022 10:42:00 AM
Received Date: 12/1/2022 11:32:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst: **DAM**	
1,4-Dioxane	2.1	1.0		µg/L	1	12/9/2022 5:39:00 PM	71867
Surr: 2-Fluorobiphenyl	62.0	15-107		%Rec	1	12/9/2022 5:39:00 PM	71867

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton Coors Rd
Collection Date:
Lab ID: 2212043-007
Matrix: TRIP BLANK
Received Date: 12/1/2022 11:32:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
Toluene	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
Ethylbenzene	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
Naphthalene	ND	2.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
1-Methylnaphthalene	ND	4.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
2-Methylnaphthalene	ND	4.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
Acetone	ND	10		µg/L	1	12/5/2022 7:13:00 PM	R93028
Bromobenzene	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
Bromodichloromethane	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
Bromoform	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
Bromomethane	ND	3.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
2-Butanone	ND	10		µg/L	1	12/5/2022 7:13:00 PM	R93028
Carbon disulfide	ND	10		µg/L	1	12/5/2022 7:13:00 PM	R93028
Carbon Tetrachloride	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
Chlorobenzene	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
Chloroethane	ND	2.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
Chloroform	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
Chloromethane	ND	3.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
2-Chlorotoluene	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
4-Chlorotoluene	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
cis-1,2-DCE	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
Dibromochloromethane	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
Dibromomethane	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
1,1-Dichloroethane	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
1,1-Dichloroethene	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
1,2-Dichloropropane	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
1,3-Dichloropropane	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
2,2-Dichloropropane	ND	2.0		µg/L	1	12/5/2022 7:13:00 PM	R93028

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
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S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton Coors Rd
Collection Date:
Lab ID: 2212043-007
Matrix: TRIP BLANK
Received Date: 12/1/2022 11:32:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
Hexachlorobutadiene	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
2-Hexanone	ND	10		µg/L	1	12/5/2022 7:13:00 PM	R93028
Isopropylbenzene	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
4-Isopropyltoluene	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
4-Methyl-2-pentanone	ND	10		µg/L	1	12/5/2022 7:13:00 PM	R93028
Methylene Chloride	ND	3.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
n-Butylbenzene	ND	3.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
n-Propylbenzene	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
sec-Butylbenzene	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
Styrene	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
tert-Butylbenzene	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
trans-1,2-DCE	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
Trichlorofluoromethane	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
Vinyl chloride	ND	1.0		µg/L	1	12/5/2022 7:13:00 PM	R93028
Xylenes, Total	ND	1.5		µg/L	1	12/5/2022 7:13:00 PM	R93028
Surr: 1,2-Dichloroethane-d4	92.7	70-130		%Rec	1	12/5/2022 7:13:00 PM	R93028
Surr: 4-Bromofluorobenzene	94.6	70-130		%Rec	1	12/5/2022 7:13:00 PM	R93028
Surr: Dibromofluoromethane	99.1	70-130		%Rec	1	12/5/2022 7:13:00 PM	R93028
Surr: Toluene-d8	91.2	70-130		%Rec	1	12/5/2022 7:13:00 PM	R93028

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2212043**
05-Jan-23

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **MB-D** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **D93505** RunNo: **93505**
Prep Date: Analysis Date: **12/21/2022** SeqNo: **3373037** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								
Iron	ND	0.020								
Manganese	ND	0.0020								

Sample ID: **LLLCS-D** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **D93505** RunNo: **93505**
Prep Date: Analysis Date: **12/21/2022** SeqNo: **3373038** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Iron	0.026	0.020	0.02000	0	131	50	150			
Manganese	0.0021	0.0020	0.002000	0	104	50	150			

Sample ID: **LCS-D** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **D93505** RunNo: **93505**
Prep Date: Analysis Date: **12/21/2022** SeqNo: **3373039** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.52	0.0060	0.5000	0	104	85	115			
Iron	0.53	0.020	0.5000	0	106	85	115			
Manganese	0.52	0.0020	0.5000	0	104	85	115			

Sample ID: **LLLCS-D** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **D93505** RunNo: **93505**
Prep Date: Analysis Date: **12/21/2022** SeqNo: **3373040** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060	0.006000	0	67.1	50	150			

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2212043**
05-Jan-23

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **MB-71870** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **71870** RunNo: **93144**
Prep Date: **12/6/2022** Analysis Date: **12/8/2022** SeqNo: **3355613** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LCSLL-71870** SampType: **LCSLL** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC** Batch ID: **71870** RunNo: **93144**
Prep Date: **12/6/2022** Analysis Date: **12/8/2022** SeqNo: **3355614** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.0086	0.0060	0.006000	0	144	50	150			

Sample ID: **LCS-71870** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **71870** RunNo: **93144**
Prep Date: **12/6/2022** Analysis Date: **12/8/2022** SeqNo: **3355615** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.47	0.0060	0.5000	0	93.6	85	115			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2212043**
05-Jan-23

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R93028** RunNo: **93028**
Prep Date: Analysis Date: **12/5/2022** SeqNo: **3350807** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.3	70	130			
Toluene	21	1.0	20.00	0	104	70	130			
Chlorobenzene	22	1.0	20.00	0	108	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	99.6	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	95.8	70	130			
Surr: 1,2-Dichloroethane-d4	8.7		10.00		87.4	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		98.0	70	130			
Surr: Dibromofluoromethane	9.1		10.00		90.8	70	130			
Surr: Toluene-d8	9.4		10.00		93.7	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R93028** RunNo: **93028**
Prep Date: Analysis Date: **12/5/2022** SeqNo: **3350808** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2212043**
05-Jan-23

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**	
Client ID: **PBW**	Batch ID: **R93028**	RunNo: **93028**	
Prep Date:	Analysis Date: **12/5/2022**	SeqNo: **3350808**	Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2212043**
05-Jan-23

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R93028** RunNo: **93028**
Prep Date: Analysis Date: **12/5/2022** SeqNo: **3350808** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.9		10.00		89.3	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.1	70	130			
Surr: Dibromofluoromethane	9.5		10.00		94.6	70	130			
Surr: Toluene-d8	9.3		10.00		93.3	70	130			

Sample ID: **2212043-001ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **CW-2 Effluent** Batch ID: **R93028** RunNo: **93028**
Prep Date: Analysis Date: **12/5/2022** SeqNo: **3350817** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	108	70	130			
Toluene	21	1.0	20.00	0	107	70	130			
Chlorobenzene	22	1.0	20.00	0	112	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	109	70	130			
Trichloroethene (TCE)	21	1.0	20.00	0	105	70	130			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.2	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		98.7	70	130			
Surr: Dibromofluoromethane	9.7		10.00		97.0	70	130			
Surr: Toluene-d8	9.4		10.00		93.8	70	130			

Sample ID: **2212043-001amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **CW-2 Effluent** Batch ID: **R93028** RunNo: **93028**
Prep Date: Analysis Date: **12/5/2022** SeqNo: **3350818** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	104	70	130	3.95	20	
Toluene	21	1.0	20.00	0	103	70	130	4.18	20	
Chlorobenzene	22	1.0	20.00	0	108	70	130	4.32	20	
1,1-Dichloroethene	20	1.0	20.00	0	101	70	130	7.03	20	
Trichloroethene (TCE)	20	1.0	20.00	0	101	70	130	4.28	20	
Surr: 1,2-Dichloroethane-d4	9.3		10.00		93.1	70	130	0	0	
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130	0	0	
Surr: Dibromofluoromethane	9.4		10.00		93.7	70	130	0	0	
Surr: Toluene-d8	9.2		10.00		92.1	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2212043**
05-Jan-23

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R93145** RunNo: **93145**
Prep Date: Analysis Date: **12/8/2022** SeqNo: **3355685** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	20	1.0	20.00	0	97.8	70	130			
Surr: 1,2-Dichloroethane-d4	9.3		10.00		92.9	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		96.9	70	130			
Surr: Dibromofluoromethane	9.3		10.00		93.1	70	130			
Surr: Toluene-d8	9.4		10.00		94.3	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R93145** RunNo: **93145**
Prep Date: Analysis Date: **12/8/2022** SeqNo: **3355686** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Trichloroethene (TCE)	ND	1.0								
Surr: 1,2-Dichloroethane-d4	9.3		10.00		93.5	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		95.4	70	130			
Surr: Dibromofluoromethane	9.4		10.00		94.3	70	130			
Surr: Toluene-d8	9.0		10.00		90.1	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2212043**
05-Jan-23

Client: EA Engineering
Project: Sparton Coors Rd

Sample ID: **mb-71815** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **71815** RunNo: **93090**
Prep Date: **12/2/2022** Analysis Date: **12/7/2022** SeqNo: **3352795** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	1.7		4.000		41.5	15	108			
Surr: 2,4,6-Tribromophenol	3.2		8.000		40.2	15	112			
Surr: 2-Fluorobiphenyl	1.2		4.000		29.0	15	107			
Surr: 4-Terphenyl-d14	2.6		4.000		65.5	15	166			

Sample ID: **lcs-71815** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **71815** RunNo: **93090**
Prep Date: **12/2/2022** Analysis Date: **12/7/2022** SeqNo: **3352796** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0	2.000	0	26.0	15	60.5			
Surr: Nitrobenzene-d5	3.0		5.000		59.2	15	108			
Surr: 2,4,6-Tribromophenol	6.0		10.00		59.8	15	112			
Surr: 2-Fluorobiphenyl	2.2		5.000		44.8	15	107			
Surr: 4-Terphenyl-d14	4.4		5.000		88.0	15	166			

Sample ID: **mb-71867** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **71867** RunNo: **93185**
Prep Date: **12/6/2022** Analysis Date: **12/9/2022** SeqNo: **3357520** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	2.2		4.000		56.0	15	108			
Surr: 2,4,6-Tribromophenol	3.4		8.000		42.8	15	112			
Surr: 2-Fluorobiphenyl	1.9		4.000		47.5	15	107			
Surr: 4-Terphenyl-d14	3.7		4.000		93.0	15	166			

Sample ID: **lcs-71867** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **71867** RunNo: **93185**
Prep Date: **12/6/2022** Analysis Date: **12/9/2022** SeqNo: **3357521** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0	2.000	0	24.0	15	60.5			
Surr: Nitrobenzene-d5	3.1		5.000		61.6	15	108			
Surr: 2,4,6-Tribromophenol	4.8		10.00		47.8	15	112			
Surr: 2-Fluorobiphenyl	2.5		5.000		50.0	15	107			
Surr: 4-Terphenyl-d14	4.5		5.000		90.0	15	166			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: EA Engineering Work Order Number: 2212043 RcptNo: 1

Received By: **Kasandra Jimena Garcia** 12/1/2022 11:32:00 AM

Completed By: **Sean Livingston** 12/1/2022 11:38:14 AM

Reviewed By: JGL 12/1/22

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 8
(<2 or >12 unless noted)
Adjusted? NO
Checked by: 12-1-22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	4.8	Good				

Chain-of-Custody Record

Client: Sparton Technologies inc
EA Engineering, Science and Technology
Mailing Address: 320 Gold Ave SW #1300
Albuquerque, NM 87102
Phone #: 505 715 4154
email or Fax#: rmarley@eaest.com
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: Sparton Coors Rd.
Project #: Bills to Sparton direct
Project Manager: Bob Marley, EA
Sampler: Scott Miles
On Ice: ☑ Yes ☐ No
# of Coolers: 1
Cooler Temp (including CF): 4.7+0.1 = 4.8 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2212043	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	VOCs 8260B	1,4 Dioxane 8270 SIM	Total Chromium	Dissolved Metals (Cr, Fe, Mn)
12-1-22	0845	Water	CW-2 Effluent	3x VOA, 1x1L Amber 1x250mlHDPE, 1x125mlHDPE	none HCl HNO3	001											X	X	X	X
	0855		CW-2 Influent			002											X	X	X	X
	1042		CW-1 Effluent			003											X	X	X	X
	1053		CW-1 Influent			004											X	X	X	X
	0845		CW-2 Effluent Duplicate	1x1L Amber	none	005												X		
	1042		CW-1 Effluent Duplicate			006												X		
			Trip Blank	2x VOA	HCl	007											X			

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
12-1-22	1131	[signature]	[signature]	CDO	12.01.22	
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks: 11:32

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

January 09, 2023

Bob Marley
EA Engineering
320 Gold Ave SW Suite 1210
Albuquerque, NM 87102
TEL:
FAX:

RE: Sparton OrderNo.: 2211736

Dear Bob Marley:

Hall Environmental Analysis Laboratory received 7 sample(s) on 11/11/2022 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report
Lab Order **2211736**
Date Reported: **1/9/2023**

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2211736-001 **Matrix:** AQUEOUS

Client Sample ID: MW-53D
Collection Date: 11/10/2022 4:01:00 PM
Received Date: 11/11/2022 2:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JRR**
Chromium	ND	0.0060		mg/L	1	12/15/2022 10:12:39 AM	A93348
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.066	0.0060		mg/L	1	11/22/2022 7:49:37 PM	71548
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	11/22/2022 6:26:00 AM	71473
Surr: 2-Fluorobiphenyl	52.5	15-107		%Rec	1	11/22/2022 6:26:00 AM	71473
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
Toluene	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
Ethylbenzene	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
Naphthalene	ND	2.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
1-Methylnaphthalene	ND	4.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
2-Methylnaphthalene	ND	4.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
Acetone	ND	10		µg/L	1	11/14/2022 5:14:00 PM	R92552
Bromobenzene	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
Bromodichloromethane	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
Bromoform	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
Bromomethane	ND	3.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
2-Butanone	ND	10		µg/L	1	11/14/2022 5:14:00 PM	R92552
Carbon disulfide	ND	10		µg/L	1	11/14/2022 5:14:00 PM	R92552
Carbon Tetrachloride	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
Chlorobenzene	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
Chloroethane	ND	2.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
Chloroform	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
Chloromethane	ND	3.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
2-Chlorotoluene	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
4-Chlorotoluene	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
cis-1,2-DCE	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
Dibromochloromethane	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
Dibromomethane	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2211736-001 **Matrix:** AQUEOUS

Client Sample ID: MW-53D
Collection Date: 11/10/2022 4:01:00 PM
Received Date: 11/11/2022 2:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
1,1-Dichloroethane	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
1,1-Dichloroethene	1.3	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
1,2-Dichloropropane	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
1,3-Dichloropropane	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
2,2-Dichloropropane	ND	2.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
1,1-Dichloropropene	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
Hexachlorobutadiene	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
2-Hexanone	ND	10		µg/L	1	11/14/2022 5:14:00 PM	R92552
Isopropylbenzene	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
4-Isopropyltoluene	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
4-Methyl-2-pentanone	ND	10		µg/L	1	11/14/2022 5:14:00 PM	R92552
Methylene Chloride	ND	3.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
n-Butylbenzene	ND	3.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
n-Propylbenzene	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
sec-Butylbenzene	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
Styrene	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
tert-Butylbenzene	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
trans-1,2-DCE	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
Trichloroethene (TCE)	23	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
Trichlorofluoromethane	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
Vinyl chloride	ND	1.0		µg/L	1	11/14/2022 5:14:00 PM	R92552
Xylenes, Total	ND	1.5		µg/L	1	11/14/2022 5:14:00 PM	R92552
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	11/14/2022 5:14:00 PM	R92552
Surr: 4-Bromofluorobenzene	91.8	70-130		%Rec	1	11/14/2022 5:14:00 PM	R92552
Surr: Dibromofluoromethane	103	70-130		%Rec	1	11/14/2022 5:14:00 PM	R92552
Surr: Toluene-d8	89.1	70-130		%Rec	1	11/14/2022 5:14:00 PM	R92552

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2211736-002 **Matrix:** AQUEOUS

Client Sample ID: MW-45
Collection Date: 11/11/2022 11:25:00 AM
Received Date: 11/11/2022 2:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Chromium	ND	0.0060		mg/L	1	12/21/2022 1:38:57 PM	C93505
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	11/22/2022 7:52:25 PM	71548
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	11/22/2022 7:08:00 AM	71473
Surr: 2-Fluorobiphenyl	39.0	15-107		%Rec	1	11/22/2022 7:08:00 AM	71473
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
Toluene	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
Ethylbenzene	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
Naphthalene	ND	2.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
1-Methylnaphthalene	ND	4.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
2-Methylnaphthalene	ND	4.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
Acetone	ND	10		µg/L	1	11/14/2022 5:37:00 PM	R92552
Bromobenzene	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
Bromodichloromethane	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
Bromoform	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
Bromomethane	ND	3.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
2-Butanone	ND	10		µg/L	1	11/14/2022 5:37:00 PM	R92552
Carbon disulfide	ND	10		µg/L	1	11/14/2022 5:37:00 PM	R92552
Carbon Tetrachloride	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
Chlorobenzene	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
Chloroethane	ND	2.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
Chloroform	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
Chloromethane	ND	3.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
2-Chlorotoluene	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
4-Chlorotoluene	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
cis-1,2-DCE	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
Dibromochloromethane	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
Dibromomethane	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2211736-002 **Matrix:** AQUEOUS

Client Sample ID: MW-45
Collection Date: 11/11/2022 11:25:00 AM
Received Date: 11/11/2022 2:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
1,1-Dichloroethane	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
1,1-Dichloroethene	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
1,2-Dichloropropane	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
1,3-Dichloropropane	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
2,2-Dichloropropane	ND	2.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
1,1-Dichloropropene	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
Hexachlorobutadiene	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
2-Hexanone	ND	10		µg/L	1	11/14/2022 5:37:00 PM	R92552
Isopropylbenzene	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
4-Isopropyltoluene	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
4-Methyl-2-pentanone	ND	10		µg/L	1	11/14/2022 5:37:00 PM	R92552
Methylene Chloride	ND	3.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
n-Butylbenzene	ND	3.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
n-Propylbenzene	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
sec-Butylbenzene	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
Styrene	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
tert-Butylbenzene	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
trans-1,2-DCE	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
Trichlorofluoromethane	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
Vinyl chloride	ND	1.0		µg/L	1	11/14/2022 5:37:00 PM	R92552
Xylenes, Total	ND	1.5		µg/L	1	11/14/2022 5:37:00 PM	R92552
Surr: 1,2-Dichloroethane-d4	98.9	70-130		%Rec	1	11/14/2022 5:37:00 PM	R92552
Surr: 4-Bromofluorobenzene	94.2	70-130		%Rec	1	11/14/2022 5:37:00 PM	R92552
Surr: Dibromofluoromethane	100	70-130		%Rec	1	11/14/2022 5:37:00 PM	R92552
Surr: Toluene-d8	87.3	70-130		%Rec	1	11/14/2022 5:37:00 PM	R92552

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2211736-003 **Matrix:** AQUEOUS

Client Sample ID: MW-37R
Collection Date: 11/11/2022 12:41:00 PM
Received Date: 11/11/2022 2:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Chromium	0.038	0.0060		mg/L	1	12/21/2022 1:40:33 PM	C93505
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.038	0.0060		mg/L	1	11/22/2022 7:55:21 PM	71548
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	11/30/2022 7:56:00 PM	71473
Surr: 2-Fluorobiphenyl	39.5	15-107		%Rec	1	11/30/2022 7:56:00 PM	71473
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
Toluene	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
Ethylbenzene	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
Naphthalene	ND	2.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
1-Methylnaphthalene	ND	4.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
2-Methylnaphthalene	ND	4.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
Acetone	ND	10		µg/L	1	11/14/2022 6:00:00 PM	R92552
Bromobenzene	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
Bromodichloromethane	3.7	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
Bromoform	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
Bromomethane	ND	3.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
2-Butanone	ND	10		µg/L	1	11/14/2022 6:00:00 PM	R92552
Carbon disulfide	ND	10		µg/L	1	11/14/2022 6:00:00 PM	R92552
Carbon Tetrachloride	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
Chlorobenzene	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
Chloroethane	ND	2.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
Chloroform	6.3	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
Chloromethane	ND	3.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
2-Chlorotoluene	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
4-Chlorotoluene	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
cis-1,2-DCE	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
Dibromochloromethane	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
Dibromomethane	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2211736-003 **Matrix:** AQUEOUS

Client Sample ID: MW-37R
Collection Date: 11/11/2022 12:41:00 PM
Received Date: 11/11/2022 2:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
1,1-Dichloroethane	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
1,1-Dichloroethene	1.1	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
1,2-Dichloropropane	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
1,3-Dichloropropane	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
2,2-Dichloropropane	ND	2.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
1,1-Dichloropropene	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
Hexachlorobutadiene	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
2-Hexanone	ND	10		µg/L	1	11/14/2022 6:00:00 PM	R92552
Isopropylbenzene	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
4-Isopropyltoluene	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
4-Methyl-2-pentanone	ND	10		µg/L	1	11/14/2022 6:00:00 PM	R92552
Methylene Chloride	ND	3.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
n-Butylbenzene	ND	3.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
n-Propylbenzene	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
sec-Butylbenzene	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
Styrene	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
tert-Butylbenzene	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
trans-1,2-DCE	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
Trichloroethene (TCE)	33	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
Trichlorofluoromethane	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
Vinyl chloride	ND	1.0		µg/L	1	11/14/2022 6:00:00 PM	R92552
Xylenes, Total	ND	1.5		µg/L	1	11/14/2022 6:00:00 PM	R92552
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	11/14/2022 6:00:00 PM	R92552
Surr: 4-Bromofluorobenzene	94.0	70-130		%Rec	1	11/14/2022 6:00:00 PM	R92552
Surr: Dibromofluoromethane	103	70-130		%Rec	1	11/14/2022 6:00:00 PM	R92552
Surr: Toluene-d8	91.1	70-130		%Rec	1	11/14/2022 6:00:00 PM	R92552

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2211736-004 **Matrix:** AQUEOUS

Client Sample ID: MW-44
Collection Date: 11/11/2022 10:01:00 AM
Received Date: 11/11/2022 2:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Chromium	ND	0.0060		mg/L	1	12/21/2022 1:42:02 PM	C93505
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	ND	0.0060		mg/L	1	11/22/2022 7:58:08 PM	71548
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	11/30/2022 8:40:00 PM	71473
Surr: 2-Fluorobiphenyl	59.5	15-107		%Rec	1	11/30/2022 8:40:00 PM	71473
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
Toluene	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
Ethylbenzene	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
Naphthalene	ND	2.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
1-Methylnaphthalene	ND	4.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
2-Methylnaphthalene	ND	4.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
Acetone	ND	10		µg/L	1	11/14/2022 6:23:00 PM	R92552
Bromobenzene	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
Bromodichloromethane	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
Bromoform	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
Bromomethane	ND	3.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
2-Butanone	ND	10		µg/L	1	11/14/2022 6:23:00 PM	R92552
Carbon disulfide	ND	10		µg/L	1	11/14/2022 6:23:00 PM	R92552
Carbon Tetrachloride	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
Chlorobenzene	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
Chloroethane	ND	2.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
Chloroform	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
Chloromethane	ND	3.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
2-Chlorotoluene	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
4-Chlorotoluene	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
cis-1,2-DCE	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
Dibromochloromethane	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
Dibromomethane	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2211736-004 **Matrix:** AQUEOUS

Client Sample ID: MW-44
Collection Date: 11/11/2022 10:01:00 AM
Received Date: 11/11/2022 2:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
1,1-Dichloroethane	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
1,1-Dichloroethene	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
1,2-Dichloropropane	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
1,3-Dichloropropane	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
2,2-Dichloropropane	ND	2.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
1,1-Dichloropropene	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
Hexachlorobutadiene	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
2-Hexanone	ND	10		µg/L	1	11/14/2022 6:23:00 PM	R92552
Isopropylbenzene	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
4-Isopropyltoluene	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
4-Methyl-2-pentanone	ND	10		µg/L	1	11/14/2022 6:23:00 PM	R92552
Methylene Chloride	ND	3.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
n-Butylbenzene	ND	3.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
n-Propylbenzene	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
sec-Butylbenzene	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
Styrene	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
tert-Butylbenzene	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
trans-1,2-DCE	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
Trichlorofluoromethane	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
Vinyl chloride	ND	1.0		µg/L	1	11/14/2022 6:23:00 PM	R92552
Xylenes, Total	ND	1.5		µg/L	1	11/14/2022 6:23:00 PM	R92552
Surr: 1,2-Dichloroethane-d4	100	70-130		%Rec	1	11/14/2022 6:23:00 PM	R92552
Surr: 4-Bromofluorobenzene	93.8	70-130		%Rec	1	11/14/2022 6:23:00 PM	R92552
Surr: Dibromofluoromethane	102	70-130		%Rec	1	11/14/2022 6:23:00 PM	R92552
Surr: Toluene-d8	86.4	70-130		%Rec	1	11/14/2022 6:23:00 PM	R92552

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2211736-005 **Matrix:** AQUEOUS

Client Sample ID: MW-19
Collection Date: 11/11/2022 12:37:00 PM
Received Date: 11/11/2022 2:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Chromium	0.055	0.0060		mg/L	1	12/21/2022 1:43:38 PM	C93505
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.060	0.0060		mg/L	1	11/22/2022 8:01:04 PM	71548
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	3.1	1.0		µg/L	1	12/1/2022 12:28:00 AM	71563
Surr: 2-Fluorobiphenyl	19.0	15-107		%Rec	1	12/1/2022 12:28:00 AM	71563
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
Toluene	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
Ethylbenzene	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
Naphthalene	ND	2.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
1-Methylnaphthalene	ND	4.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
2-Methylnaphthalene	ND	4.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
Acetone	ND	10		µg/L	1	11/14/2022 6:46:00 PM	R92552
Bromobenzene	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
Bromodichloromethane	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
Bromoform	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
Bromomethane	ND	3.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
2-Butanone	ND	10		µg/L	1	11/14/2022 6:46:00 PM	R92552
Carbon disulfide	ND	10		µg/L	1	11/14/2022 6:46:00 PM	R92552
Carbon Tetrachloride	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
Chlorobenzene	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
Chloroethane	ND	2.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
Chloroform	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
Chloromethane	ND	3.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
2-Chlorotoluene	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
4-Chlorotoluene	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
cis-1,2-DCE	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
Dibromochloromethane	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
Dibromomethane	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2211736-005 **Matrix:** AQUEOUS

Client Sample ID: MW-19
Collection Date: 11/11/2022 12:37:00 PM
Received Date: 11/11/2022 2:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
1,1-Dichloroethane	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
1,1-Dichloroethene	2.0	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
1,2-Dichloropropane	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
1,3-Dichloropropane	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
2,2-Dichloropropane	ND	2.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
1,1-Dichloropropene	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
Hexachlorobutadiene	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
2-Hexanone	ND	10		µg/L	1	11/14/2022 6:46:00 PM	R92552
Isopropylbenzene	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
4-Isopropyltoluene	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
4-Methyl-2-pentanone	ND	10		µg/L	1	11/14/2022 6:46:00 PM	R92552
Methylene Chloride	ND	3.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
n-Butylbenzene	ND	3.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
n-Propylbenzene	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
sec-Butylbenzene	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
Styrene	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
tert-Butylbenzene	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
trans-1,2-DCE	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
Trichloroethene (TCE)	20	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
Trichlorofluoromethane	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
Vinyl chloride	ND	1.0		µg/L	1	11/14/2022 6:46:00 PM	R92552
Xylenes, Total	ND	1.5		µg/L	1	11/14/2022 6:46:00 PM	R92552
Surr: 1,2-Dichloroethane-d4	98.5	70-130		%Rec	1	11/14/2022 6:46:00 PM	R92552
Surr: 4-Bromofluorobenzene	95.1	70-130		%Rec	1	11/14/2022 6:46:00 PM	R92552
Surr: Dibromofluoromethane	102	70-130		%Rec	1	11/14/2022 6:46:00 PM	R92552
Surr: Toluene-d8	88.8	70-130		%Rec	1	11/14/2022 6:46:00 PM	R92552

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2211736-006 **Matrix:** AQUEOUS

Client Sample ID: MW-19 DUP
Collection Date: 11/11/2022 12:37:00 PM
Received Date: 11/11/2022 2:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**JLF**
Chromium	0.056	0.0060		mg/L	1	12/21/2022 1:45:15 PM	C93505
EPA METHOD 200.7: TOTAL METALS						Analyst:	**VP**
Chromium	0.060	0.0060		mg/L	1	11/22/2022 8:20:02 PM	71548
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	3.4	1.0		µg/L	1	12/1/2022 1:11:00 AM	71563
Surr: 2-Fluorobiphenyl	18.5	15-107		%Rec	1	12/1/2022 1:11:00 AM	71563
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
Toluene	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
Ethylbenzene	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
Naphthalene	ND	2.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
1-Methylnaphthalene	ND	4.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
2-Methylnaphthalene	ND	4.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
Acetone	ND	10		µg/L	1	11/14/2022 7:09:00 PM	R92552
Bromobenzene	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
Bromodichloromethane	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
Bromoform	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
Bromomethane	ND	3.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
2-Butanone	ND	10		µg/L	1	11/14/2022 7:09:00 PM	R92552
Carbon disulfide	ND	10		µg/L	1	11/14/2022 7:09:00 PM	R92552
Carbon Tetrachloride	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
Chlorobenzene	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
Chloroethane	ND	2.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
Chloroform	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
Chloromethane	ND	3.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
2-Chlorotoluene	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
4-Chlorotoluene	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
cis-1,2-DCE	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
Dibromochloromethane	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
Dibromomethane	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Project: Sparton
Lab ID: 2211736-006 **Matrix:** AQUEOUS

Client Sample ID: MW-19 DUP
Collection Date: 11/11/2022 12:37:00 PM
Received Date: 11/11/2022 2:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
1,1-Dichloroethane	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
1,1-Dichloroethene	1.8	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
1,2-Dichloropropane	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
1,3-Dichloropropane	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
2,2-Dichloropropane	ND	2.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
1,1-Dichloropropene	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
Hexachlorobutadiene	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
2-Hexanone	ND	10		µg/L	1	11/14/2022 7:09:00 PM	R92552
Isopropylbenzene	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
4-Isopropyltoluene	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
4-Methyl-2-pentanone	ND	10		µg/L	1	11/14/2022 7:09:00 PM	R92552
Methylene Chloride	ND	3.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
n-Butylbenzene	ND	3.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
n-Propylbenzene	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
sec-Butylbenzene	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
Styrene	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
tert-Butylbenzene	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
trans-1,2-DCE	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
Trichloroethene (TCE)	19	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
Trichlorofluoromethane	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
Vinyl chloride	ND	1.0		µg/L	1	11/14/2022 7:09:00 PM	R92552
Xylenes, Total	ND	1.5		µg/L	1	11/14/2022 7:09:00 PM	R92552
Surr: 1,2-Dichloroethane-d4	99.0	70-130		%Rec	1	11/14/2022 7:09:00 PM	R92552
Surr: 4-Bromofluorobenzene	91.4	70-130		%Rec	1	11/14/2022 7:09:00 PM	R92552
Surr: Dibromofluoromethane	101	70-130		%Rec	1	11/14/2022 7:09:00 PM	R92552
Surr: Toluene-d8	88.4	70-130		%Rec	1	11/14/2022 7:09:00 PM	R92552

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton
Collection Date:
Lab ID: 2211736-007
Matrix: TRIP BLANK
Received Date: 11/11/2022 2:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
Toluene	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
Ethylbenzene	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
Naphthalene	ND	2.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
1-Methylnaphthalene	ND	4.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
2-Methylnaphthalene	ND	4.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
Acetone	ND	10		µg/L	1	11/14/2022 7:32:00 PM	R92552
Bromobenzene	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
Bromodichloromethane	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
Bromoform	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
Bromomethane	ND	3.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
2-Butanone	ND	10		µg/L	1	11/14/2022 7:32:00 PM	R92552
Carbon disulfide	ND	10		µg/L	1	11/14/2022 7:32:00 PM	R92552
Carbon Tetrachloride	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
Chlorobenzene	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
Chloroethane	ND	2.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
Chloroform	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
Chloromethane	ND	3.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
2-Chlorotoluene	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
4-Chlorotoluene	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
cis-1,2-DCE	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
Dibromochloromethane	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
Dibromomethane	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
1,1-Dichloroethane	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
1,1-Dichloroethene	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
1,2-Dichloropropane	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
1,3-Dichloropropane	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
2,2-Dichloropropane	ND	2.0		µg/L	1	11/14/2022 7:32:00 PM	R92552

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Hall Environmental Analysis Laboratory, Inc.

CLIENT: EA Engineering
Client Sample ID: Trip Blank
Project: Sparton
Collection Date:
Lab ID: 2211736-007
Matrix: TRIP BLANK
Received Date: 11/11/2022 2:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
Hexachlorobutadiene	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
2-Hexanone	ND	10		µg/L	1	11/14/2022 7:32:00 PM	R92552
Isopropylbenzene	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
4-Isopropyltoluene	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
4-Methyl-2-pentanone	ND	10		µg/L	1	11/14/2022 7:32:00 PM	R92552
Methylene Chloride	ND	3.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
n-Butylbenzene	ND	3.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
n-Propylbenzene	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
sec-Butylbenzene	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
Styrene	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
tert-Butylbenzene	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
trans-1,2-DCE	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
Trichlorofluoromethane	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
Vinyl chloride	ND	1.0		µg/L	1	11/14/2022 7:32:00 PM	R92552
Xylenes, Total	ND	1.5		µg/L	1	11/14/2022 7:32:00 PM	R92552
Surr: 1,2-Dichloroethane-d4	99.0	70-130		%Rec	1	11/14/2022 7:32:00 PM	R92552
Surr: 4-Bromofluorobenzene	91.3	70-130		%Rec	1	11/14/2022 7:32:00 PM	R92552
Surr: Dibromofluoromethane	102	70-130		%Rec	1	11/14/2022 7:32:00 PM	R92552
Surr: Toluene-d8	86.9	70-130		%Rec	1	11/14/2022 7:32:00 PM	R92552

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211736**
09-Jan-23

Client: EA Engineering
Project: Sparton

Sample ID: **MB-A** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **A93348** RunNo: **93348**
Prep Date: Analysis Date: **12/15/2022** SeqNo: **3365546** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LLLCS-A** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **A93348** RunNo: **93348**
Prep Date: Analysis Date: **12/15/2022** SeqNo: **3365547** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060	0.006000	0	56.1	50	150			

Sample ID: **LCS-A** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **A93348** RunNo: **93348**
Prep Date: Analysis Date: **12/15/2022** SeqNo: **3365548** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.49	0.0060	0.5000	0	97.2	85	115			

Sample ID: **2211736-001DMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MW-53D** Batch ID: **A93348** RunNo: **93348**
Prep Date: Analysis Date: **12/15/2022** SeqNo: **3365581** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060	0.5000	0.004720	-0.111	70	130			S

Sample ID: **2211736-001DMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MW-53D** Batch ID: **A93348** RunNo: **93348**
Prep Date: Analysis Date: **12/15/2022** SeqNo: **3365585** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.51	0.0060	0.5000	0.004720	100	70	130	197	20	R

Sample ID: **MB-C** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **C93505** RunNo: **93505**
Prep Date: Analysis Date: **12/21/2022** SeqNo: **3373032** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211736**
09-Jan-23

Client: EA Engineering
Project: Sparton

Sample ID: **LCSLL-C** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **C93505** RunNo: **93505**
Prep Date: Analysis Date: **12/21/2022** SeqNo: **3373033** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060	0.006000	0	61.5	50	150			

Sample ID: **LCS-C** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **C93505** RunNo: **93505**
Prep Date: Analysis Date: **12/21/2022** SeqNo: **3373034** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.49	0.0060	0.5000	0	98.7	85	115			

Sample ID: **2211736-006DMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MW-19 DUP** Batch ID: **C93505** RunNo: **93505**
Prep Date: Analysis Date: **12/21/2022** SeqNo: **3373050** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.55	0.0060	0.5000	0.05626	99.5	70	130			

Sample ID: **2211736-006DMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **MW-19 DUP** Batch ID: **C93505** RunNo: **93505**
Prep Date: Analysis Date: **12/21/2022** SeqNo: **3373051** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.56	0.0060	0.5000	0.05626	101	70	130	1.60	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211736**
09-Jan-23

Client: EA Engineering
Project: Sparton

Sample ID: **MB-71548** SampType: **MBLK** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **PBW** Batch ID: **71548** RunNo: **92779**
Prep Date: **11/16/2022** Analysis Date: **11/22/2022** SeqNo: **3339523** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060								

Sample ID: **LCSLL-71548** SampType: **LCSLL** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **BatchQC** Batch ID: **71548** RunNo: **92779**
Prep Date: **11/16/2022** Analysis Date: **11/22/2022** SeqNo: **3339524** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	ND	0.0060	0.006000	0	93.9	50	150			

Sample ID: **LCS-71548** SampType: **LCS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **LCSW** Batch ID: **71548** RunNo: **92779**
Prep Date: **11/16/2022** Analysis Date: **11/22/2022** SeqNo: **3339525** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.47	0.0060	0.5000	0	93.2	85	115			

Sample ID: **2211736-005CMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MW-19** Batch ID: **71548** RunNo: **92779**
Prep Date: **11/16/2022** Analysis Date: **11/22/2022** SeqNo: **3339541** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.52	0.0060	0.5000	0.05997	92.0	70	130			

Sample ID: **2211736-005CMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MW-19** Batch ID: **71548** RunNo: **92779**
Prep Date: **11/16/2022** Analysis Date: **11/22/2022** SeqNo: **3339542** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.52	0.0060	0.5000	0.05997	91.9	70	130	0.0776	20	

Sample ID: **2211736-006CMS** SampType: **MS** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MW-19 DUP** Batch ID: **71548** RunNo: **92779**
Prep Date: **11/16/2022** Analysis Date: **11/22/2022** SeqNo: **3339544** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.53	0.0060	0.5000	0.05961	94.0	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211736**
09-Jan-23

Client: EA Engineering
Project: Sparton

Sample ID: **2211736-006CMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Total Metals**
Client ID: **MW-19 DUP** Batch ID: **71548** RunNo: **92779**
Prep Date: **11/16/2022** Analysis Date: **11/22/2022** SeqNo: **3339545** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chromium	0.53	0.0060	0.5000	0.05961	93.3	70	130	0.644	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211736**
09-Jan-23

Client: EA Engineering
Project: Sparton

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R92552** RunNo: **92552**
Prep Date: Analysis Date: **11/14/2022** SeqNo: **3327744** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	70	130			
Toluene	21	1.0	20.00	0	104	70	130			
Chlorobenzene	22	1.0	20.00	0	109	70	130			
1,1-Dichloroethene	21	1.0	20.00	0	105	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	102	70	130			
Surr: 1,2-Dichloroethane-d4	9.1		10.00		90.9	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		96.2	70	130			
Surr: Dibromofluoromethane	9.3		10.00		93.3	70	130			
Surr: Toluene-d8	9.0		10.00		89.5	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R92552** RunNo: **92552**
Prep Date: Analysis Date: **11/14/2022** SeqNo: **3328840** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211736**
09-Jan-23

Client: EA Engineering
Project: Sparton

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R92552**	RunNo: **92552**			
Prep Date:	Analysis Date: **11/14/2022**	SeqNo: **3328840**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211736**
09-Jan-23

Client: EA Engineering
Project: Sparton

Sample ID: **mb**	SampType: **MBLK**	TestCode: **EPA Method 8260B: VOLATILES**			
Client ID: **PBW**	Batch ID: **R92552**	RunNo: **92552**			
Prep Date:	Analysis Date: **11/14/2022**	SeqNo: **3328840**	Units: **µg/L**		

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.4		10.00		94.4	70	130			
Surr: 4-Bromofluorobenzene	9.2		10.00		92.5	70	130			
Surr: Dibromofluoromethane	9.5		10.00		94.7	70	130			
Surr: Toluene-d8	8.8		10.00		88.3	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
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QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211736**
09-Jan-23

Client: EA Engineering
Project: Sparton

Sample ID: **mb-71473** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **71473** RunNo: **92740**
Prep Date: **11/14/2022** Analysis Date: **11/21/2022** SeqNo: **3337662** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	3.5		4.000		88.0	15	108			
Surr: 2,4,6-Tribromophenol	7.3		8.000		91.8	15	112			
Surr: 2-Fluorobiphenyl	2.8		4.000		69.5	15	107			
Surr: 4-Terphenyl-d14	5.0		4.000		126	15	166			

Sample ID: **lcs-71473** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **71473** RunNo: **92740**
Prep Date: **11/14/2022** Analysis Date: **11/21/2022** SeqNo: **3337663** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.84	0.10	2.000	0	42.0	15	60.5			
Surr: Nitrobenzene-d5	4.2		5.000		83.6	15	108			
Surr: 2,4,6-Tribromophenol	8.4		10.00		84.0	15	112			
Surr: 2-Fluorobiphenyl	2.9		5.000		57.2	15	107			
Surr: 4-Terphenyl-d14	6.3		5.000		126	15	166			

Sample ID: **lcsd-71473** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **71473** RunNo: **92740**
Prep Date: **11/14/2022** Analysis Date: **11/22/2022** SeqNo: **3337664** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	0.84	0.10	2.000	0	42.0	15	60.5	0	29.7	
Surr: Nitrobenzene-d5	4.4		5.000		87.2	15	108	0	0	
Surr: 2,4,6-Tribromophenol	9.0		10.00		89.6	15	112	0	0	
Surr: 2-Fluorobiphenyl	3.0		5.000		59.2	15	107	0	0	
Surr: 4-Terphenyl-d14	6.8		5.000		135	15	166	0	0	

Sample ID: **mb-71563** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **71563** RunNo: **92927**
Prep Date: **11/17/2022** Analysis Date: **11/30/2022** SeqNo: **3346005** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	2.1		4.000		53.5	15	108			
Surr: 2,4,6-Tribromophenol	3.8		8.000		47.2	15	112			
Surr: 2-Fluorobiphenyl	1.4		4.000		35.0	15	107			
Surr: 4-Terphenyl-d14	3.7		4.000		93.0	15	166			

Qualifiers:

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D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2211736**
09-Jan-23

Client: EA Engineering
Project: Sparton

Sample ID: **lcs-71563** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **71563** RunNo: **92927**
Prep Date: **11/17/2022** Analysis Date: **11/30/2022** SeqNo: **3346006** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0	2.000	0	32.0	15	60.5			
Surr: Nitrobenzene-d5	2.7		5.000		53.2	15	108			
Surr: 2,4,6-Tribromophenol	4.8		10.00		47.6	15	112			
Surr: 2-Fluorobiphenyl	1.6		5.000		32.8	15	107			
Surr: 4-Terphenyl-d14	5.8		5.000		117	15	166			

Sample ID: **lcsd-71563** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **71563** RunNo: **92927**
Prep Date: **11/17/2022** Analysis Date: **11/30/2022** SeqNo: **3346007** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0	2.000	0	38.0	15	60.5	0	29.7	
Surr: Nitrobenzene-d5	3.2		5.000		64.8	15	108	0	0	
Surr: 2,4,6-Tribromophenol	4.9		10.00		49.2	15	112	0	0	
Surr: 2-Fluorobiphenyl	2.1		5.000		42.4	15	107	0	0	
Surr: 4-Terphenyl-d14	5.3		5.000		107	15	166	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of standard limits. If undiluted results may be estimated.		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: EA Engineering Work Order Number: 2211736 RcptNo: 1

Received By: Sean Livingston 11/11/2022 2:10:00 PM S Livingston
Completed By: Sean Livingston 11/11/2022 2:23:33 PM S Livingston
Reviewed By: TMU 11/11/22

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 12
(<2 or >12 unless noted)
Adjusted? NO
Checked by: KPA 11.11.22

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.4	Good				

Chain-of-Custody Record

Client: Sparton Technologies, Inc.
EA Engineering, Science and Technology
Mailing Address: 320 Gold Ave SW #1300
Albuquerque, NM 87102
Phone #: 505 715 4154
email or Fax#: r marley@eaest.com
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: Sparton Coors Rd
Project #: Bills to Sparton direct
Project Manager: Bob Marley, EA
Sampler: Scott Miles
On Ice: ☑ Yes ☐ No
# of Coolers: 1
Cooler Temp (including CF): 3.2 to 2:3.4 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2211736	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	VOCs 8260B	1,4 Dioxane 8270 SIM	Total Chromium	Dissolved Chromium		
11-10-22	1601	Aq	MW-53D	1x1L Amber, 3x VOA, 1x125ml HDPE, 1x250ml HDPE	none, HNO3, HCl	001											X	X	X	X		
11-11-22	1125		MW-45			002											X	X	X	X		
	1241		MW-37R			003											X	X	X	X		
	1001		MW-44			004											X	X	X	X		
	~~1236~~ 1237		MW-19			005											X	X	X	X		
			Trip Blank	2x VOAs	HCl	007											X					
11-11-22	1237		MW-19 DUP	1x1L Amber, 3x VOA, 1x125ml HDPE, 1x250ml HDPE	none, HNO3, HCl	006											X	X	X	X		

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
11-11-22	1010	Jyonne Walotiner	Szz	COU	11/11/22	1410
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks:
szz 11/11/22

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.