



May 9, 2023

Ms. Lisa Dunning  
Task Order Contracting Officer's Representative  
U.S. Environmental Protection Agency, Region 7  
11201 Renner Boulevard  
Lenexa, Kansas 66219

**Subject: Contract No. 68HERH19D0018; Task Order No. 68HE0719F0190  
Former Clinton Engines  
605 and 607 East Maple Street, Maquoketa, Jackson County, Iowa  
Phase II Environmental Site Assessment, Quarter 2**

Dear Ms. Dunning:

Toeroek Associates, Inc. (Toeroek) and our teaming subcontractor, Tetra Tech, Inc. (Tetra Tech), (hereafter "Toeroek Team") are pleased to present the Phase II Environmental Site Assessment (ESA), Quarter 2 report regarding the Former Clinton Engines site at 605 and 607 East Maple Street in Maquoketa, Jackson County, Iowa.

This deliverable has been reviewed internally as part of Tetra Tech's quality assurance program, as well as Toeroek's quality assurance program, and is consistent with Toeroek's Quality Management Plan for the Resource Conservation and Recovery Act (RCRA) Enforcement and Permitting Assistance (REPA) contract. Documentation of this review is retained in the Toeroek Team's project files.

If you have any questions or comments, please contact Greg Hanna at 720-898-4102 or Kaitlyn Mitchell at 816-412-1742.

Sincerely,

Greg Hanna  
Toeroek Team Program Manager

Kaitlyn Mitchell  
Toeroek Team Project Manager

Enclosure      Phase II ESA, Quarter 2

cc:      Leeanna Balsley, EPA Region 7 (cover letter only)  
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**TARGETED BROWNFIELDS ASSESSMENT  
PHASE II ENVIRONMENTAL SITE ASSESSMENT, QUARTER 2**

**FORMER CLINTON ENGINES  
605 AND 607 EAST MAPLE STREET  
MAQUOKETA, JACKSON COUNTY, IOWA**



**Prepared for**

**U.S. ENVIRONMENTAL PROTECTION AGENCY  
REGION 7**

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## 1.0 INTRODUCTION

The U.S. Environmental Protection Agency (EPA) tasked Toeroek Associates, Inc. (Toeroek) and its teaming subcontractor, Tetra Tech, Inc. (Tetra Tech) (together, the “Toeroek Team”) with providing technical support to the EPA Region 7 Brownfields Program under Contract Number (No.) 68HERH19D0018, Task Order No. 68HE0719F0190. EPA Region 7 requested the Toeroek Team conduct a Phase II Environmental Site Assessment (ESA) as part of a Targeted Brownfields Assessment of the Former Clinton Engines site (the Site). The focus of this Phase II ESA is 605 and 607 East Maple Street in Maquoketa, Jackson County, Iowa, and the wells associated with the Site on surrounding properties ([Appendix A](#), Figures 1 and 2).

The Toeroek Team did not conduct a Phase I ESA of the Site. The Toeroek Team developed the Phase II ESA based on results of the following previous investigations: (1) Missman, Stanley, & Associates P.C. (MSA) 1999 Phase I and II ESA (MSA 1999); (2) 2007 enrollment application submitted by the City of Maquoketa (City) for the Iowa Department of Natural Resources (IDNR) Land Recycling Program (LRP), including the Forest Road Consultants’ 2006 Work Plan and TestAmerica analytical data (City 2007); (3) Impact7G, Inc. (Impact7G) 2013 Site Assessment, 2014 Site Assessment, and 2019 Supplemental Phase II ESA reports under direction from the IDNR LRP (Impact7G 2013, 2014, 2019); and (4) Superfund Technical Assessment and Response Team START() 2021 Integrated Site Assessment (Tetra Tech 2021).

The scope of the Phase II ESA included collection of subsurface soil, groundwater, and soil-gas samples to determine plume dynamics and assess horizontal and vertical plume stability. Initial sampling and installation of monitoring wells was in October and November 2022. The Toeroek Team now is sampling these monitoring wells quarterly. This report details the second (Quarter 2) sampling event at the Site conducted in February 2023.

This Phase II ESA, Quarter 2, report is consistent with ASTM International Standard E1903-19 for Phase II ESAs, and otherwise complies with EPA’s “All Appropriate Inquiries” Rule (40 *Code of Federal Regulations* Part 312).

### 1.1 PURPOSE

Purposes of the Phase II ESA were to: (1) confirm or eliminate Recognized Environmental Conditions (RECs) identified during previous investigations; (2) acquire information regarding natures and concentrations of contaminants present at the Site in soil and/or groundwater; (3) assess potential impacts

on the Site and risks posed by hazardous substances that would support informed business decisions about the Site; and (4) where applicable, satisfy the innocent purchaser defense under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

## **1.2 SPECIAL TERMS AND CONDITIONS**

No special terms or conditions were identified during the Phase II ESA.

## **2.0 BACKGROUND AND SITE HISTORY**

This section specifies the location of the Site and its features, describes the physical setting, recounts the history of the Site, discusses land uses at the Site and adjacent properties, and relates results of previous investigations.

### **2.1 SITE DESCRIPTION AND FEATURES**

The Site is in Maquoketa, Jackson County, Iowa. It is a former industrial site in a mixed-use area consisting of residential, agricultural, and commercial land. The Site encompasses three Jackson County parcels and approximately 10.86 acres of land (Beacon 2022). Coordinates at the approximate center of the Site are 42.065375 degrees north latitude and 90.657173 degrees west longitude. The Site is in Section 19, Township 84 North, Range 3 East, as depicted on the Maquoketa, Iowa, 7.5-minute topographic map (U.S. Geological Survey [USGS] 1980).

Beginning in approximately 1945, the Site hosted industrial operations that included production of small engines. The Clinton Engines Company (Clinton Engines) acquired the property in 1950 from the Maquoketa Company and continued production of small engines. During the 1999 Phase I and Phase II ESA, the machine shop, shipping and receiving, and one of the paint booths were in active use. The Phase I ESA report described other portions of the Site facility as dilapidated, with holes in the roof and walls and standing water. Former operations included a foundry and die casting. Apparent underground storage tanks (USTs), chemical storage rooms, and 55-gallon drums were noted in various areas (MSA 1999). Clinton Engines officially closed in 1999, and the property was donated to the City in 2000 (IDNR 2020). In 2004, the Jackson County Historical Society purchased the western parcel from City (Beacon 2022). Review of aerial photographs indicate that most facility buildings had been razed by 2004, with only a former office/administration building left standing (Historic Aerials 2023). This building has been converted into the Clinton Engines Museum. Several buildings associated with the museum have been constructed at the Site after razing of the original manufacturing buildings.

### **2.2 PHYSICAL SETTING**

The Site lies within the Maquoketa city limits. It is bounded north by East Maple Street, with commercial or industrial properties beyond; east by a metal barn/residence (at a former railroad grade) and a farm center; south by residential properties and farmland; and west by South Clark Street, with residential properties beyond. Elevation of the Site is approximately 700 feet above mean sea level (amsl), with a

slight slope to the north and northeast. Higher elevations are off-site to the south and southwest, with elevations reaching approximately 750 feet amsl.

### 2.2.1 Geologic Setting

The Site is in the Central Lowlands physiographic province of the United States. Jackson County is in eastern Iowa near the boundary of the Southern Iowa Drift Plain and the Iowan Surface. Locally, a moderate loess cover overlies a thin glacial drift layer (City of Maquoketa & Alliance Water, Iowa Rural Water Association 2014). The Southern Iowa Drift Plain is characterized by a steeply rolling landscape, with the eastern part dominated by tabular uplands. Surfaces of the Southern Iowa Drift Plain are cut deeply into the Pre-Illinoisan glacial drift and are overlain by various thicknesses of Wisconsinan loess. The Iowan Surface is more eroded with gently sloping hills and valleys (Iowa Geological Survey [IGS] 2022a).

Soils at the former manufacturing area at the Site are characterized as urban land, which is generally flat and has been altered by buildings, parking lots, and cut and fill to render the soil unidentifiable. The lawn area surrounding the museum to the northwest is classified as well-drained Worthen silt loam, with 2 to 5 percent slopes, that derived from silty alluvium. The railroad grade area to the east is classified as Orthents, loamy, with 1 to 5 percent slopes. Soils south and southwest of the Site (at higher elevations) are classified as Tama silt loams, driftless, with slopes of 5 to 14 percent, that derived from loess (U.S. Department of Agriculture [USDA] 2022).

In April 2014, Impact7G advanced two bore holes (BHs), BH-1 and BH-2, at the Site to obtain information about geology of the Site. BH-1 was in the south-central portion of the Site, and BH-2 was in the north-central part of the Site. BH-1 was advanced to 38 feet below ground surface (bgs), where the boring encountered carbonate (likely dolomite) bedrock. Materials logged in the hole were primarily silt with some clay layers. Interspersed in the silt and clay were fine and medium sands from 12 to 22, 29 to 30, and 35 to 37 feet bgs. BH-2 was advanced to 90 feet bgs. This boring also contained primarily silt with more clay from 75 to 90 feet bgs, at which depth carbonate (dolomite) bedrock was encountered. Fine to medium sands were logged from 18 to 25 and 58 to 64 feet bgs. The water table was encountered at depths ranging from 13 to 16 feet bgs (Impact7G 2014).

The IGS 1992 Guidebook 56 *Quaternary Drainage Evolution of the Maquoketa River Valley* identifies an ancient Maquoketa River channel underlying the City. Delineation of the channel was based on bedrock depths in the area that ranged to approximately 155 feet bgs. The ancient channel having depths



exceeding 100 feet bgs trends north-south to the central areas of the City, then trends northeast (Ludvigson, Bettis, and Hudak 1992). Alluvial deposits within the channel would be in lateral contact with shallower bedrock along the sides.

The bedrock geology map of northeast Iowa indicates that uppermost bedrock in the Maquoketa area is Silurian-aged Hopkinton and Blandings Formations consisting of a maximum of 330 feet of dolomite, fossil-moldic to vuggy, and non-cherty to cherty (IDNR 1998). During the Phase II ESA investigation, weathered, vuggy, fossiliferous dolomitic bedrock was encountered at depths ranging from 21 feet bgs at the Jackson County Fairgrounds, approximately 0.6 mile northeast of the Site, to 117 feet bgs, approximately 1,000 feet west of the Site.<sup>1</sup>

### **2.2.2 Hydrogeology**

Silurian carbonate rocks make up the uppermost bedrock in the vicinity of the Site. The stratigraphic log for City Well 6, approximately 0.3 mile southwest of the Site, begins at 125 feet bgs in Silurian (undifferentiated) deposits and reaches a total depth of 2,325 feet (IGS 2022b). The Ordovician Maquoketa Formation (mainly shale) was encountered from 245 to 270 feet bgs and is considered an aquitard protecting the underlying aquifers. Cambrian rocks below the St. Lawrence Formation (encountered approximately 1,200 feet bgs) are indicated as the aquifer supplying City Wells 4, 5, and 6 (IGS 2022b).

Porous Silurian dolomites form the uppermost bedrock aquifer. In eastern and northern Iowa, the average thickness is approximately 200 to 400 feet. Based on depth of the underlying Ordovician Maquoketa Formation listed for City Well 6, wells tapping this aquifer would be less than approximately 245 feet deep.

The Cambrian-Ordovician aquifer has been extensively developed for municipal and industrial supplies, and yields range from 100 to 2,300 gallons per minute (gpm). Yields of 1,000 gpm can be obtained in all but the easternmost part of the aquifer area if drawdown of water levels is not a major concern (USGS 1978).

The upper part of the Cambrian-Ordovician Aquifer consists of the Ordovician St. Peter Sandstone and Prairie du Chien Formation and the Cambrian Jordan Sandstone. Wells completed in the Jordan

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<sup>1</sup> Bedrock was encountered at 122 feet bgs approximately 750 feet south of the Site; however, this location is approximately 45 feet higher in elevation.

Sandstone typically produce at least 50 gpm, with yields up to 300 gpm; however, high yields generally depend on thickness and degree of cementation of the Jordan Sandstone (USGS 1978).

The lower part of the Cambrian-Ordovician Aquifer consists of three Cambrian formations (Wonewoc, Eau Claire, and Mt. Simon), collectively referred to as the “Dresbach” aquifer. Yields in the Dresbach aquifer range from 280 to 2,560 gpm, and commonly yield at least 500 gpm. Yields are highest near Clinton, Iowa, decreasing westward, where water quality becomes poor. The Maquoketa area is an exception to this, as City Wells 4, 5, and 6 have high production capacities from this aquifer. Geologic data indicate this may be due to faulting within the Plum River fault zone, bringing the higher quality water in the Jordan Sandstone into juxtaposition with the Galesville Sandstone Member of the Wonewoc Formation (City of Maquoketa & Alliance Water, Iowa Rural Water Association 2014).

### **2.2.3 Hydrology**

Most of the Site is gently sloping (north and northeast) or flat with elevations of approximately 700 feet amsl. Higher elevations (approximately 750 feet amsl) are off-site to the south and west, and lower elevations (approximately 680 feet amsl) are farther north and east, near the Maquoketa River (approximately 0.8 to 2 miles north of the Site) or Prairie Creek (approximately 0.8 mile east of the Site). Surface water likely flows into the stormwater sewer system or generally northeast toward Prairie Creek.

## **2.3 SUMMARY OF PREVIOUS ASSESSMENTS**

In 1999, MSA conducted a Phase II ESA of the Site. Tables B-1, B-2, and B-3 in [Appendix B](#) summarize soil, groundwater and soil-gas data for volatile organic compounds (VOCs) from that assessment. The 1999 Phase II ESA found concentrations of chlorinated VOCs (CVOCs) and benzene, toluene, ethylbenzene, and xylene (BTEX) VOCs in groundwater and soil that exceeded risk-based screening levels and, for groundwater, EPA maximum contaminant levels (MCLs).

On May 23, 2005, IDNR notified the City regarding the transfer of the Site to the Contaminated Sites Section within IDNR (IDNR 2005a). Results from an Initial Site Screening, completed on June 2, 2005, indicate the need for additional investigations at the Site (IDNR 2005b). The Site was enrolled in the IDNR Voluntary LRP in April 2008. According to the Voluntary LRP enrollment application, additional Site investigation activities occurred in 2006 (City 2007). Analytical results from the 2006 sampling event are in Table B-1 and Table B-2 in [Appendix B](#).

The 2006 groundwater sampling event at the Site found elevated concentrations of BTEX and CVOCs. Further, the enrollment application included information pertaining to removal of three additional USTs (two 20,000-gallon diesel tanks and one 8,000-gallon tank of unidentified contents) from 2001 to 2002 (City 2007).

Since 2006, further Site assessment activities have been sporadic, focusing primarily on delineation of extents of on-site and off-site groundwater contamination and on-site vapor intrusion (VI). CVOCs at the following maximum concentrations have been detected in groundwater samples from on-site groundwater monitoring wells and off-site temporary wells as far as 900 feet north-northwest of the Site:

- Trichloroethene (TCE) at 9,580 micrograms per liter (µg/L), off-site temporary well;
- *cis*-1,2-Dichloroethene (DCE) at 7,190 µg/L, off-site temporary well;
- *trans*-1,2-DCE at 1,044 µg/L, off-site temporary well;
- 1,1,2-Trichloroethane (TCA) at 132 µg/L, off-site temporary well;
- Vinyl chloride (VC) at 319 µg/L, off-site temporary well; and
- Toluene at 247,000 µg/L, on-site groundwater monitoring well (Impact7G 2019).

Additional Site investigation activities in 2013 included sampling of groundwater monitoring wells that had been installed during previous investigations (Impact7G 2013). Available groundwater and soil data are in Table B-1 and Table B-2 in [Appendix B](#).

Given the elevated CVOCs concentrations in groundwater, IDNR required indoor VI sampling at the museum (IDNR 2014). Sub-slab samples collected at the museum in 2014 and 2015 detected TCE at concentrations above risk-based screening levels. In response, cracks in the museum basement were repaired, chemicals stored in the basement were relocated, and the sump pit area was passively vented. In December 2019, follow-up indoor air sampling at the museum documented indoor air exceedances above risk-based screening levels. As a result, energy recovery ventilators (ERVs) were installed at the museum in September 2020 (IDNR 2020). Available VI sampling results for selected VOCs are in Table B-3 in [Appendix B](#).

IDNR requested federal assistance in a letter dated February 17, 2020, regarding potential impacts of off-site groundwater contamination on nearby residential and commercial properties (IDNR 2020). IDNR also requested assistance related to VI sampling at surrounding properties near areas of known groundwater contamination to further determine potential impacts (Tetra Tech 2021).

In 2020 and 2021, Tetra Tech, under its START contract, collected indoor air, soil-gas, soil, and drinking water samples at the Site and at nearby residential and commercial properties. No CVOCs were detected in soil gas. No VOCs were detected in soil, sub-slab vapor, or indoor air at a concentration that exceeded a removal management level. No VOCs were detected in drinking water at a concentration that exceeded EPA MCLs (Tetra Tech 2021).

The 2022 Phase II ESA by the Toeroek Team included soil, groundwater, and soil-gas sampling (Toeroek Team 2023). Toluene was detected in 17 of the 21 subsurface soil samples, often at low concentrations (estimated at less than 1.0 micrograms per kilogram [ $\mu\text{g/kg}$ ]) where no other fuel-related VOCs were present, suggesting laboratory contamination may have occurred. High toluene concentrations (greater than 100  $\mu\text{g/kg}$ ) detected in samples MW-1B (19 to 21 ft bgs) and MW-8B (14 to 16 ft bgs) were found with other fuel-related VOCs. Samples from MW-102 and MW-103 contained only low levels of toluene suggestive of laboratory contamination. TCE concentrations in five on-site soil samples exceeded EPA's Regional Screening Levels (RSL) for both residential and industrial soils. No other analyte concentrations in any soil samples exceeded an associated RSL. No analyte concentration in any sample exceeded an associated IDNR Statewide Standard (SWS) for soils (Toeroek Team 2023).

In October and November 2022, during the Phase II ESA, the Toeroek Team installed 17 monitoring wells, including four bedrock wells, seven delineation wells, and six vertical gradient wells. The bedrock wells were designed to assess deeper groundwater at a greater distance from the Site. The delineation wells were to determine horizontal plume boundaries, and the vertical gradient wells were designed to characterize vertical contamination profiles paired with pre-existing shallower monitoring wells (Toeroek Team 2023). Ground water was not encountered at the proposed location of monitoring well MW-5; therefore, well installation was not completed at this location. Approximate locations of monitoring wells are depicted on Figure 2 in [Appendix A](#).

Groundwater samples were collected from the 17 newly-installed monitoring wells installed by the Toeroek Team in November 2022. [Table 1](#) summarizes information regarding the monitoring wells and VOCs concentrations from the November 2022 sampling event. Sampling data from the 2022 Phase II ESA are in Table B-4 and Table B-6 in [Appendix B](#).

TABLE 1

**GROUNDWATER SAMPLE SUMMARY, QUARTER 1 (NOVEMBER 2022)  
FORMER CLINTON ENGINES SITE, MAQUOKETA, IOWA**

Sample Identification	Screened Interval (ft bgs)	Measured Depth (ft btoc)	Depth to Water (ft btoc)	Top of Casing Elevation (ft amsl)	Groundwater Elevation (ft amsl)
<b>Vertical Gradient Wells</b>					
MW-1B	42-52	52.22	18.47	697.310	678.840
MW-2B	47-57	56.74	16.11	693.835	677.725
MW-3B	47-57	56.87	21.04	699.182	678.142
MW-4B	47-57	60.22*	28.69	702.532	673.842
MW-6B	41-51	53.74*	21.91	700.082	678.172
MW-6B-FD					
MW-8B	43-53	52.79	13.57	691.144	677.574
<b>Delineation Wells</b>					
MW-9	46-56	53.89	14.71	693.648	678.938
MW-10A	47-57	57.06	11.81	689.654	677.844
MW-10B	63-73	72.70	13.67	689.398	675.728
MW-10B-FD					
MW-11	40-50	52.83*	18.16	701.474	683.314
MW-12	35-45	44.60	6.39	684.200	677.810
MW-13	33-43	42.51	NA	680.000	NA
MW-14	50-60	60.34	11.69	679.283	667.593
<b>Bedrock Wells</b>					
MW-101	117-127	128.15	24.38	702.415	678.035
MW-102	125-135	136.79	63.54	744.429	680.889
MW-103	27-37	36.96	16.04	679.851	663.811
MW-104	77-87	85.78	17.39	684.785	667.395

Notes:

\* Monitoring wells MW-4B, MW-6B, and MW-11 have aboveground completions; remaining wells are flush-mount.

No well was installed in the boring advance for MW-5B because a deeper groundwater zone was not encountered.

amsl     Above mean sea level  
bgs       Below ground surface  
btoc      Below top of casing

FD        Field duplicate  
ft         Feet  
MW       Monitoring well

TCE and its common degradation products were detected in all on-site monitoring wells except MW-11, near the southeast corner of the Site. TCE concentrations exceeded the MCL in 11 of the on-site samples. In 7 of 11 samples, TCE concentrations also exceeded the IDNR SWS for a non-protected groundwater source. Typically, where TCE levels exceeded these benchmarks, concentrations of *cis*-1,2-DCE and VC also exceeded the benchmarks. The highest CVOC concentrations were detected in samples from on-site monitoring wells MW-8B, MW-10A, and MW-10B, and from the off-site monitoring well MW-12. Slightly lower concentrations were detected in MW-10B (screened from 63 to 73 feet bgs) than in MW-10A (screened from 47 to 57 feet bgs), suggesting the separating zone has not significantly retarded

downward migration. In addition, low levels of 1,1,1-TCA, 1,1,2-TCA, 1,1-dichloroethane (DCA), and tetrachloroethene (PCE) were detected in several on-site groundwater samples.

No VOCs were detected in samples from upgradient bedrock monitoring wells MW-101 and MW-102, west and south of the Site, respectively. MW-103 and MW-104, northeast and downgradient of the Site contained TCE and 1,2-DCE, but at concentrations below MCLs. At MW-104, bedrock was encountered at 71 feet bgs, and the well was screened from 77 to 87 feet bgs. In contrast, MW-103, approximately 1,500 feet to the east, encountered bedrock at 21 feet bgs and was screened from 27 to 37 feet bgs. The porous shallow bedrock is likely in lateral contact with contaminated groundwater in the sandy alluvial deposits.

Fuel-related VOCs (or constituents of petroleum solvents) were detected in nine samples, with benzene concentration exceeding the MCL in three samples (MW-1B, MW-8B, and MW-10A). No other concentrations of fuel-related VOCs exceeded an associated MCL, and none exceeded an IDNR SWS for non-protected groundwater.

The Toeroek Team collected soil-gas samples from borings adjacent to monitoring wells. VOCs were detected in all soil-gas samples. Detected TCE concentrations in soil-gas samples adjacent to monitoring wells MW-2B, MW-3B, MW-8B, MW-9, MW-10A/B, and MW-11 exceeded the EPA residential Vapor Intrusion Screening Level (VISL). Except for MW9-SG and MW10-SG, TCE concentrations also exceeded the commercial VISL. Soil-gas samples near monitoring wells in roadways were collected from the nearby easement. Numerous fuel-related VOCs were detected in the soil-gas samples; however, no concentration exceeded a VISL benchmark (Toeroek Team 2023).

### 3.0 PHASE II ENVIRONMENTAL SITE ASSESSMENT ACTIVITIES

The following subsections describe the scope, field exploration, and methods implemented during the Phase II ESA, Quarter 2 sampling event. From February 21 to 23, 2023, Toeroek Team members Thomas Kaley and Clay Weiss sampled 17 monitoring wells previously installed by the Toeroek Team in October and November 2022. Field activities were documented in a logbook ([Appendix C](#)).

#### 3.1 SCOPE OF THE ASSESSMENT

The Toeroek Team performed environmental sampling to determine if subsurface soils, groundwater, and soil gas are contaminated by historical activities at the Site. Sampling was consistent with the Quality Assurance Project Plan (QAPP) approved by EPA on July 28, 2022 (Toeroek Team 2022).

##### 3.1.1 Sampling Plan

The proposed sampling scheme for this project incorporated a combination of biased/judgmental sampling with definitive laboratory analysis, in accordance with procedures included in the *Guidance for Performing Site Inspections Under CERCLA* (Office of Solid Waste and Emergency Response [OSWER] Directive #9345.1-05, September 1992). The objective of groundwater sampling was to characterize possible releases to the environment. Figure 2 in [Appendix A](#) depicts sampling locations at the Site. One sample was collected at each of 17 permanent groundwater monitoring well locations: MW-1B, MW-2B, MW-3B, MW-4B, MW-6B, MW-8B, MW-9, MW-10A, MW-10B, MW-11, MW-12, MW-13, MW-14, MW-101, MW-102, MW-103, and MW-104. Of these, two samples were collected as field duplicate pairs—one from MW-3B (identified as MW-X on the chain-of-custody), and the other from MW-10B (identified as MW-Y on the chain of custody).

##### 3.1.2 Chemical Testing Plan

Laboratory analytes were selected based on contaminants commonly associated with current and historical uses of the Site and results from previous investigations. Samples were submitted to Pace Analytical (Pace) in Lenexa, Kansas, for VOC analysis via EPA Method 8260.

##### 3.1.3 Deviations from the QAPP

No deviations from the QAPP occurred during the Phase II ESA, Quarter 2 sampling event. In February 2023, the QAPP was amended to specify use of passive diffusion bags (PDBs) for future sampling events.

## 3.2 FIELD ACTIVITIES

Field activities were performed at the Site from February 21 through 23, 2023, and groundwater samples were submitted to Pace on February 24, 2023. The following subsections summarize groundwater sample collection activities. Sampling locations are depicted on Figure 2 in [Appendix A](#).

### 3.2.1 Groundwater Sampling

Groundwater samples were collected via low-flow sampling technique by use of bladder pumps. Samples were collected from the most downgradient or least contaminated monitoring wells first, as identified by the results of initial sampling. Depth to groundwater was measured at each sample location. Groundwater at the Site was encountered between 6 and 25 feet bgs.

Bladder pumps with dedicated sample tubing were lowered to the middle of the screened interval and connected to a flow controller, compressed air source, and a flow through cell. Groundwater was purged at a discharge rate of approximately 1 liter per minute (L/min). Purging continued until parameters had stabilized over three successive readings at 3- to 5-minute intervals. Stable parameters were defined as follows: pH  $\pm 0.1$ -unit, temperature  $\pm 1$  degrees Celsius ( $^{\circ}\text{C}$ ), specific conductance  $\pm 3$  percent, turbidity less than 10 nephelometric turbidity units (NTUs) or  $\pm 10$  percent if greater than 10 NTU, dissolved oxygen  $\pm 10$  percent if greater than 3 milligrams per liter (mg/L) or  $\pm 0.3$  mg/L if less than 3 mg/L, and oxidation-reduction potential  $\pm 10$  millivolts.

After completion of sampling at each location, each piece of sampling equipment that had encountered the groundwater sample, except for the dedicated polyethylene tubing, was decontaminated with a non-ionic detergent and tap water wash, followed by a tap water rinse. Disposal of the tubing after use occurred as solid waste. PDB samplers and tethers designed to hang at the middle of the screened interval were acquired from Eon Products, Inc., of Snellville, Georgia. Following collection of each groundwater sample, a PDB sampler was left in each monitoring well and suspended for collection during the Phase II ESA, Quarter 3 sampling event, in May 2023.

Groundwater samples were analyzed for low-level VOCs via EPA Method 8260. Samples were collected into three 40-milliliter vials preserved with hydrochloric acid. [Table 2](#) summarizes groundwater samples collected during the Phase II ESA, Quarter 2 sampling event.



**TABLE 2**

**GROUNDWATER LEVEL AND SAMPLE SUMMARY, QUARTER 2 (FEBRUARY 2023)  
FORMER CLINTON ENGINES SITE, MAQUOKETA, IOWA**

Location ID(s)	Depth to Groundwater (ft btoc)	Static Water Level (ft amsl)
<b>Vertical Gradient Wells</b>		
MW-1B	18.84	678.840
MW-2B	15.13	677.725
MW-3B	21.08	678.102
MW-3B duplicate (MW-X)		
MW-4B	16.79	685.742
MW-6B	21.98	678.102
MW-8B	13.67	677.474
<b>Delineation Wells</b>		
MW-9	15.03	678.618
MW-10A	12.27	677.384
MW-10B	13.96	675.438
MW-10B duplicate (MW-Y)		
MW-11	16.70	684.774
MW-12	6.49	677.710
MW-13	8.88	671.120
MW-14	11.32	667.963
<b>Bedrock Wells</b>		
MW-101	24.84	673.935
MW-102	64.20	680.229
MW-103	16.49	663.361
MW-104	17.82	666.965

Notes:

EPA     U.S. Environmental Protection Agency  
ft amsl   Feet above mean sea level  
ft btoc   Feet below top of casing  
ID       Identification  
MW      Monitoring well

### 3.2.2 Quality Control Sampling

Field quality control (QC) samples for this investigation included one laboratory-supplied aqueous trip blank, one field blank, and two groundwater field duplicates collected at MW-3B and MW-10B. Pace analyzed the QC samples for VOCs. Analytical data from the field blanks were used to evaluate contamination of sampling containers or sample preservatives, and assess contamination potentially introduced during sampling and laboratory procedures. Two groundwater field duplicates were collected to determine total method precision. Analytical results from field duplicate samples were used to calculate relative percent differences (RPDs) between paired results for each reported analyte. The RPDs served informational purposes only; however, the higher concentration of each analyte in the duplicate sample pair was compared to the associated screening level. Analytical accuracy was determined via analysis of

laboratory-prepared spikes and duplicates. Calculated RPDs are discussed with the applicable data validation report in [Appendix D](#).

## 4.0 EVALUATION AND PRESENTATION OF RESULTS

The following subsections present analytical data from groundwater samples collected during the Phase II ESA, Quarter 2 sampling event. Sample results from this ESA were compared to EPA MCLs (EPA 2023) and to IDNR SWSs for Non-Protected Groundwater (IDNR 2023). IDNR SWSs for Protected Groundwater are EPA MCLs. Copies of analytical data packages and data validation reports are in [Appendix D](#).

### 4.1 GROUNDWATER SAMPLES

Groundwater samples were collected from 17 monitoring wells installed by the Toeroek Team in October and November 2022. Two duplicate pairs were collected. Samples were submitted to Pace for analyses for VOCs. The contaminants are listed in [Table 3](#) in the following order: miscellaneous VOCs, Site-related CVOCs, and fuel-related VOCs. CVOCs are followed by their common degradation products. The gasoline additive methyl tert-butyl ether (MTBE) was detected only in the duplicate collected at MW-10B and is listed right of the fuel-related VOCs.

The following groundwater samples contained concentrations of VOCs exceeding one or more regulatory benchmarks:

- Carbon tetrachloride was detected at a concentration exceeding the EPA MCL of 5 µg/L in the sample from MW-3B.
- PCE was detected at a concentration exceeding the EPA MCL of 5 µg/L in samples from MW-3B and the MW-3B duplicate (MW-X).
- TCE was detected at concentrations exceeding the EPA MCL of 5 µg/L and the IDNR SWS for non-protected groundwater of 76 µg/L in samples from MW-2B, MW-3B, MW-8, MW-9, MW-10A, MW-10B, and MW-12. Concentration of TCE in MW-6B exceeded only the EPA MCL of 5 µg/L.
- *cis*-1,2-DCE was detected at concentrations exceeding the EPA MCL of 70 µg/L and the IDNR SWS for non-protected groundwater of 350 µg/L in samples from MW-1B, MW-2B, MW-3B, MW-8B, MW-10A, MW-10B, and MW-12. Concentrations of *cis*-1,2-DCE in samples MW-9 and MW-14 exceeded only the EPA MCL of 70 µg/L.
- *trans*-1,2-DCE was detected at concentrations exceeding the EPA MCL of 100 µg/L and the IDNR SWS for non-protected groundwater of 700 µg/L in the sample from MW-8B. Concentration of *trans*-1,2-DCE in MW-12 exceeded only the EPA MCL of 100 µg/L.

- VC was detected at concentrations exceeding the EPA MCL of 2 µg/L and the IDNR SWS for non-protected groundwater of 10 µg/L in samples from MW-1B, MW-2B, MW-3B, MW-8B, MW-10A, MW-10B, and MW-12. Concentration of VC in sample MW-13 exceeded only the EPA MCL of 2 µg/L.
- Benzene was detected at a concentration exceeding the EPA MCL of 5 µg/L in the sample from MW-8B.

No other chemical of concern was detected at a concentration exceeding a regulatory benchmark in any other well. [Table 3](#) below lists all VOC detections in groundwater. Figure 3 in [Appendix A](#) shows VOC exceedances of IDNR SWSs or EPA MCLs or RSLs in groundwater.

TABLE 3

DETECTED VOC RESULTS FROM GROUNDWATER SAMPLES, QUARTER 2 (FEBRUARY 2023)  
 FORMER CLINTON ENGINES SITE, MAQUOKETA, IOWA

Sample Identification	Screened Interval (ft bgs)	Carbon Tetrachloride	Chloroform	Chloromethane	1,1,1-Trichloroethane	1, 1, 2-Trichloroethane	1,1,1,2-Tetrachloroethane	PCE	TCE	1,1-Dichloroethane	1,1-DCE	1,2-DCE (Total)	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride	Chloroethane	Benzene	Sec-Butylbenzene	Methyl-Tert-Butyl-Ether (MTBE)
		EPA MCL or EPA RSL (TR=1E-6, THQ=0.1) Tap water																	
		5	80*	19	200	5	0.57	5	5	2.8	7	NE	70	100	2	NE	5	200	14**
		IDNR SWSs for Non-Protected Groundwater																	
		50	400	NE	70,000	61	350	1,700	76	700	180	NE	350	700	10	14,000	64	NE	1000
Vertical Gradient Wells																			
MW-1B	42-52	ND	ND	ND	ND	ND	ND	ND	2.2 J	ND	ND	365	362	3.8 J	126	11.4	3.6 J	ND	ND
MW-2B	47-57	ND	ND	ND	ND	ND	ND	ND	2,180	ND	ND	997	945	52.0	57.2	ND	ND	ND	ND
MW-3B	47-57	29.4	19.5	ND	ND	ND	ND	7.7 J	715	ND	ND	650	624	25.8	30.5	ND	2.9 J	ND	ND
MW-3B duplicate (MW-X)		36.7	20.7	ND	ND	ND	ND	10.3	582	ND	0.96 J	479	479	16.5 J	35.0	ND	2.9	ND	ND
MW-4B	47-57	ND	ND	0.31 J	ND	ND	ND	ND	1.5	ND	ND	ND	ND	0.15 J	ND	ND	ND	ND	ND
MW-6B	41-51	ND	ND	ND	ND	ND	ND	ND	7.0	ND	ND	ND	ND	0.14 J	ND	ND	ND	ND	ND
MW-8B	43-53	ND	ND	ND	ND	ND	ND	ND	7,700	ND	ND	10,700	9,880	834	258	ND	21.9 J	ND	ND
Delineation Wells																			
MW-9	46-56	ND	0.31 J	ND	2.5	0.18 J	0.16 J	0.44 J	1,270	ND	0.75 J	116	114	1.5	0.50 J	ND	ND	ND	ND
MW-10A	47-57	ND	ND	ND	ND	ND	ND	ND	7,830	ND	ND	2,410	2,390	24.9 J	134	ND	ND	ND	ND
MW-10B	63-73	ND	ND	ND	ND	ND	ND	ND	3,670		ND	978	970	8.3 J	49.4 J	ND	ND	ND	ND
MW-10B duplicate (MW-Y)		1.3	ND	4.2	1.9	0.41 J	ND	1.5	3,640	0.87 J	5.2	973	973	ND	49.4	0.95 J	2.8	0.15 J	0.49 J
MW-11	40-50	ND	ND	ND	ND	ND	ND	ND	0.30 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-12	35-45	ND	ND	ND	ND	ND	ND	ND	4,060	ND	ND	1,370	702	668	20.2 J	ND	ND	ND	ND
MW-13	33-43	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.8	2.8	ND	2.9	ND	ND	ND	ND
MW-14	50-60	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	89.4	72.0	17.4	1.8	ND	0.24 J	ND	ND
Bedrock Wells																			
MW-101	117-127	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-102	125-135	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-103	27-37	ND	ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-104	77-87	ND	ND	ND	ND	ND	ND	ND	0.90 J	ND	ND	0.83 J	0.54 J	0.29 J	ND	ND	ND	ND	ND

Notes:  
 All values are in micrograms per liter (µg/L).  
 \* MCL for total trihalomethanes.  
 \*\* RSL for tap water is listed  
 Bold font indicates a value exceeds the MCL or RSL.  
 Shading indicates a value exceeds the IDNR SWS for non-protected groundwater.

EPA	U.S. Environmental Protection Agency	J	Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit	PCE	Tetrachloroethene
DCE	Dichloroethene	MCL	Maximum Contaminant Level	SWS	Statewide Standard
ft bgs	Feet below ground surface	MW	Monitoring well	TCE	Trichloroethene
IDNR	Iowa Department of Natural Resources	NE	Not established	VOC	Volatile organic compound

## 4.2 QUALITY CONTROL SAMPLES

Pace analyzed QC samples for VOCs. No VOCs were detected in the trip blank or the field blank.

Calculated RPDs between data from the duplicate pair from MW-3B indicated poor precision of 1,2-DCE (total), carbon tetrachloride, TCE, and *cis*-1,2-DCE, resulting in estimated values. Duplicate results for all other analytes were within acceptance limits, rendering those data reliable.

## 5.0 DISCUSSION OF SIGNIFICANT FINDINGS AND CONCLUSIONS

This section summarizes significant findings and offers conclusions regarding the Phase II ESA, Quarter 2 sampling event.

CVOCs are known to have impacted groundwater at the Site and were detected in all on-site groundwater samples. CVOCs were detected in off-site groundwater samples from all except upgradient bedrock monitoring wells MW-101 and MW-102. TCE and its degradation products were detected at concentrations exceeding the IDNR SWS for non-protected groundwater in on-site monitoring wells MW-2B, MW-3B, MW-8B, MW-9, MW-10A, and MW-10B, and off-site monitoring well MW-12. On-site monitoring well MW-6B and off-site monitoring well MW-14 had CVOC concentrations exceeding the MCL, but not the IDNR SWS for non-protected groundwater (protected groundwater SWSs are MCLs, if established). The sample from MW-10B contained a low concentration of MTBE, an oxygenate in unleaded gasoline.

The following groundwater samples contained concentrations of VOCs that exceeded a regulatory benchmark:

- Carbon tetrachloride exceeded the EPA MCL in the sample from samples MW-3B.
- PCE was detected at a concentration exceeding the EPA MCL of 5 µg/L in samples from MW-3B and the MW-3B duplicate (MW-X).
- TCE exceeded the MCL and SWS in samples from MW-2B, MW-3B, MW-8, MW-9, MW-10A, MW-10B, and MW-12 and the MCL only in the sample from MW-6B.
- *cis*-1,2-DCE exceeded the MCL and IDNR SWS in samples from MW-1B, MW-2B, MW-3B, MW-8B, MW-10A, MW-10B, and MW-12 and the MCL only in samples from MW-9 and MW-14.
- *trans*-1,2-DCE exceeded the MCL and IDNR SWS in the sample from MW-8B and the MCL only in the sample from MW-12.
- VC exceeded the MCL and the IDNR SWS in samples from MW-1B, MW-2B, MW-3B, MW-8B, MW-10A, MW-10B, and MW-12 and the MCL only in the sample from MW-13.
- Benzene exceeded the MCL in the sample from MW-8B.

No other chemical of concern was detected at a concentration exceeding a regulatory benchmark.

## 6.0 REFERENCES

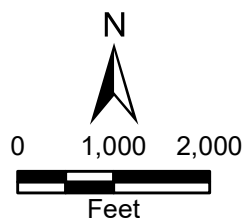
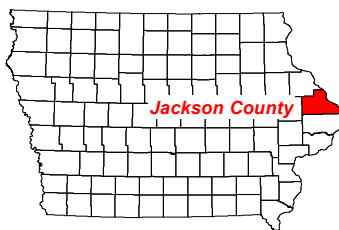
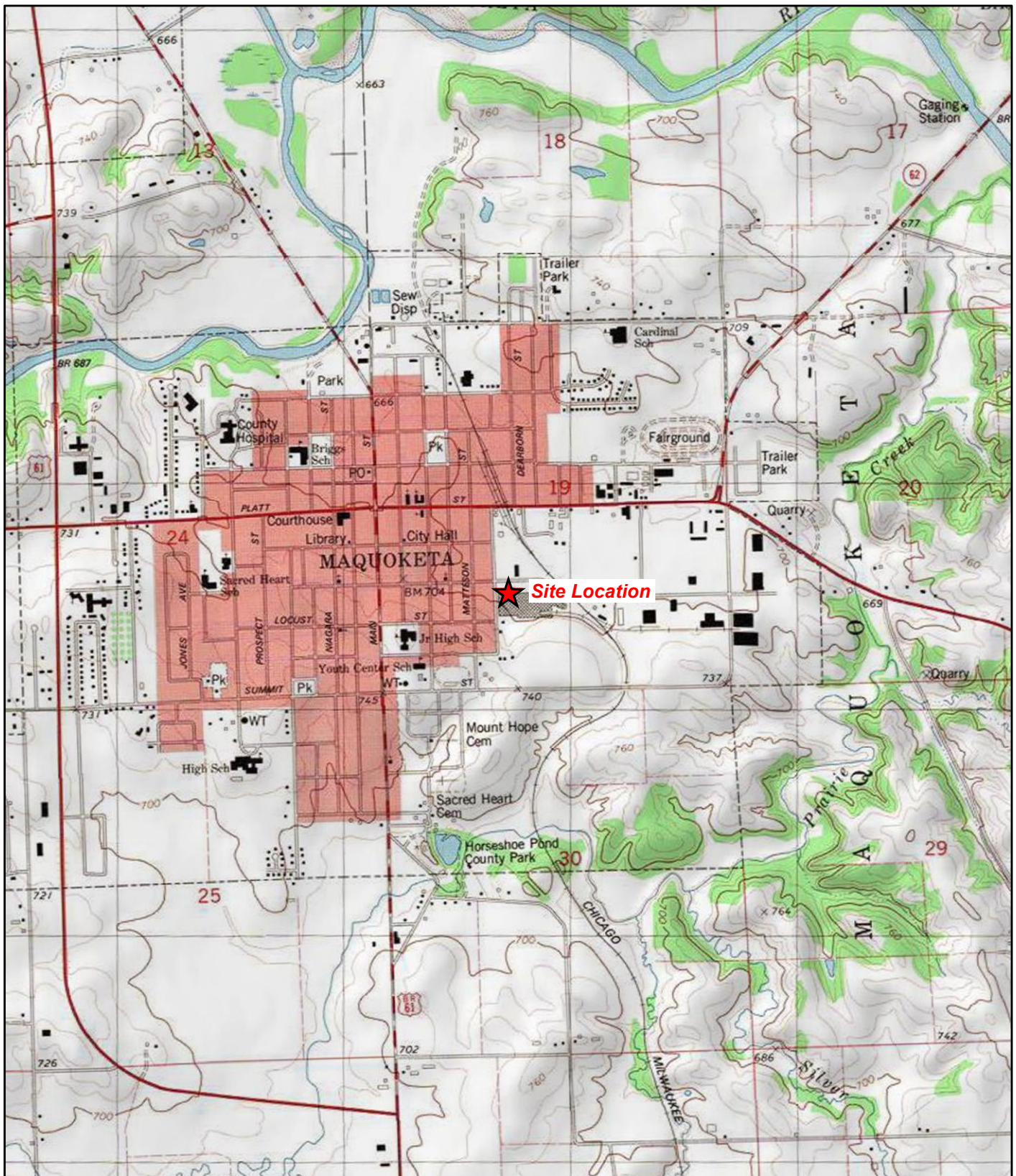
- Beacon. 2022. Jackson County, Iowa Assessor Parcel Interactive Map.  
<https://beacon.schneidercorp.com/Application.aspx?AppID=80&LayerID=723&PageTypeID=1&PageID=938>
- City of Maquoketa (City). 2007. Land Recycling Program Enrollment Application. November 27.
- City of Maquoketa & Alliance Water, Iowa Rural Water Association. 2014. Source Water Protection Plan, Maquoketa Public Works # 2537001. April 4.
- Historic Aerials. 2023. <https://www.historicaerials.com/>
- Impact7G, Inc. (Impact7G). 2013. Site Assessment Report Former Clinton Engines. June 21.
- Impact7G, Inc. (Impact7G). 2014. Site Assessment Report Former Clinton Engines. October 1.
- Impact7G, Inc. (Impact7G). 2019. Supplemental Phase II Environmental Site Assessment. Former Clinton Engines Site. 605 East Maple Street, Maquoketa Iowa. Prepared for the City of Maquoketa. July 30.
- Iowa Department of Natural Resources (IDNR). 1998. Bedrock Geology of Northeastern Iowa. August.
- Iowa Department of Natural Resources (IDNR). 2005a. Letter regarding Clinton Engines in Maquoketa, Iowa. From Jessica R. Montana, IDNR Contaminated Sites Environmental Specialist. To Brian Wagner, City of Maquoketa. May 23.
- Iowa Department of Natural Resources (IDNR). 2005b. Initial Site Screening Report. Site ID: 174. Site Name: Clinton Engines. June 2.
- Iowa Department of Natural Resources (IDNR). 2014. Letter regarding Site Assessment Report for the Former Clinton Engines site in Maquoketa, Iowa. From Greg Fuhrmann, IDNR Land Recycling Program Coordinator. To Brian Wagner, City Manager, City of Maquoketa. December 16.
- Iowa Department of Natural Resources (IDNR). 2020. Letter regarding Clinton Engines in Maquoketa, Iowa. From Amie Davidson, IDNR Land Quality Bureau Chief. To Ken Buchholz, U.S. Environmental Protection Agency (EPA) Assessment, Emergency Response & Removal Branch. February 17.
- Iowa Department of Natural Resources (IDNR). 2023. Cumulative Risk Calculator, Statewide Standards.  
<https://programs.iowadnr.gov/riskcalc/home/statewidestandards>
- Iowa Geological Survey (IGS). 2022a. Landforms. <https://iowageologicalsurvey.org/landforms/>
- Iowa Geological Survey (IGS). 2022b. GeoSam online interactive map.  
<https://www.iuhr.uiowa.edu/igs/geosam/home>
- Ludvigson, Greg A., E. Arthur Bettis III, and Curtis M. Hudak. 1992. *Quaternary Drainage Evolution of the Maquoketa River Valley*. Geological Society of Iowa, Guidebook 56. November 21.



- Missman, Stanley & Associates, P.C. (MSA). 1999. Phase I/ Phase II Environmental Assessment. Clinton Engines Property. 605 East Maple Street, Maquoketa Iowa. Prepared for the City of Maquoketa. October 15.
- National Park Service. 2006. National Register of Historic Places Registration Form. The Maquoketa Company – Clinton Machine Company Administration Building.  
<https://npgallery.nps.gov/NRHP/AssetDetail/4f5e50b9-2e05-47a8-8a91-d4f698faae0>
- Tetra Tech, Inc. (Tetra Tech). 2021. Integrated Assessment: Preliminary Assessment/Site Inspection (PA/SI) and Removal Site Evaluation Report. TCE Clinton Engines Sites. Maquoketa, Iowa. April.
- Toeroek Associates, Inc. and Tetra Tech, Inc. (Toeroek Team). 2022. Quality Assurance Project Plan for a Phase II Environmental Site Assessment, Former Clinton Engines Site. July 28.
- Toeroek Associates, Inc. and Tetra Tech, Inc. (Toeroek Team). 2023. Targeted Brownfields Assessment. Phase II Environmental Site Assessment, Former Clinton Engines Site. February 22.
- U.S. Department of Agriculture (USDA). 2022. Web Soil Survey.  
<https://websoilsurvey.nrcs.usda.gov/app/>
- U.S. Environmental Protection Agency (EPA). 2023. Regional Screening Levels. November.  
<https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables>
- U.S. Geological Survey (USGS), Iowa Geologic Survey (IGS). 1978. Water Resources of East-Central Iowa. Iowa Geological Survey Water Atlas Number 6.
- U.S. Geological Survey (USGS). 1980. Maquoketa, Iowa, Quadrangle Map. 7.5-Minute Topographic Series.

## **APPENDIX A**

### **FIGURES**



Former Clinton Engines  
605 and 607 East Maple Street  
Maquoketa, Jackson County, Iowa

**Figure 1**  
Site Location Map



Source: Maquoketa, Iowa USGS 7.5 Minute Topo Quad, 1980

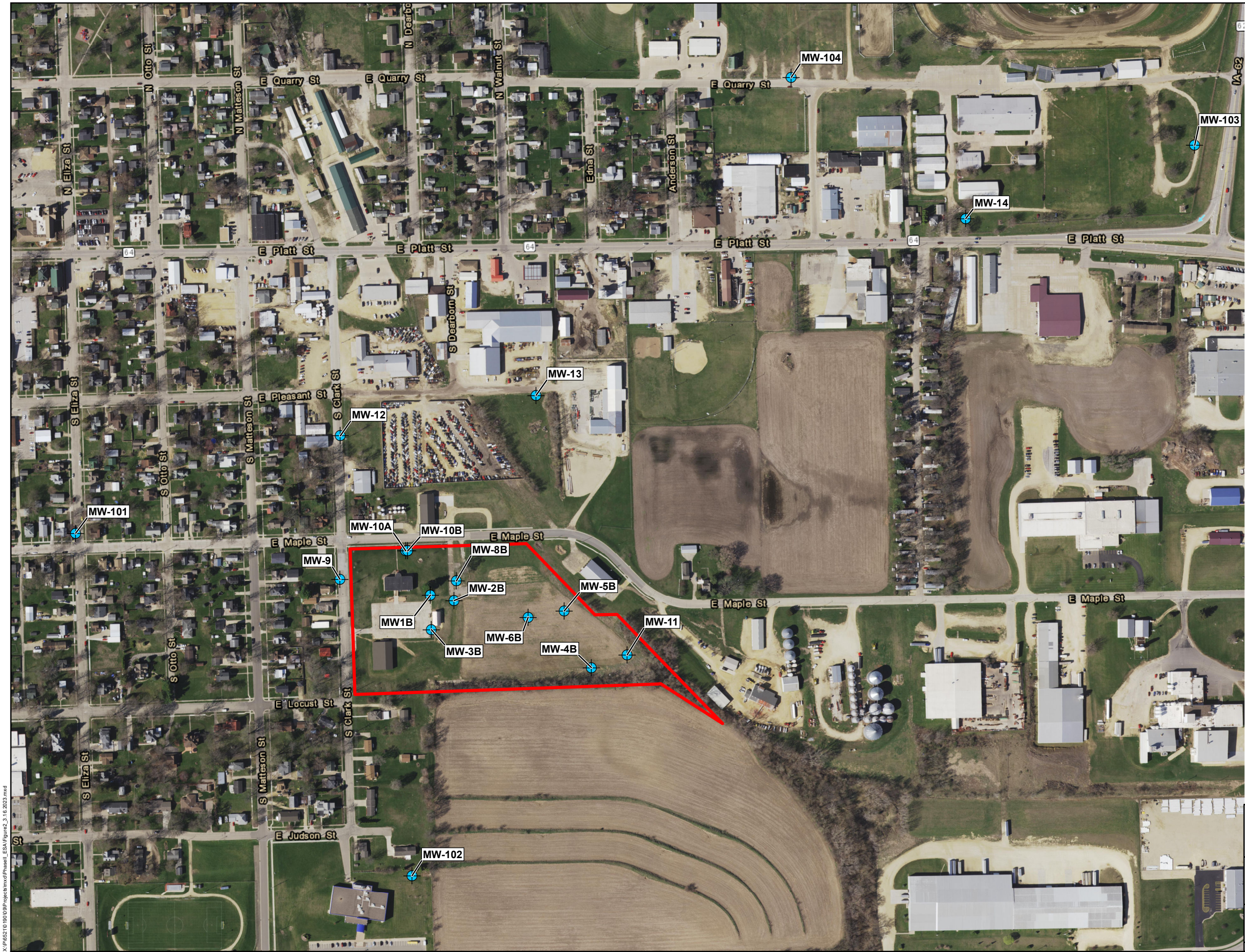
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Drawn By: Nick Wiederholt

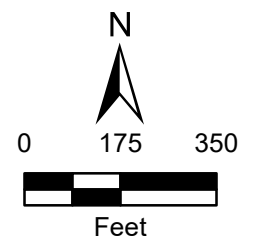
Project No: 103G6521.0190.09.03

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- Legend
- Monitoring well sample location
  - Approximate site boundary



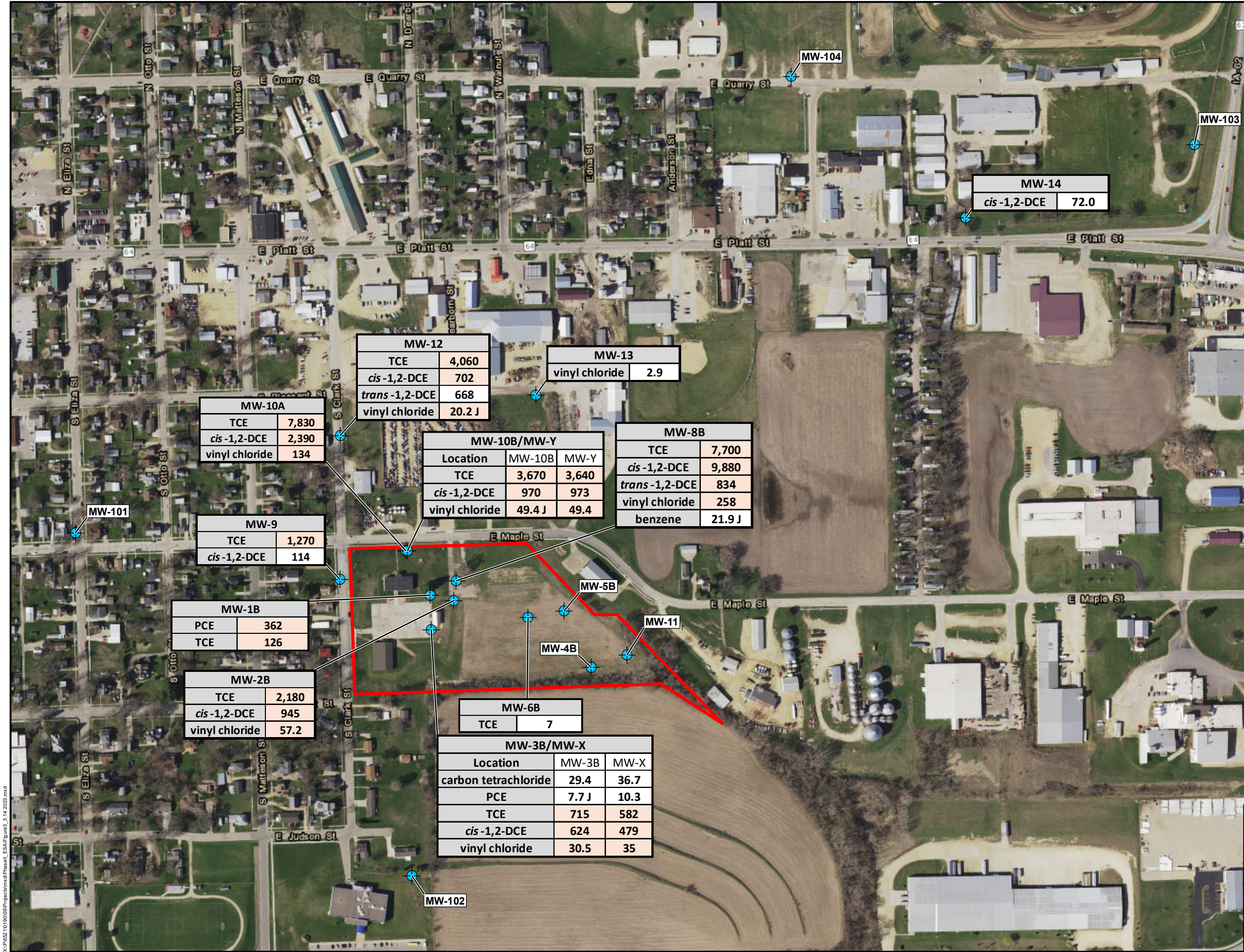
Source: Iowa State University GIS Support and Research Facility,  
Iowa Geographic Map Server, Aerial Imagery, 2016 - 2018

Former Clinton Engines  
605 and 607 East Maple Street  
Maquoketa, Jackson County, Iowa

**Figure 2**  
Quarter 2 Sampling Locations



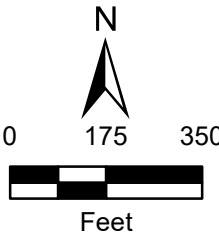




- Legend
- Monitoring well sample location
  - Approximate site boundary

**Notes:**  
EPA: U.S. Environmental Protection Agency  
IDNR: Iowa Department of Natural Resources  
J: Estimated concentration  
MCL: Maximum Contaminant Level  
MW: Monitoring well  
PCE: Tetrachloroethene  
SWS: Statewide Standards  
TCE: Trichloroethene  
VOC: Volatile organic compound  
µg/L: Micrograms per liter  
EPA MCL for PCE and TCE is 5 µg/L.  
IDNR SWS for PCE is 1,700 µg/L.  
IDNR SWS for TCE is 76 µg/L.  
EPA MCL for benzene is 5 µg/L.  
IDNR SWS for benzene is 64 µg/L.  
EPA MCL for cis-1,2-DCE is 70 µg/L.  
IDNR SWS for cis-1,2-DCE is 350 µg/L.  
EPA MCL for trans-1,2-DCE is 100 µg/L.  
IDNR SWS for trans-1,2-DCE is 700 µg/L.  
EPA MCL for carbon tetrachloride is 5 µg/L.  
IDNR SWS for carbon tetrachloride is 50 µg/L.  
EPA MCL for vinyl chloride is 2 µg/L.  
IDNR SWS for vinyl chloride is 10 µg/L.

Bold font indicates a value exceeds the MCL.  
Shading indicates a value exceeds the Iowa Statewide Standard for non-protected groundwater.



Source: Iowa State University GIS Support and Research Facility,  
Iowa Geographic Map Server, Aerial Imagery, 2016 - 2018

Former Clinton Engines  
605 and 607 East Maple Street  
Maquoketa, Jackson County, Iowa

**Figure 3**  
VOC Exceedances in Groundwater





**APPENDIX B**

**HISTORICAL DATA TABLES**

TABLE B-1: HISTORICAL GROUNDWATER SAMPLE RESULTS

Location	Depth	Sample Date	1,1,1-TCA	1,1-DCA	1,1,2-TCA	PCE	TCE	1,1-DCE	cis -1,2-DCE	trans -1,2-DCE	VC	Chloroethane	Benzene	Toluene	Ethylbenzene	Xylenes
			Concentration (µg/L)													
Missman, Stanley & Associates - 1999 Phase II - Test America Data																
B1	5-15	9/23/1999	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<2	<2	<2	<2
B2	5-15	9/23/1999	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
B3	5-15	9/23/1999	<10	<10	<10	<10	170	14.7	1,940	14.5	494	<40	56	72.5	246	382
B6	5-15	9/24/1999	<500	<500	<500	<500	<500	<1,000	<500	<500	<500	<2,000	<200	673,000	<500	<1,500
B-9	15-25	9/24/1999	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<4	5.8	<4	<6
Forest Road Consulting 2006 - TestAmerica Data																
MW-10	~14-20	6/8/2006	ND	ND	ND	ND	524	ND	776	13.1	147	ND	95.6	3,000	94.6	249
MW-11	~12-20		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-12	~11-20	6/8/2006	ND	ND	ND	ND	15.5	ND	32.4	ND	<1	ND	3.24	368	2.26	79.7
MW-13	~20-25		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-14	~11-18	6/8/2006	ND	ND	ND	ND	79.9	ND	84.3	1.46	3.37	ND	0.56	2.57	ND	ND
MW-15	~13-20	6/8/2006	ND	ND	ND	ND	261	ND	181	4.11	5.34	ND	<0.5	1.37	ND	ND
MW-16	~12-20	6/8/2006	ND	ND	ND	ND	342	ND	52.3	1.11	<1	ND	<0.5	ND	ND	ND
MW-17	~16-20	6/8/2006	ND	ND	ND	ND	44.8	ND	6.08	ND	<1	ND	<0.5	31.1	ND	ND
Impact 7G 2013 "Existing Wells" - TestAmerica Data																
MW-1		4/25/2013	ND	ND	1.37	ND	7.5	7.38	8,380	90	673	5.34	59	112	27	ND
MW-2		4/25/2013	ND	ND	ND	ND	5,160	ND	45,900	ND	2,340	ND	231	125,000	453	1,860
MW-3		4/25/2013	ND	ND	ND	ND	6.64	ND	2.05	ND	ND	ND	ND	44.1	ND	3.36
MW-4		4/25/2013	ND	ND	ND	1.58	8,000	ND	1,090	7.58	ND	ND	0.519	ND	ND	ND
MW-5		4/25/2013	ND	ND	ND	ND	20.3	ND	37	ND	2.23	ND	ND	4.75	ND	ND
MW-6		4/25/2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.34	ND	ND
MW-8		4/25/2013	ND	ND	ND	ND	5.12	ND	15	ND	ND	ND	ND	ND	ND	ND
Impact 7G 2019 Supplemental Phase II - TestAmerica Data																
MW-1		5/22/2019	ND	ND	ND	ND	ND	ND	2.22	ND	ND	ND	0.706	1.03	9.23	ND
MW-1FD		5/22/2019	ND	ND	ND	ND	ND	ND	1.88	ND	ND	ND	0.799	1.26	11.9	ND
MW-2R	5-30	5/22/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	247,000	ND	ND
MW-4		5/16/2019	ND	ND	ND	ND	358	ND	4,000	ND	91.2	ND	ND	ND	ND	ND
MW-5		5/16/2019	ND	ND	ND	ND	6.64	ND	3.63	ND	ND	ND	ND	ND	ND	ND
MW-6		5/16/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-7R	20-35	5/22/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-8		5/22/2019	ND	ND	ND	ND	ND	ND	41.8	ND	ND	ND	ND	135	ND	ND
Impact 7G April 2013 Direct-push Technology (DPT) Groundwater - Below Ground Surface (BGS) Mobile Laboratory Results																
BH-3	28-32	NS	NS	NS	NS	NS	4,258	NS	6,893	ND	163	NS	ND	ND	ND	ND
	40-44	NS	NS	NS	NS	NS	1,643	NS	6,357	ND	106	NS	ND	ND	ND	ND
	50-54	NS	NS	NS	NS	NS	1,439	NS	6,743	ND	113	NS	ND	ND	ND	ND
	60-64	NS	NS	NS	NS	NS	1,817	NS	6,636	ND	112	NS	ND	ND	ND	ND
	70-74	NS	NS	NS	NS	NS	3,705	NS	4,244	ND	98.9	NS	ND	ND	ND	ND
BH-4	28-32	NS	NS	NS	NS	NS	59.5	NS	46.6	ND	2.6	NS	ND	11.1	ND	ND
	40-44	NS	NS	NS	NS	NS	689	NS	949	ND	57.2	NS	ND	26.8	ND	ND
	50-54	NS	NS	NS	NS	NS	272	NS	1,090	ND	40.9	NS	ND	118	ND	ND
	60-64	NS	NS	NS	NS	NS	111	NS	850	ND	51.6	NS	18,300	291	ND	ND
BH-6	28-32	NS	NS	NS	NS	NS	ND	NS	ND	ND	ND	NS	ND	ND	ND	ND
	36-40	NS	NS	NS	NS	NS	ND	NS	ND	ND	ND	NS	ND	ND	ND	ND
BH-7	28-32	NS	NS	NS	NS	NS	3,281	NS	194	ND	ND	NS	ND	ND	ND	ND
	38-42	NS	NS	NS	NS	NS	1,900	NS	47.1	ND	ND	NS	ND	ND	ND	ND
	48-52	NS	NS	NS	NS	NS	1,009	NS	125	ND	ND	NS	ND	ND	ND	ND
	58-62	NS	NS	NS	NS	NS	1,183	NS	479	ND	ND	NS	ND	ND	ND	ND
BH-8	28-32	NS	NS	NS	NS	NS	49.2	NS	ND	ND	ND	NS	ND	ND	ND	ND
	38-42	NS	NS	NS	NS	NS	10.2	NS	ND	ND	ND	NS	ND	ND	ND	ND
	48-52	NS	NS	NS	NS	NS	9.5	NS	ND	ND	ND	NS	ND	ND	ND	ND
	58-62	NS	NS	NS	NS	NS	16.8	NS	ND	ND	ND	NS	ND	ND	ND	ND
BH-9	28-32	NS	NS	NS	NS	NS	139	NS	153	49.9	ND	NS	ND	ND	ND	ND
	36-40	NS	NS	NS	NS	NS	142	NS	117	32.5	ND	NS	ND	ND	ND	ND
BH-10	28-32	NS	NS	NS	NS	NS	63.5	NS	273	66.5	ND	NS	ND	ND	ND	ND
	38-42	NS	NS	NS	NS	NS	22.4	NS	69.2	75.9	ND	NS	ND	ND	ND	ND
	46-50	NS	NS	NS	NS	NS	15.9	NS	73.2	79.5	ND	NS	ND	ND	ND	ND

TABLE B-1: HISTORICAL GROUNDWATER SAMPLE RESULTS

Location	Depth	Sample Date	1,1,1-TCA	1,1-DCA	1,1,2-TCA	PCE	TCE	1,1-DCE	cis -1,2-DCE	trans -1,2-DCE	VC	Chloroethane	Benzene	Toluene	Ethylbenzene	Xylenes
			Concentration (µg/L)													
BH-11	28-32	NS	NS	NS	NS	NS	7,825	NS	595	94.6	19.5	NS	ND	ND	ND	ND
	38-42	NS	NS	NS	NS	NS	8,687	NS	954	ND	26.1	NS	ND	ND	ND	ND
	48-52	NS	NS	NS	NS	NS	5,278	NS	216	74.4	ND	NS	ND	ND	ND	ND
	58-62	NS	NS	NS	NS	NS	462	NS	52.7	44.2	ND	NS	ND	ND	ND	ND
BH-12	28-32	NS	NS	NS	NS	NS	288	NS	622	552	ND	NS	ND	ND	ND	ND
	38-42	NS	NS	NS	NS	NS	840	NS	1,457	1,044	14.6	NS	ND	ND	ND	ND
	48-52	NS	NS	NS	NS	NS	2,147	NS	1,221	115	23.3	NS	ND	ND	ND	ND
	58-62	NS	NS	NS	NS	NS	2,525	NS	2,487	435	34	NS	ND	ND	ND	ND
BH-13	28-32	NS	NS	NS	NS	NS	23.0	NS	255	164	10.6	NS	ND	ND	ND	ND
	38-42	NS	NS	NS	NS	NS	28.7	NS	425	216	10.8	NS	ND	ND	ND	ND
	48-52	NS	NS	NS	NS	NS	32.7	NS	755	324	18.4	NS	ND	ND	ND	ND
	58-62	NS	NS	NS	NS	NS	6.5	NS	61.6	24.4	9.1	NS	ND	ND	ND	ND
BH-14	28-32	NS	NS	NS	NS	NS	320	NS	153	17.8	ND	NS	ND	ND	ND	ND
	38-42	NS	NS	NS	NS	NS	627	NS	248	37.5	8.4	NS	ND	ND	ND	ND
	48-52	NS	NS	NS	NS	NS	791	NS	400	68.8	16.6	NS	ND	ND	ND	ND
	58-62	NS	NS	NS	NS	NS	3,694	NS	912	73.8	ND	NS	ND	ND	ND	ND
BH-15	28-32	NS	NS	NS	NS	NS	10.2	NS	10.5	8.9	ND	NS	ND	ND	ND	ND
	38-42	NS	NS	NS	NS	NS	7.4	NS	10.4	7.2	ND	NS	ND	ND	ND	ND
	48-52	NS	NS	NS	NS	NS	74.2	NS	50.2	49.8	ND	NS	ND	ND	ND	ND
	58-62	NS	NS	NS	NS	NS	158	NS	55.2	75.2	ND	NS	ND	ND	ND	ND
BH-16	28-32	NS	NS	NS	NS	NS	28.6	NS	143	83.9	ND	NS	ND	ND	ND	ND
	38-42	NS	NS	NS	NS	NS	8.7	NS	419	77.7	2.7	NS	ND	ND	ND	ND
	48-52	NS	NS	NS	NS	NS	93.8	NS	284	83.6	4.5	NS	ND	ND	ND	ND
April 2014 Impact 7G DPT Groundwater - BGS Mobile Laboratory Results																
BH-17	41.5	NS	NS	NS	NS	NS	51.1	ND	36.9	ND	ND	NS	NS	NS	NS	NS
	51.5	NS	NS	NS	NS	NS	83	ND	45.9	ND	ND	NS	NS	NS	NS	NS
	61.5	NS	NS	NS	NS	NS	104	ND	47.5	ND	ND	NS	NS	NS	NS	NS
	71.5	NS	NS	NS	NS	NS	142	ND	51.1	ND	ND	NS	NS	NS	NS	NS
BH-18	30	NS	NS	NS	NS	NS	84.3	ND	16.1	ND	ND	NS	NS	NS	NS	NS
	30FD	NS	NS	NS	NS	NS	79.8	ND	15.4	ND	ND	NS	NS	NS	NS	NS
BH-19	35	NS	NS	NS	NS	NS	835	ND	230	13.8	7.4	NS	NS	NS	NS	NS
	45	NS	NS	NS	NS	NS	16.4	ND	132	24.7	ND	NS	NS	NS	NS	NS
	55	NS	NS	NS	NS	NS	102	ND	211	63.8	5.7	NS	NS	NS	NS	NS
BH-19TD (Sampled from top down)	35	NS	NS	NS	NS	NS	897	ND	243	10.5	9.4	NS	NS	NS	NS	NS
	45	NS	NS	NS	NS	NS	15.6	ND	140	26	ND	NS	NS	NS	NS	NS
	55	NS	NS	NS	NS	NS	79.8	ND	161	42.4	6.8	NS	NS	NS	NS	NS
BH-20	20	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	NS	NS
BH-21	21	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	NS	NS
BH-24	35	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	NS	NS
BH-26	37	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	NS	NS
	47	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	NS	NS
BH-28	34	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	NS	NS
	44	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	NS	NS
BH-30	29	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	NS	NS
	39	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	NS	NS
BH-32	29	NS	NS	NS	NS	NS	24.3	ND	15.9	ND	ND	NS	NS	NS	NS	NS
	29FD	NS	NS	NS	NS	NS	22.5	ND	15.3	ND	ND	NS	NS	NS	NS	NS
	39	NS	NS	NS	NS	NS	108	ND	121	12.8	ND	NS	NS	NS	NS	NS
	49	NS	NS	NS	NS	NS	255	ND	300	77.1	ND	NS	NS	NS	NS	NS
	59	NS	NS	NS	NS	NS	191	ND	331	63.4	ND	NS	NS	NS	NS	NS



TABLE B-1: HISTORICAL GROUNDWATER SAMPLE RESULTS

Location	Depth	Sample Date	1,1,1-TCA	1,1-DCA	1,1,2-TCA	PCE	TCE	1,1-DCE	cis -1,2-DCE	trans -1,2-DCE	VC	Chloroethane	Benzene	Toluene	Ethylbenzene	Xylenes
			Concentration (µg/L)													
BH-34	28	NS	NS	NS	NS	NS	ND	ND	ND	ND	ND	NS	NS	NS	NS	NS
	37	NS	NS	NS	NS	NS	11.6	4.2	ND	ND	ND	NS	NS	NS	NS	NS
	37FD	NS	NS	NS	NS	NS	11.7	4.1	ND	ND	ND	NS	NS	NS	NS	NS
Impact 7G DPT Groundwater Sampling 2019 - Eurofins/Test America Data																
B35	75-79	5/13/2019	ND	ND	ND	ND	199	ND	23.5	ND	ND	ND	ND	ND	ND	ND
	65-69	5/13/2019	ND	ND	ND	ND	1,390	ND	187	ND	ND	ND	ND	ND	ND	ND
	55-59	5/13/2019	ND	ND	ND	ND	1,330	ND	230	1.58	ND	ND	ND	ND	ND	ND
	45-49	5/13/2019	1.66	5.09	ND	ND	8,280	11.8	1,120	20.5	70	ND	3	ND	ND	ND
	35-39	5/13/2019	2.11	4.32	1.26	ND	8,970	14.9	1,580	20.2	102	ND	6.04	ND	ND	ND
	25-29	5/13/2019	1.62	11.30	ND	ND	7,760	11.3	1,010	15.4	77	ND	4.73	ND	ND	ND
	15-19	5/13/2019	7.59	ND	ND	ND	1,630	ND	45	ND	ND	ND	ND	ND	ND	ND
B36	15-19FD	5/13/2019	7.59	ND	ND	ND	2,230	ND	121	1.4	5.29	ND	0.531	ND	ND	ND
	49-53	5/13/2019	ND	ND	ND	ND	2,400	ND	163	ND	ND	ND	ND	ND	ND	ND
	39-43	5/13/2019	ND	ND	ND	ND	1,190	ND	63	ND	ND	ND	ND	ND	ND	ND
B37	29-33	5/13/2019	ND	ND	ND	ND	946	ND	63	ND	ND	ND	ND	ND	ND	ND
	70-74	5/13/2019	ND	ND	ND	ND	12.7	ND	1.08	ND	ND	ND	ND	ND	ND	ND
	60-64	5/13/2019	ND	ND	ND	ND	12.2	ND	1.19	ND	ND	ND	ND	ND	ND	ND
	50-54	5/13/2019	ND	ND	ND	ND	10.4	ND	ND	ND	ND	ND	ND	ND	ND	ND
	40-44	5/13/2019	ND	ND	ND	ND	13.6	ND	1.69	ND	ND	ND	ND	ND	ND	ND
	30-34	5/13/2019	ND	ND	ND	ND	508	2.15	175	350	ND	ND	ND	ND	ND	ND
	20-24	5/13/2019	ND	ND	ND	ND	27.8	ND	1.41	4.37	ND	ND	ND	ND	ND	ND
B38	20-24FD	5/13/2019	ND	ND	ND	ND	32.7	ND	1.61	5.22	ND	ND	ND	ND	ND	ND
	56-60	5/14/2019	ND	7.24	ND	ND	9,580	14.5	1,590	551	43	ND	0.693	ND	ND	ND
	46-50	5/14/2019	ND	2.85	ND	ND	6,670	7.13	690	371	20.2	ND	0.785	ND	ND	ND
	36-40	5/14/2019	ND	3.66	ND	ND	7,140	8.48	800	390	23.2	ND	0.805	ND	ND	ND
	26-30	5/14/2019	ND	1.37	ND	ND	4,270	4.08	322	160	8.77	ND	ND	ND	ND	ND
	16-20	5/14/2019	ND	ND	ND	ND	861	ND	73.4	38.8	2.04	ND	ND	ND	ND	ND
B39	16-20FD	5/14/2019	ND	ND	ND	ND	870	ND	78.3	40	2.31	ND	ND	ND	ND	ND
	6-10	5/14/2019	ND	ND	ND	ND	1030	ND	102	38.8	2.14	ND	ND	ND	ND	ND
	21-25	5/14/2019	ND	ND	ND	ND	2.83	ND	2.08	1.18	ND	ND	ND	ND	ND	ND
	41-45	5/14/2019	ND	ND	ND	ND	6.3	ND	7.79	3.82	ND	ND	ND	ND	ND	ND
	31-35	5/14/2019	ND	ND	ND	ND	4.52	ND	4.39	2.68	ND	ND	ND	ND	ND	ND
B40	21-25 FD	5/14/2019	ND	ND	ND	ND	1.11	ND	ND	ND	ND	ND	ND	ND	ND	ND
	30-34	5/14/2019	ND	ND	ND	ND	4,420	10.3	4,330	734	224	ND	7.31	ND	ND	ND
	20-24	5/14/2019	ND	ND	ND	ND	1,180	2.17	841	160	46.1	ND	1.67	ND	ND	ND
	20-24 FD	5/14/2019	ND	ND	ND	ND	1,150	2.77	840	161	46.9	ND	1.62	ND	ND	ND
B41	10-14	5/14/2019	ND	ND	ND	ND	1,520	2.89	1,260	216	58.8	ND	2.18	ND	ND	ND
	30-34	5/14/2019	ND	ND	ND	ND	1.42	ND	ND	1.07	ND	ND	ND	ND	ND	ND
	20-24	5/14/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
B42	20-24FD	5/14/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	36-40	5/14/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	26-30	5/14/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	26-30FD	5/14/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
B43	16-20	5/14/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	36-40	5/15/2019	ND	ND	12.82	4.29	4,390	23.5	7,190	27.6	319	ND	9.32	ND	ND	ND
	26-30	5/15/2019	ND	ND	3.04	3.44	3,870	20.7	6,630	23.9	2.83	ND	8.56	ND	ND	ND
	16-20	5/15/2019	ND	ND	ND	ND	796	3.05	710	5.27	33.6	ND	0.942	ND	ND	ND
B44	6-10	5/15/2019	ND	ND	ND	ND	101	ND	63.1	ND	1.36	ND	ND	ND	ND	ND
	36-40	5/15/2019	ND	ND	ND	ND	132	ND	37.5	ND	ND	ND	ND	ND	ND	ND
	26-30	5/15/2019	ND	ND	ND	ND	345	ND	49.6	1.21	ND	ND	ND	ND	ND	ND
	16-20	5/15/2019	ND	ND	ND	ND	932	ND	1,420	14.8	47.1	ND	ND	11.2	ND	44.8
	16-20FD	5/15/2019	ND	ND	ND	ND	850	4.06	1,290	15.7	57.1	ND	ND	ND	ND	ND
B45	6-10	5/15/2019	ND	ND	ND	ND	476	2.15	952	7.62	34.2	ND	1.63	ND	ND	ND
	36-40	5/15/2019	ND	ND	ND	ND	139	ND	15.5	ND	ND	ND	ND	ND	ND	ND
	26-30	5/15/2019	ND	ND	ND	ND	90.2	ND	12.2	ND	ND	ND	ND	ND	ND	ND
	16-20	5/15/2019	ND	ND	ND	ND	37.4	ND	3.92	ND	ND	ND	ND	ND	ND	ND
B45	16-20FD	5/15/2019	ND	ND	ND	ND	35.5	ND	3.83	ND	ND	ND	ND	ND	ND	ND

TABLE B-1: HISTORICAL GROUNDWATER SAMPLE RESULTS

Location	Depth	Sample Date	1,1,1-TCA	1,1-DCA	1,1,2-TCA	PCE	TCE	1,1-DCE	cis -1,2-DCE	trans -1,2-DCE	VC	Chloroethane	Benzene	Toluene	Ethylbenzene	Xylenes
			Concentration (µg/L)													
B46	55-59	5/15/2019	ND	ND	ND	ND	264	ND	37.3	1.34	ND	ND	ND	ND	ND	ND
	45-49	5/15/2019	ND	ND	ND	ND	281	ND	40.9	1.14	ND	ND	ND	ND	ND	ND
	35-39	5/15/2019	ND	ND	ND	ND	310	ND	156	1.3	ND	ND	ND	ND	ND	ND
	25-29	5/15/2019	ND	ND	ND	ND	118	ND	49.8	ND	ND	ND	ND	ND	ND	ND
	25-29FD	5/15/2019	ND	ND	ND	ND	92.1	ND	27.5	ND	ND	ND	ND	ND	ND	ND
B47	54-58	5/15/2019	ND	ND	ND	ND	191	ND	291	59.5	7.17	ND	0.535	ND	ND	ND
	44-48	5/15/2019	ND	ND	ND	ND	72.4	ND	167	25.5	5.14	ND	0.535	ND	ND	ND
	34-38	5/15/2019	ND	ND	ND	ND	93.9	ND	80.9	8.98	1.61	ND	ND	ND	ND	ND
	34-38FD	5/15/2019	ND	ND	ND	ND	77.8	ND	81.1	10.3	1.34	ND	ND	ND	ND	ND
	24-28	5/15/2019	ND	ND	ND	ND	29.5	ND	25.9	2.71	ND	ND	ND	ND	ND	ND
B-48	NA	5/22/2019	ND	ND	ND	ND	23.6	ND	ND	ND	ND	ND	ND	ND	ND	ND
B-49	NA	5/22/2019	ND	ND	ND	ND	3.94	ND	ND	ND	ND	ND	ND	ND	ND	ND
B50	46-50	6/18/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
B51	46-50	6/18/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
B52	27-31	6/18/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
B53	64-68	6/18/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
B54	50-54	6/19/2019	ND	ND	ND	ND	1.1	ND	2.17	ND	ND	ND	ND	ND	ND	ND
B56	37-41	6/18/2019	ND	ND	ND	ND	355	ND	29	1.25	ND	ND	ND	ND	ND	ND
B57	25-29	6/20/2019	ND	ND	ND	ND	5.92	ND	1.29	ND	ND	ND	ND	7.61	ND	ND
MW-2R/SB	49-53	6/20/2019	ND	ND	ND	1.46	1.070	ND	350	54.7	9.12	ND	0.965	27.1	ND	ND

Notes:

B = Boring  
BH = Borehole  
DCA = Dichloroethane  
DCE = Dichloroethene  
FD = Field duplicate  
ft bgs = Feet below ground surface  
µg/L = Micrograms per liter  
MW = Monitoring well  
NA = Not available

ND = Not detected  
NS = Analyte not selected for analysis  
PCE = Tetrachloroethene  
TCA = Trichloroethane  
TCE = Trichloroethene  
R = Replacement  
SB = Soil boring  
VC = Vinyl chloride

TABLE B-2: HISTORICAL VOLATILE ORGANIC COMPOUNDS IN SOILS

Sample Location	Depth (ft bgs)	Sample Date	1,1,2-TCA	PCE	TCE	1,1-DCE	cis -1,2-DCE	trans -1,2-DCE	VC	Chloroethane	Benzene	Toluene	Ethylbenzene	Xylenes
			Concentration (µg/kg)											
Missman, Stanley & Associates 1999 Phase I - Test America Data														
B-6-3	3	9/24/1999	<120	<120	<120	<120	<120	<120	<360	<480	<120	604,000	786	2,690
Seneca Environmental 2002 Test America soils results for closure of three underground stoarage tanks are not listed (CVOCs not analyzed)														
Three monitoring wells were installed around Tank2 (southeast) and Tank3 (southwest)														
Forest Road Group 2006 - Test America Data														
MW-10	16	6/1/2006	ND	ND	ND	ND	256	ND	29.4	ND	10.2	109	115	228
MW-10	20	6/1/2006	ND	ND	6.22	ND	ND	ND	112	ND	21.5	22.7	ND	ND
MW-11	11	6/2/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-11	20	6/2/2006	ND	ND	6.9	ND	ND	ND	ND	ND	ND	7.07	ND	ND
MW-12	18	6/2/2006	ND	ND	ND	ND	ND	ND	ND	ND	13.33	36,900	107	438
MW-12	20	6/2/2006	ND	ND	25.6	ND	50.4	ND	ND	ND	ND	6.66	ND	ND
MW-13	23	6/1/2006	9.04	4.07	8,370	ND	3,310	ND	85.2	ND	151	285,000	367	5,010
MW-13	27	6/1/2006	ND	ND	48.1	ND	204	ND	26.4	ND	ND	12.7	ND	ND
MW-14	12	6/7/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-14	18	6/7/2006	ND	ND	54.6	ND	28.6	ND	ND	ND	ND	6.71	ND	ND
MW-15	11	6/7/2006	ND	ND	11	ND	4.7	ND	ND	ND	ND	ND	ND	ND
MW-15	19	6/7/2006	ND	ND	94.3	ND	64.5	ND	ND	ND	ND	5.77	ND	ND
MW-16	12	6/7/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-16	20	6/7/2006	ND	ND	29.9	ND	4.83	ND	ND	ND	ND	ND	ND	ND
MW-17	11	6/7/2006	ND	ND	13.4	ND	ND	ND	ND	ND	ND	6.26	ND	ND
MW-17	20	6/7/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.58	ND	ND
Impact 7G 2014 - TestAmerica Data														
BH-17	15	4/21/2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BH-18	7	7/21/2014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Impact 7G 2019 Supplemental Phase II - TestAmerica Data														
MW-2R	16-17	5/16/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,450,000	2,740	10,800
MW-2R	16-17FD	5/16/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	211,000	2,520	11,800
MW-2R	20-21	5/16/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	522,000	884	ND
MW-2R	25-26	5/16/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	54.9	ND	ND
MW-7R	25-26	5/16/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
EPA START 2020 - EPA Region 7 Laboratory Data														
SB-1	9-10	7/22/2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	15-16	7/22/2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SB-2	9-10	7/22/2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	15-16	7/22/2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SB-3	9-10	7/22/2020	ND	ND	73	ND	31	ND	ND	ND	ND	ND	ND	ND
	9-10FD	7/22/2020	ND	ND	61	ND	23	ND	ND	ND	ND	ND	ND	ND
	15-16	7/22/2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SB-4	9-10	7/22/2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	15-16	7/22/2020	ND	ND	3,000	ND	180	ND	ND	ND	ND	ND	ND	ND
SB-5	9-10	7/22/2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	15-16	7/22/2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SB-6	8-9	7/22/2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	15-16	7/22/2020	ND	ND	610	ND	13	ND	ND	ND	ND	ND	ND	ND

TABLE B-2: HISTORICAL VOLATILE ORGANIC COMPOUNDS IN SOILS

Notes:

B = Boring  
BH = Borehole  
CVOC = Chlorinated volatile organic compounds  
DCE = Dichloroethene  
EPA = U.S. Environmental Protection Agency  
ft bgs = Feet below ground surface  
FD = Field duplicate  
µg/kg = Micrograms per kilogram

MW = Monitoring well  
ND = Not detected  
PCE = Tetrachloroethene  
R = Replacement  
START = Superfund Technical Assessment Response Team  
TCA = Trichloroethane  
TCE = Trichloroethene  
VC = Vinyl chloride

**TABLE B-3: AVAILABLE VAPOR INTRUSION SAMPLE RESULTS FOR SELECTED VOLATILE ORGANIC COMPOUNDS**

Sample Location	Sample Type	Date	PCE	TCE	cis -1,2-DCE	trans -1,2-DCE	Toluene	Xylenes
<b>Impact 7G 2014-2020 Site Assessment VI Samples - TestAmerica Data</b>								
Museum Sub-slab- Sample 1	Sub-slab	4/21/2014		930	850	47		8.5
Museum Sub-slab- Sample 2	Sub-slab	7/31/2014		730	450	33		
Museum Sub-slab- Sample 3	Sub-slab	10/29/2014		230	64	7.1		
Museum Sub-slab- Sample 4	Sub-slab	1/27/2015		540	560	22		
Vapor Pin (Sub-slab)	Sub-slab	3/22/2018		19	ND	ND	2.1	1.8
Outdoor Ambient Air	Ambient Air	3/22/2018		ND	ND	ND	0.85	ND
	Ambient Air	5/14/2019		ND	ND	ND	3.1	ND
	Ambient Air	12/10/2019		ND	ND	ND	ND	ND
	Ambient Air	9/23/2020		ND	ND	ND	ND	ND
Indoor Air - Basement	Indoor Air	3/22/2018		22	2.6	7	1.9	1.1
Indoor Air - Basement	Indoor Air	3/22/2018		23	2.7	7.5	2.2	1.3
Indoor Air - Main Level	Indoor Air	3/22/2018		19	2.2	5.7	2	1.2
Basement - Community Room	Indoor Air	4/24/2019		7.6	0.95	26	12	8.8
	Indoor Air	12/10/2019		12	1.1	1.5	1	102
	Indoor Air	9/23/2020	14.8	ND	ND	1.4		
Basement - Media Room	Indoor Air	4/24/2019		9	1.1	26	15	11
	Indoor Air	12/10/2019		12	1.4	3.2	143	2.1
	Indoor Air	12/20/2019		7.8/8.3	ND/ND	2.6/2.8	3.6/3.8	76/89
	Indoor Air	9/23/2020	36.8/29	ND/ND	ND/ND	1.2/2.1	ND/ND	14.3/14.4
First Level - Museum	Indoor Air	4/24/2019		2	ND	5.5	3.7	1.2
	Indoor Air	12/10/2019		6.4	ND	1	1.2	57
	Indoor Air	9/23/2020	ND	ND	ND	ND	1.4	2
First Level - Office	Indoor Air	4/24/2019		2.5	ND	7.7	4.6	5.5
	Indoor Air	12/10/2019		6.3	0.88	1.5	1.7	63
	Indoor Air	9/23/2020	ND	ND	ND	ND	ND	1.8
Depot	Indoor Air	12/10/2019		ND	ND	ND	ND	ND
Warehouse Building	Indoor Air	12/10/2019		ND	ND	ND	6.7	7.4

**TABLE B-3: AVAILABLE VAPOR INTRUSION SAMPLE RESULTS FOR SELECTED VOLATILE ORGANIC COMPOUNDS**

Address	Property and SampleType	Sample Number	Location	TCE	cis-1,2-DCE	trans-1,2-DCE	VC	Toluene
<b>START 2020-2021 Sub-slab Vapor Samples</b>								
<b>EPA START June 2020 Sample Locations - EPA Region 7 Laboratory Data</b>								
501 E. Maple St.	Residential- Sub-slab	8537-19	Basement, center of right wall	1.4 U	NA	NA	NA	NA
209 S. Otto St.	Residential -Sub-slab	8537-21	Basement, center of far wall	1.4 U	NA	NA	NA	NA
807 E. Platt St.	Residential -Sub-slab	8537-22	Basement, back right corner	1.4 U	NA	NA	NA	NA
214 S. Matteson St.	Residential -Sub-slab	8537-24	Basement, by stairs under rug	1.4 U	NA	NA	NA	NA
215 S. Matteson St.	Residential -Sub-slab	8537-18	Basement, main room far wall	1.4 U	NA	NA	NA	NA
216 S. Matteson St.	Residential -Sub-slab	8537-20	Basement, center between rooms	1.4 U	NA	NA	NA	NA
219 S. Matteson St.	Residential -Sub-slab	8537-25	Basement, right side back corner	3.1	NA	NA	NA	NA
307 S. Matteson St.	Residential -Sub-slab	8537-17	Basement, left room by dryer	1.4 U	NA	NA	NA	NA
308 S. Clark St.	Residential -Sub-slab	8537-16	NA	1.4 U	NA	NA	NA	NA
311 S. Matteson St.	Residential -Sub-slab	8537-23	Basement, back right corner (dryer)	1.4 U	NA	NA	NA	NA
<b>EPA START July 2020 Sample Locations - EPA Region 7 Laboratory Data</b>								
104 N. Dearborn St.	Residential -Sub-slab	8612-16	Basement Port	0.14 U	0.20 U	0.20 U	0.13 UJ	0.76 U
514 E. Maple St.	Residential -Sub-slab	8612-22	Basement Port	0.14 U	0.20 U	0.20 U	0.13 UJ	0.76 U
604 E. Maple St.	Commercial - Sub-slab	8612-18	West Shop Port	0.14 U	0.20 U	0.20 U	0.13 UJ	7
802 E. Maple St.	Commercial - Sub-slab	8612-19	Furnace Closet Port	0.32	0.20 U	0.20 U	0.13 UJ	0.94
1286 E. Maple St.	Commercial - Sub-slab	8612-28	Shop Port	0.14 U	0.20 U	0.20 U	0.13 UJ	0.76 U
204 S. Matteson St.	Residential -Sub-slab	8612-26	Basement Port (back room)	0.14 U	0.20 U	0.20 U	0.13 UJ	0.76 U
222 S. Matteson St.	Residential -Sub-slab	8612-21	Basement Port	0.14 U	0.20 U	0.20 U	0.13 UJ	0.76 U
316 S. Matteson St.	Residential -Sub-slab	8612-20	Basement Port	0.14 U	0.20 U	0.20 U	0.13 UJ	0.76 U
312 S. Clark St.	Residential -Sub-slab	8612-24	Basement Port	0.14 U	0.20 U	0.20 U	0.13 UJ	0.76 U
908 E. Platt St.	Residential -Sub-slab	8612-25	Basement Port	0.76	0.20 U	0.20 U	0.13 UJ	0.76 U
1207 E. Platt St.	Residential -Sub-slab	8612-27	Basement Port	0.14 U	0.20 U	0.20 U	0.13 UJ	0.76 U
1215 E. Platt St.	Commercial -Sub-slab	8612-17	Basement Port	0.14 U	0.20 U	0.20 U	0.13 UJ	2.9
<b>EPA START February 2021 Sample Locations - EPA Region 7 Laboratory Data</b>								
604 E. Maple St.	Commercial - Sub-slab	8778-3	West Shop Port	0.14 U	0.20 U	0.20 U	0.13 U	16
802 E. Maple St.	Commercial - Sub-slab	8778-5	Furnace Closet Port	0.14 U	0.20 U	0.20 U	0.13 U	0.76 U
907 E. Platt St.	Residential -Sub-slab	8778-8	Basement	0.14 U	0.20 U	0.20 U	0.13 U	0.76 U
219 S. Matteson St.	Residential -Sub-slab	8778-11	Basement, right side back corner	1	0.20 U	0.20 U	0.13 U	0.76 U
<b>START 2021-2021 - Indoor and Ambient Air Samples</b>								
<b>EPA START June 2020 Sample Locations - EPA Region 7 Laboratory Data</b>								
214 S. Matteson St.	Residential - Indoor air	8537-9	Main Floor, Living Room	1.4 U	NA	NA	NA	NA
215 S. Matteson St.	Residential - Indoor air	8537-5	Main Floor, Kitchen	1.4 U	NA	NA	NA	NA
216 S. Matteson St.	Residential - Indoor air	8537-10	Main Floor, Living Room	1.4 U	NA	NA	NA	NA
219 S. Matteson St.	Residential - Indoor air	8537-1	Main Floor, Dining Room	1.4 U	NA	NA	NA	NA
307 S. Matteson St.	Residential - Indoor air	8537-3	Main Floor, Dining Room	1.4 U	NA	NA	NA	NA
311 S. Matteson St.	Residential - Indoor air	8537-15	Main Floor, Dining Room	1.4 U	NA	NA	NA	NA
308 S. Clark St.	Residential - Indoor air	8537-2	Main Floor, Living Room	1.4 U	NA	NA	NA	NA
314 S. Clark St.	Residential - Indoor air	8537-7	Main Floor, Living Room	1.4 U	NA	NA	NA	NA
501 E. Maple St.	Residential - Indoor air	8537-8	Main Floor, Main Area	1.4 U	NA	NA	NA	NA
209 S. Otto St.	Residential - Indoor air	8537-11	Main Floor, Dining Room	1.4 U	NA	NA	NA	NA
109 S. Otto St.	Residential - Indoor air	853712	Main Floor, Kitchen	1.4 U	NA	NA	NA	NA
907 E. Platt St.	Residential - Indoor air	8537-13	Main Floor, Kitchen	1.9	NA	NA	NA	NA
807 E. Platt St.	Residential - Indoor air	8537-14	Main Floor - Kitchen	1.4 U	NA	NA	NA	NA

**TABLE B-3: AVAILABLE VAPOR INTRUSION SAMPLE RESULTS FOR SELECTED VOLATILE ORGANIC COMPOUNDS**

Address	Property and SampleType	Sample Number	Location	TCE	cis-1,2-DCE	trans-1,2-DCE	VC	Toluene
<b>EPA START July 2020 Sample Locations - EPA Region 7 Laboratory Data</b>								
514 E. Maple St.	Residential - Indoor air	8612-10	Main Floor, Living Room	0.14 U	0.20 U	0.20 U	0.13 U	3.8
600 E. Maple St.	Residential - Indoor air	8612-7	Main Floor, Main Room	0.14 U	0.20 U	0.20 U	0.13 U	11
604 E. Maple St.	Commercial - Indoor air	8612-4	Left Building Shop (west)	0.35	0.28	0.79	0.13 U	1,700 J
		8612-5	Right Building Office (east)	0.14 U	0.20 U	0.20 U	0.13 U	300
803 E. Maple St.	Residential - Indoor air	8612-1	Main Floor, Living Room	0.2	0.20 U	0.51	0.13 U	680
802 E. Maple St.	Commercial - Indoor air	8612-6	Room with Furnace Closet	0.64	0.33	0.20 U	0.13 U	14
1286 E. Maple St.	Commercial - Indoor air	8612-23	Main Office Area	0.14 U	0.20 U	0.20 U	0.13 UJ	34
204 S. Matteson St.	Residential - Indoor air	8612-14	Main Floor, Living Room	0.14 U	0.20 U	0.20 U	0.13 U	3.3
316 S. Matteson St.	Residential - Indoor air	8612-8	Main Floor, Living Room	0.14 U	0.20 U	0.20 U	0.13 U	14
222 S. Matteson St.	Residential - Indoor air	8612-9	Main Floor, Office Room	0.14 U	0.20 U	0.20 U	0.13 U	10
312 S. Clark St.	Residential - Indoor air	8612-11	Main Floor – Kitchen	0.14 U	0.20 U	0.20 U	0.13 U	2.9
104 N. Dearborn St.	Residential - Indoor air	8612-2	Main Floor, Living Room	0.21	0.20 U	0.20 U	0.24	1.7
908 E. Platt St.	Residential - Indoor air	8612-13	Main Floor, Living Room	0.14 U	0.20 U	0.20 U	0.13 U	2.2
1207 E. Platt St.	Residential - Indoor air	8612-15	Main Floor, Living Room	0.14 U	0.20 U	0.20 U	0.13 UJ	0.76 U
1211 E. Platt St.	Commercial - Indoor air	8612-12	Main Floor, Front Desk	0.14 U	0.20 U	0.20 U	0.13 U	6.6
1215 E. Platt St.	Commercial - Indoor air	8612-3	Auditorium	0.14 U	0.20 U	0.20 U	0.13 U	13
<b>EPA START February 2021 Sample Locations - EPA Region 7 Laboratory Data</b>								
604 E Maple St.	Commercial - Indoor air	8778-2	Left Building Shop (west)	0.14 U	0.20 U	0.46	0.13 U	460
802 E. Maple St.	Commercial - Indoor air	8778-4	Room with Furnace Closet	0.14 U	0.20 U	0.20 U	0.13 U	5.5
803 E. Maple St.	Residential - Indoor air	8778-9	Main Floor, Living Room	0.38	0.20 U	0.20 U	0.13 U	220
104 N. Dearborn St.	Residential - Indoor air	8778-6	Main Floor, Living Room	0.14 U	0.20 U	0.20 U	0.13 U	2.2
219 S. Matteson St.	Residential - Indoor air	8778-10	Main Floor, Dining Room	0.14 U	0.20 U	0.20 U	0.13 U	0.76 U
907 E. Platt St.	Residential - Indoor air	8778-7	Main Floor, Kitchen	0.38	0.20 U	0.20 U	0.13 U	8.8
908 E. Platt St.	Residential - Indoor air	8778-1	Main Floor, Living Room	0.14 U	0.20 U	0.20 U	0.13 U	2.9
<b>Ambient Air June 2020 and February 2021</b>								
217 S. Matteson St.	Ambient Air	8537-4	Backdoor Steps	0.14 U	NA	NA	NA	NA
314 S. Clark St.	Ambient Air	8537-6	Backdoor Steps	0.14 U	NA	NA	NA	NA
607 E Maple St.	Ambient Air	8778-12	Museum Parking Lot	0.14 U	0.20 U	0.20 U	0.13 U	0.76 U

Notes:

DCE = Dichloroethene  
EPA = U.S. Environmental Protection Agency  
J = Estimated value  
NA = Not available  
ND = Not detected

PCE = Tetrachloroethene  
START = Superfund Technical Assessment Response Team  
TCE = Trichloroethene  
U = Undetected at detection limit to left  
VC = Vinyl chloride

TABLE B-4  
QUARTER 1, FEBRUARY 2023

DETECTED VOC RESULTS FROM SUBSURFACE SOIL SAMPLES  
FORMER CLINTON ENGINES SITE, MAQUOKETA, IOWA

Sample Location	Depth (ft bgs)	Acetone	2-Butanone (MEK)	MIBK	Carbon Disulfide	Carbon Tetrachloride	Chloroform	1,1,1-TCA	1,1-DCA	PCE	TCE	1,1-DCE	1,2-DCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl chloride
		Concentrations (µg/kg)														
EPA RSL (Residential)		7E+6	2.7E+6	3.3E+6	7.7E+4	650	320	8.1E+5	3,600	8,100	410	2.3E+4	NE	6,300	7,000	59
EPA RSL (Industrial)		1.1E+8	1.9E+7	1.4E+7	3.5E+5	2,900	1,400	3.6E+6	1.6E+4	3.9E+4	1,900	1E+5	NE	3.7E+4	3E+4	1,700
IDNR Residential SWS		6.8E+7	1.6E+7	6.1E+6	7.6E+6	4.4E+4	7.6E+5	1.5E+8	1.5E+6	1.5E+6	6.7E+4	3.8E+5	NE	1.5E+5	1.5E+6	2,100
MW-1B	19-21	ND	184 J	ND	ND	ND	371	ND	ND	ND	132 J	ND	1,970	1,970	ND	42.6 J
MW-2B	55-57	ND	ND	ND	ND	ND	1.5 J	ND	ND	ND	2,400	ND	95.1	94.6	ND	1.7 J
MW-3B	36-38	ND	ND	ND	ND	7.4	6.2	ND	ND	1.5 J	108	ND	66.1	66.1	ND	7.6
MW-4B	24-26	ND	ND	ND	ND	ND	ND	ND	ND	ND	3,760	ND	141	131	10.3	6.5
MW-5B	21-23	ND	ND	ND	ND	ND	ND	ND	ND	ND	90.2	ND	28.3	27.6	0.74 J	1 J
MW-6B	18-20	15.8 J	3.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	50-52	ND	ND	ND	1.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-8B	14-16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	55-57	19.6	4.9 J	ND	ND	ND	ND	ND	ND	ND	6,090	ND	127	125	1.8 J	1.6 J
MW-9	55-57	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3 J	ND	1.2 J	1.2 J	ND	ND
MW-10A	39-41	33.4	5.5 J	ND	ND	ND	ND	ND	ND	0.94 J	2,770	1 J	303	300	2.9 J	16.8
MW-10B	43-45	ND	ND	3.1 J	ND	ND	ND	1 J	1.1 J	ND	2,900	2.3 J	262	259	3.4 J	20.7
MW-11	44-46	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-12	39-41	ND	ND	ND	ND	ND	ND	ND	ND	ND	49.1 J	ND	9.5 J	6.5 J	3 J	ND
	39-41-FD	ND	ND	ND	ND	ND	ND	ND	ND	ND	10 J	ND	2.6 J	1.9 J	0.73 J	ND
MW-13	22-24	ND	ND	ND	ND	ND	ND	ND	ND	ND	11.7	ND	14.4	13.6	0.74 J	ND
MW-14	59-61	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3 J	1.3 J	ND	ND
MW-101	114-116	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-102	117-119	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-103	19-21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-104	64-66	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND



TABLE B-4  
QUARTER 1, FEBRUARY 2023

DETECTED VOC RESULTS FROM SUBSURFACE SOIL SAMPLES  
FORMER CLINTON ENGINES SITE, MAQUOKETA, IOWA

Sample Location	Sample Depth (ft bgs)	Benzene	Toluene	Ethylbenzene	Total Xylenes	n-Butylbenzene	Sec- Butylbenzene	Tert- Butylbenzene	Hexachloro-1,3-butadiene	Isopropylbenzene (Cumene)	p-Isopropyltoluene	Naphthalene	n-Propylbenzene	1,2,3-Trichlorobenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene
		Concentration (µg/kg)														
		EPA RSL (Residential)	1,200	4.9E+5	5,800	5.8E+4	3.9 E+5	7.8E+5	7.8E+5	NE	1.9E+5	NE	2,000	3.8E+5	6,300	3E+4
EPA RSL (Industrial)		5,100	4.7E+6	2.5E+4	2.5E+5	5.8E+6	1.2E+7	1.2E+7	NE	9.9E+5	NE	8,600	2.5E+6	9.1E+4	1.8E+5	1.5E+5
Iowa Statewide Standard		5.6E+4	6.1E+6	7.6E+6	1.5E+7	3.8E+6	NE	NE	NE	7.6E+6	NE	1.1E+6	7.6E+6	NE	7.6E+5	7.6E+5
MW-1B	19-21	40.4 J	258 J	286	737	7,860	1,250	57.1 J	280 J	446	1,740	693	2,050	ND	8,130	4,050
MW-2B	55-57	2.6 J	0.43 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-3B	36-38	1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-4B	24-26	0.61 J	1.2 J	0.83 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-5B	21-23	0.55 J	1.3 J	1.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-6B	18-20	ND	0.68 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	50-52	ND	0.64 J	0.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-8B	14-16	0.85 J	144 J	22	110	ND	ND	ND	ND	1.5 J	ND	1.5 J	1.3 J	ND	8.3	1.3 J
	55-57	3.8 J	1.8 J	0.52 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-9	55-57	ND	0.45 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-10A	39-41	1.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-10B	43-45	1.3 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-11	44-46	0.56 J	1.6 J	1.3 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-12	39-41	ND	0.32 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	39-41-FD	ND	0.33 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-13	22-24	ND	0.58 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-14	59-61	ND	0.76 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-101	114-116	0.79 J	2.3 J	2.1 J	1.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-102	117-119	ND	0.95 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-103	19-21	ND	0.74 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-104	64-66	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

Bold font indicates the concentration exceeds the Residential RSL.  
Shading indicates the concentration exceeds the Industrial RSL.

DCA     Dichloroethane  
DCE     Dichloroethene  
EPA     U.S. Environmental Protection Agency  
ft bgs   Feet below ground surface  
FD      Field duplicate  
IDNR    Iowa Department of Natural Resources  
J        Estimated value

MEK     Methyl ethyl ketone  
µg/kg   Micrograms per kilogram  
MIBK    Methyl isobutyl ketone  
MW      Monitoring well  
ND       Not detected  
NE       Not established  
PCE      Tetrachloroethene

RSL      Regional Screening Level TR = 1E-06; THQ = 0.1 (EPA 2022a)  
SWS      Statewide Standard (IDNR 2022c)  
THQ      Total hazard quotient  
TR        Target Cancer Risk  
TCA      Trichloroethane  
TCE      Trichloroethene  
VOC      Volatile organic compound

TABLE B-5  
QUARTER 1, FEBRUARY 2023

DETECTED VOC RESULTS FROM GROUNDWATER SAMPLES  
FORMER CLINTON ENGINES SITE, MAQUOKETA, IOWA

Sample Identification	Screened Interval (ft bgs)	Methylene Chloride	Carbon Tetrachloride	Chloroform	Bromoform	Dibromochloromethane	1,1,1-Trichloroethane	1, 1, 2-Trichloroethane	1,1-Dichloroethane	Tetrachloroethene	Trichloroethene	1,1-Dichloroethene	1,2-Dichloroethene (Total)	cis- 1,2-Dichloroethene	trans-1,2-Dichloroethene	Vinyl Chloride	Chloroethane	Benzene	Toluene	Ethylbenzene	Xylene (Total)	Chlorobenzene	Sec-Butylbenzene	Isopropylbenzene (Cumene)	p-Isopropyltoluene	1,2-Dichloroethane	Methyl- Tert-Butyl- Ether (MTBE)
		Concentration (µg/L)																									
		EPA MCL or EPA RSL (TR=1E-6, THQ=0.1) Tap water																									
		5	5	80*	80*	80*	200	5	NE	5	5	7	NE	70	100	2	NE	5	1000	700	10,000	100	2,000**	450**	NE	5	14**
		IDNR SWSs for Non-Protected Groundwater																									
		1,800	50	400	440	400	70,000	61	700	1,700	76	180	NE	350	700	10	14,000	64	5,000	3,500	50,000	700	NE	3,500	NE	38	1000
MW-1B	42-52	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.2	0.22 J	199	196	3.2 J	93.9	5.3	5.0	ND	0.53 J	0.57 J	ND	0.15 J	0.22 J	ND	ND	ND
MW-2B	47-57	ND	ND	3.1 J	ND	ND	ND	ND	ND	ND	1,950	3.9 J	1,080	1,040	43.5	41.8	ND	2.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-3B	47-57	ND	12.2	21.9	1.1	0.57 J	ND	0.41 J	ND	4.9	375	0.64 J	460	448	11.9	22.3	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-4B	47-57	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.9	ND	1.7	1.5	0.20 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-6B	41-51	ND	ND	0.36 J	ND	0.56 J	ND	ND	ND	ND	10.2	ND	3.9	3.6	0.34 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15 J	ND	ND
MW-6B-FD		ND	ND	0.35 J	ND	0.54 J	ND	ND	ND	ND	9.9	ND	3.8	3.5	0.30 J	ND	ND	ND	0.26 J	ND	ND	ND	ND	ND	0.14 J	ND	ND
MW-8B	43-53	ND	ND	ND	ND	ND	ND	ND	ND	ND	4,680	9.9 J	6,520	5,740	788	154	ND	13.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Delineation Wells																									
MW-9	46-56	ND	ND	ND	ND	ND	ND	ND	ND	ND	133	ND	12.7	9.6	3.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-10A	47-57	ND	ND	ND	ND	ND	ND	3.1 J	ND	ND	5,730	17.5	2,160	2,140	23.4 J	103	ND	7.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-10B	63-73	ND	ND	ND	ND	ND	ND	ND	ND	ND	3,810	ND	1,070	1,050	17.7 J	39.5 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-10B-FD		ND	ND	ND	ND	ND	ND	ND	ND	ND	3,670	ND	1,010	1,000	7.6 J	36.3 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-11	40-50	ND	ND	ND	ND	0.50 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-12	35-45	ND	ND	ND	ND	ND	ND	ND	3.7	ND	4,420	8.2	1,280	697	583	22.5	ND	0.40 J	ND	ND	ND	1.2	ND	ND	ND	ND	ND
MW-13	33-43	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.32 J	ND	1.2	1.2	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-14	50-60	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.8	0.54 J	215	184	31.2	6.5	ND	0.38 J	0.33 J	ND	ND	ND	ND	ND	ND	0.24 J	0.56
		Bedrock Wells																									
MW-101	117-127	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-102	125-135	ND	ND	ND	ND	0.55 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-103	27-37	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-104	77-87	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	2.3	2.0	0.34 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

\* MCL for total trihalomethanes.

\*\* RSL for Tapwater is listed

Bold font indicates a value exceeds the MCL

Shading indicates a value exceeds the Iowa Statewide Standard for non-protected groundwater.

bgsBelow ground surface

EPAU.S. Environmental Protection Agency

FDField Duplicate

ftFeet

JEstimated Value

IDNRIowa Department of Natural Resources

MCLMaximum Contaminant Level (EPA 2022a)

µg/LMicrograms per liter

MWMonitoring well

NDNot detected

NENot established

RSLRegional Screening Level (EPA 2022a)

SWSStatewide Standard (IDNR 2022c)

THQTarget Hazard Quotient

TRTarget Cancer Risk

VOCVolatile organic compound

TABLE B-6  
QUARTER 1, FEBRUARY 2023

DETECTED VOC RESULTS FROM SOIL-GAS SAMPLES  
FORMER CLINTON ENGINES SITE, MAQUOKETA, IOWA

Analyte	VISL Exterior Soil Gas (Residential)	VISL Exterior Soil Gas (Worker)	MW1B-SG	MW2B-SG	MW3B-SG	MW4B-SG	MW8B-SG	MW9-SG	MW10-SG	MW11-SG	MW13-SG	MW14-SG	MW101-SG	MW102-SG	MW103-SG	MW104-SG
			Concentration (µg/m³)													
Gasoline-range Organics	NE	NE	2,160	1,570	4,380	228 J	1,120	438 J	206 J	628 J	ND	237 J	ND	1,930	1,840	425 J
Acetone	NE	NE	38.5	34.5	ND	20.2	53.7	107	27.8	38	25.7	5.01	22.6	43.5	17.5	23.6
Benzene	100	440	ND	1.49	27	0.974	0.773	0.623 J	1.25	1.35	0.616 J	2.67	0.712	0.882	9.01	7.76
Bromomethane	17.4	72	ND	ND	ND	ND	0.625 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Butadiene	6.95	29.2	ND	ND	ND	ND	ND	ND	ND	ND	0.239 J	0.569 J	ND	ND	ND	0.597 J
Carbon disulfide	2,430	10,200	ND	3.3	4.26	ND	ND	1.49	ND	ND	0.439 J	1.15	ND	2.25	ND	0.489 J
Carbon Tetrachloride	160	680	ND	ND	ND	ND	ND	ND	ND	ND	0.636 J	0.622 J	ND	ND	ND	ND
Chloroethane	NE	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.517 J	ND	ND	ND	ND
Chloromethane	313	1,310	ND	0.266 J	ND	ND	0.863	0.233 J	0.38 J	0.993	1.12	1.97	0.271 J	0.618	1.09	0.351 J
Cyclohexane	3,480	14,600	ND	0.961	ND	ND	ND	0.596 J	ND	0.63 J	0.342 J	1.22	0.379 J	ND	25.9	2.75
1,4-Dichlorobenzene	85.1	372	7.7	3.1	ND	1.85	8.48	ND	4.92	2.07	ND	0.601 J	2	3.04	1.35	0.776 J
1,1-Dichloroethene	700	2,900	ND	ND	0.725 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	139	584	ND	51.1	21	ND	10.5	ND	ND	1.55	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	140	580	ND	7.41	13.9	ND	1.51	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	13.9	58.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.428 J	ND	ND	ND	ND
Ethanol	NE	NE	17.5	49	27.2	12.9	31.7	41.1	20.9	56.8	56	10.5	10.4	21.1	496	14.9
Ethylbenzene	370	1,600	2.55	2.58	1.91	1.67	2.08	0.715 J	1.81	2.4	0.423 J	1.61	1.76	2.53	26.1	7.85
Ethyl Acetate	243	1,020	ND	ND	ND	ND	ND	ND	ND	ND	0.594 J	1.14	ND	ND	ND	ND
4-Ethyltoluene	NE	NE	3.79	3.75	0.942 J	2.46	3.35	ND	2.61	2.61	ND	ND	1.63	3.31	18.8	2.56
Trichlorofluoromethane	NE	NE	ND	ND	ND	ND	ND	1.24	ND	ND	1.16	1.15	1.16	ND	1.1 J	1.07 J
Dichlorodifluoromethane	348	1,460	ND	1.98	1.08	1.6	2.08	2.12	2.24	2.15	2.39	2.41	2.06	3.93	2.18	2.18
1,1,2-Trichlorotrifluoroethane	17,400	73,000	ND	ND	ND	ND	ND	0.723 J	ND	ND	0.747 J	0.835 J	ND	0.666 J	ND	ND
n-Heptane	1,390	5,840	32	1.71	3.69	ND	ND	1.51	ND	3.14	0.487 J	1.02	1.06	ND	33	11.8
Hexachloro-1,3-butadiene	42.5	186	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3 J	ND	ND	ND
n-Hexane	2,430	10,200	9.98	3.01	7.97	1.35 J	3.01	4.34	ND	5.15	1.1 J	3.46	2.36	4.3	39.5	8.81
Isopropylbenzene (Cumene)	1,390	5,840	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.526 J	ND	ND	ND	ND
Methylene chloride	2,090	8,760	4.55	1.16	ND	1.08	ND	1.1	0.972	4.13	1.4	2.07	2.52	7.88	12.7	4.13
2-Hexanone	104	438	8.06	5.85	ND	3.3 J	92	5.69	2.8 J	4.79 J	ND	ND	1.52 J	5.69	ND	ND
2-Butanone (MEK)	17,400	73,000	34.5	41	ND	29.1	41	31.8	25.8	39.5	2.67 J	0.743 J	11.5	34.8	11.5	5.4
4-Methyl-2-pentanone (MIBK)	10,400	73,000	ND	1.6 J	ND	ND	14.4	2.54 J	0.733 J	0.565 J	0.381 J	ND	0.557 J	1.49 J	ND	ND

TABLE B-6  
QUARTER 1, FEBRUARY 2023

DETECTED VOC RESULTS FROM SOIL-GAS SAMPLES  
FORMER CLINTON ENGINES SITE, MAQUOKETA, IOWA

Analyte	VISL Exterior Soil Gas (Residential)	VISL Exterior Soil Gas (Worker)	MW1B-SG	MW2B-SG	MW3B-SG	MW4B-SG	MW8B-SG	MW9-SG	MW10-SG	MW11-SG	MW13-SG	MW14-SG	MW101-SG	MW102-SG	MW103-SG	MW104-SG
			Concentration (µg/m³)													
Naphthalene	10.4	43.8	ND	ND	ND	ND	7.12	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Propanol	695	2,920	ND	ND	ND	ND	ND	46.9	ND	ND	5.63	2.53 J	ND	ND	ND	ND
Propylene	10,400	43,800	ND	7.51	22	ND	ND	6.96	2.67	ND	ND	4.8	ND	4.06	9.07	2.81
Tetrachloroethene	140	580	1.13 J	8.35	ND	ND	3.42	4.26	ND	1.32 J	ND	1.64	ND	1.36	1.41	0.91 J
Toluene	17,000	73,000	ND	23.7	2.98	4.56	5.91	1.36 J	5.5	ND	1.57 J	14.3	5.99	ND	81	56.5
Trichloroethene	6.7	20	ND	1,800	20.7	1.17	122	8.73	11.1	298	ND	4	ND	ND	ND	1.63
1,2,4-Trimethylbenzene	209	876	4.8	4.3	2.63	3.15	4.49	0.628 J	3.16	3.01	0.54 J	1.64	1.61	3.38	12.9	1.93
1,3,5-Trimethylbenzene	209	876	1.3	1.45	1.2	0.893 J	ND	ND	0.78 J	0.982 J	ND	0.687 J	0.52 J	0.987	5.94	0.756 J
2,2,4-Trimethylpentane	NE	NE	ND	ND	180	1.55	ND	ND	2.51	1.74	0.878 J	2.72	1.07	ND	86.9	17.6
Vinyl chloride	56	930	ND	ND	7.23	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m- & p-Xylenes	350	1,500	9.19	9.67	4.19	6.29	8.06	1.37 J	6.2	7.93	1.17 J	5.25	6.11	9.49	73.3	20.1
o-Xylenes	350	1,500	2.88	3.69	0.776 J	2.24	2.82	0.65 J	2.24	3	0.529 J	1.99	1.88	2.64	29	6.2

Notes:

Bold font indicates concentration exceeds the EPA Residential VISL.  
Red highlight indicates concentration exceeds the EPA Worker VISL.

- EPA
- U.S. Environmental Protection Agency
- J
- Estimated value
- µg/m³
- Micrograms per cubic meter
- ND
- Not detected
- NE
- Not established
- SG
- Soil gas
- THQ
- Total hazard quotient
- TR
- Total cancer risk
- VISL
- EPA Vapor Intrusion Screening Level (EPA 2022b)
- VOC
- Volatile organic compound

## **APPENDIX C**

### **LOGBOOK**

20/23 Clinton Engines  
 Leave XC office for hotel  
 in Davenport.  
 Arrive at hotel in Davenport  
 Finished for day

19/23

02/21/23

0700 Leave hotel for Sigh Site.

0740 Arrive at Sigh Site. Noted  
 that 55-gallon drums were  
 expanded on the bottom due to  
 water inside freezing.

0745 Will begin sampling the bedrock  
 wells and others at fairground.

0755 Arrive at Well MW-103

Depth: 16.49 ft

0800 Trouble shooting bladder pump assembly.

0930 Began purging well

1000 Collect sample MW-103

1030 Arrive at MW-14

Depth: 11.32 ft

1050 Begin purging well.

1130 Collect sample MW-14

1150 Arrive at MW-104

Depth: 17.82 ft

1200 Begin purging well

1240 Collect sample MW-104

1330 Arrive at MW-101

Depth: 24.84 ft

1355 Begin purging well

1430 Collect sample MW-101

1450 Arrive at MW-102

Depth: 64.20 ft Trouble shooting bladder pump



2/23

Begin purging well

Collect sample MW-102

Finished for the day. Leaving site for hotel.

CW  
2/21/23

2/22/23

0740 Arrive at MW-13

Depth: 8.88ft

0800 Begin purging well

0820 Collect sample MW-13

0835 Arrive at MW-12

Depth: 6.49ft

0840 Begin purging well

0930 Collect sample MW-12

0950 Arrive at MW-9

Depth: 15.03ft

1000 Begin purging well

1030 Collect sample MW-9

1050 Arrive at MW-11

Depth: 16.70ft

1100 Begin purging well.

1145 Collect sample MW-11

1200 Arrive at MW-4B

Depth: 16.79ft

1205 Begin purging well

1240 Collect sample MW-4B

1330 Arrive at MW-6B

Depth: 21.98ft

1340 Begin purging well.

1410 Collect sample MW-6B

1420 Arrive at MW-2B

Depth: 15.13

Rite in the Rain.

2/22/23

Begin purging well MW-6B<sup>CW</sup> 2B

Collect sample MW-2B

Arrive at MW-8B

Depth: 13.62 ft

Begin purging well

Collect sample MW-8B

Arrive at MW-3B

Depth: 21.08 ft

Begin purging well

Collect sample MW-3B

Collect sample MW-X

Leaving site for hotel.

CW  
2/22/23

2/23/23

0740 Arrive at MW-1B

Depth: 18.84 ft

0750 Begin purging well

0820 Collect sample MW-1B

0850 Arrive at MW-10A + MW-10B

10A Depth: 12.27 ft 10B Depth: 13.96 ft

0840 Begin purging MW-10A

0910 Collect sample MW-10A

0925 Begin purging well MW-10B<sup>CW</sup>

0955 Collect sample MW-10B

Collect sample MW-Y

1010 Arrive at MW-2B to replace cap.

1015 Leaving site.

1630 Arrive back at KC of ACE

1645 Collected sample Trip Blank

1700 Finished for the day

02/23/23



## **APPENDIX D**

### **ANALYTICAL DATA PACKAGE AND DATA VALIDATION REPORT**

March 08, 2023

Kaitlyn Mitchell  
Tetra Tech EMI  
415 Oak  
Kansas City, MO 64106

RE: Project: CLINTON ENGINES  
Pace Project No.: 60422699

Dear Kaitlyn Mitchell:

Enclosed are the analytical results for sample(s) received by the laboratory on February 24, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Kansas City

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Jamie Church  
jamie.church@pacelabs.com  
314-838-7223  
Project Manager

Enclosures



## REPORT OF LABORATORY ANALYSIS

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## CERTIFICATIONS

Project: CLINTON ENGINES

Pace Project No.: 60422699

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### **Pace Analytical Services Kansas**

9608 Loiret Boulevard, Lenexa, KS 66219

Missouri Inorganic Drinking Water Certification #: 10090

Arkansas Drinking Water

Arkansas Certification #: 22-031-0

Illinois Certification #: 2000302021-3

Iowa Certification #: 118

Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055

Nevada Certification #: KS000212023-1

Oklahoma Certification #: 2022-057

Florida: Cert E871149 SEKS WET

Texas Certification #: T104704407-21-15

Utah Certification #: KS000212022-12

Illinois Certification #: 004592

Kansas Field Laboratory Accreditation: # E-92587

Missouri SEKS Micro Certification: 10070

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## REPORT OF LABORATORY ANALYSIS

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## SAMPLE SUMMARY

Project: CLINTON ENGINES

Pace Project No.: 60422699

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60422699001	MW-103	Water	02/21/23 10:00	02/24/23 10:50
60422699002	MW-14	Water	02/21/23 11:30	02/24/23 10:50
60422699003	MW-104	Water	02/21/23 12:40	02/24/23 10:50
60422699004	MW-101	Water	02/21/23 14:30	02/24/23 10:50
60422699005	MW-102	Water	02/21/23 16:25	02/24/23 10:50
60422699006	MW-13	Water	02/22/23 08:20	02/24/23 10:50
60422699007	MW-12	Water	02/22/23 09:30	02/24/23 10:50
60422699008	MW-09	Water	02/22/23 10:30	02/24/23 10:50
60422699009	MW-11	Water	02/22/23 11:45	02/24/23 10:50
60422699010	MW-4B	Water	02/22/23 12:40	02/24/23 10:50
60422699011	MW-6B	Water	02/22/23 14:10	02/24/23 10:50
60422699012	MW-8B	Water	02/22/23 16:15	02/24/23 10:50
60422699013	MW-2B	Water	02/22/23 15:10	02/24/23 10:50
60422699014	MW-3B	Water	02/22/23 17:20	02/24/23 10:50
60422699015	MW-X	Water	02/22/23 17:20	02/24/23 10:50
60422699016	MW-1B	Water	02/23/23 08:20	02/24/23 10:50
60422699017	MW-10A	Water	02/23/23 09:10	02/24/23 10:50
60422699018	MW-10B	Water	02/23/23 09:55	02/24/23 10:50
60422699019	MW-Y	Water	02/23/23 09:55	02/24/23 10:50
60422699020	TRIP BLANK	Water	02/23/23 16:45	02/24/23 10:50
60422699021	FIELD BLANK	Water	02/24/23 10:00	02/24/23 10:50

## REPORT OF LABORATORY ANALYSIS

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## SAMPLE ANALYTE COUNT

Project: CLINTON ENGINES

Pace Project No.: 60422699

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60422699001	MW-103	EPA 5030B/8260	PGH	69	PASI-K
60422699002	MW-14	EPA 5030B/8260	PGH	69	PASI-K
60422699003	MW-104	EPA 5030B/8260	PGH	69	PASI-K
60422699004	MW-101	EPA 5030B/8260	PGH	69	PASI-K
60422699005	MW-102	EPA 5030B/8260	PGH	69	PASI-K
60422699006	MW-13	EPA 5030B/8260	PGH	69	PASI-K
60422699007	MW-12	EPA 5030B/8260	PGH	69	PASI-K
60422699008	MW-09	EPA 5030B/8260	HM1, PGH	69	PASI-K
60422699009	MW-11	EPA 5030B/8260	PGH	69	PASI-K
60422699010	MW-4B	EPA 5030B/8260	PGH	69	PASI-K
60422699011	MW-6B	EPA 5030B/8260	PGH	69	PASI-K
60422699012	MW-8B	EPA 5030B/8260	PGH	69	PASI-K
60422699013	MW-2B	EPA 5030B/8260	PGH	69	PASI-K
60422699014	MW-3B	EPA 5030B/8260	PGH	69	PASI-K
60422699015	MW-X	EPA 5030B/8260	HM1, PGH	69	PASI-K
60422699016	MW-1B	EPA 5030B/8260	PGH	69	PASI-K
60422699017	MW-10A	EPA 5030B/8260	PGH	69	PASI-K
60422699018	MW-10B	EPA 5030B/8260	PGH	69	PASI-K
60422699019	MW-Y	EPA 5030B/8260	PGH	69	PASI-K
60422699020	TRIP BLANK	EPA 5030B/8260	PGH	69	PASI-K
60422699021	FIELD BLANK	EPA 5030B/8260	PGH	69	PASI-K

PASI-K = Pace Analytical Services - Kansas City

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: MW-103		Lab ID: 60422699001		Collected: 02/21/23 10:00		Received: 02/24/23 10:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
Acetone	ND	ug/L	10.0	2.5	1		02/27/23 10:56	67-64-1	L1
Benzene	ND	ug/L	1.0	0.14	1		02/27/23 10:56	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		02/27/23 10:56	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		02/27/23 10:56	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		02/27/23 10:56	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		02/27/23 10:56	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		02/27/23 10:56	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		02/27/23 10:56	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		02/27/23 10:56	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		02/27/23 10:56	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 10:56	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		02/27/23 10:56	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		02/27/23 10:56	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		02/27/23 10:56	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		02/27/23 10:56	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		02/27/23 10:56	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		02/27/23 10:56	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		02/27/23 10:56	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		02/27/23 10:56	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		02/27/23 10:56	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		02/27/23 10:56	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		02/27/23 10:56	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		02/27/23 10:56	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		02/27/23 10:56	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		02/27/23 10:56	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		02/27/23 10:56	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		02/27/23 10:56	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		02/27/23 10:56	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		02/27/23 10:56	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	0.22	1		02/27/23 10:56	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		02/27/23 10:56	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		02/27/23 10:56	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		02/27/23 10:56	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		02/27/23 10:56	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		02/27/23 10:56	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		02/27/23 10:56	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		02/27/23 10:56	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		02/27/23 10:56	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		02/27/23 10:56	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 10:56	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		02/27/23 10:56	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		02/27/23 10:56	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		02/27/23 10:56	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		02/27/23 10:56	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		02/27/23 10:56	75-09-2	

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: MW-103		Lab ID: 60422699001		Collected: 02/21/23 10:00		Received: 02/24/23 10:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b> Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City									
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		02/27/23 10:56	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		02/27/23 10:56	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		02/27/23 10:56	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 10:56	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		02/27/23 10:56	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		02/27/23 10:56	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		02/27/23 10:56	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		02/27/23 10:56	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		02/27/23 10:56	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		02/27/23 10:56	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		02/27/23 10:56	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		02/27/23 10:56	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		02/27/23 10:56	79-00-5	
Trichloroethene	1.1	ug/L	1.0	0.21	1		02/27/23 10:56	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		02/27/23 10:56	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		02/27/23 10:56	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		02/27/23 10:56	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		02/27/23 10:56	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.17	1		02/27/23 10:56	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		02/27/23 10:56	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	95	%	80-120		1		02/27/23 10:56	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		02/27/23 10:56	2199-69-1	
Toluene-d8 (S)	98	%	80-120		1		02/27/23 10:56	2037-26-5	
Preservation pH	1.0		0.10		1		02/27/23 10:56		

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: MW-14		Lab ID: 60422699002		Collected: 02/21/23 11:30		Received: 02/24/23 10:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
Acetone	ND	ug/L	10.0	2.5	1		02/28/23 14:50	67-64-1	
Benzene	<b>0.24J</b>	ug/L	1.0	0.14	1		02/28/23 14:50	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		02/28/23 14:50	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		02/28/23 14:50	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		02/28/23 14:50	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		02/28/23 14:50	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		02/28/23 14:50	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		02/28/23 14:50	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		02/28/23 14:50	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		02/28/23 14:50	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		02/28/23 14:50	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		02/28/23 14:50	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		02/28/23 14:50	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		02/28/23 14:50	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		02/28/23 14:50	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		02/28/23 14:50	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		02/28/23 14:50	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		02/28/23 14:50	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		02/28/23 14:50	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		02/28/23 14:50	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		02/28/23 14:50	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		02/28/23 14:50	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		02/28/23 14:50	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		02/28/23 14:50	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		02/28/23 14:50	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		02/28/23 14:50	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		02/28/23 14:50	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		02/28/23 14:50	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		02/28/23 14:50	107-06-2	
1,2-Dichloroethene (Total)	<b>89.4</b>	ug/L	1.0	0.22	1		02/28/23 14:50	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		02/28/23 14:50	75-35-4	
cis-1,2-Dichloroethene	<b>72.0</b>	ug/L	1.0	0.13	1		02/28/23 14:50	156-59-2	
trans-1,2-Dichloroethene	<b>17.4</b>	ug/L	1.0	0.10	1		02/28/23 14:50	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		02/28/23 14:50	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		02/28/23 14:50	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		02/28/23 14:50	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		02/28/23 14:50	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		02/28/23 14:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		02/28/23 14:50	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		02/28/23 14:50	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		02/28/23 14:50	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		02/28/23 14:50	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		02/28/23 14:50	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		02/28/23 14:50	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		02/28/23 14:50	75-09-2	

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: MW-14		Lab ID: 60422699002		Collected: 02/21/23 11:30		Received: 02/24/23 10:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		02/28/23 14:50	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		02/28/23 14:50	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		02/28/23 14:50	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		02/28/23 14:50	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		02/28/23 14:50	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		02/28/23 14:50	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		02/28/23 14:50	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		02/28/23 14:50	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		02/28/23 14:50	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		02/28/23 14:50	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		02/28/23 14:50	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		02/28/23 14:50	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		02/28/23 14:50	79-00-5	
Trichloroethene	1.2	ug/L	1.0	0.21	1		02/28/23 14:50	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		02/28/23 14:50	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		02/28/23 14:50	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		02/28/23 14:50	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		02/28/23 14:50	108-67-8	
Vinyl chloride	1.8	ug/L	1.0	0.17	1		02/28/23 14:50	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		02/28/23 14:50	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	94	%	80-120		1		02/28/23 14:50	460-00-4	
1,2-Dichlorobenzene-d4 (S)	106	%	80-120		1		02/28/23 14:50	2199-69-1	
Toluene-d8 (S)	98	%	80-120		1		02/28/23 14:50	2037-26-5	
Preservation pH	1.0		0.10		1		02/28/23 14:50		

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: MW-104 Lab ID: 60422699003 Collected: 02/21/23 12:40 Received: 02/24/23 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b> Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City									
Acetone	ND	ug/L	10.0	2.5	1		02/27/23 11:10	67-64-1	L1
Benzene	ND	ug/L	1.0	0.14	1		02/27/23 11:10	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		02/27/23 11:10	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		02/27/23 11:10	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		02/27/23 11:10	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		02/27/23 11:10	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		02/27/23 11:10	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		02/27/23 11:10	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		02/27/23 11:10	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		02/27/23 11:10	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 11:10	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		02/27/23 11:10	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		02/27/23 11:10	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		02/27/23 11:10	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		02/27/23 11:10	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		02/27/23 11:10	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		02/27/23 11:10	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		02/27/23 11:10	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		02/27/23 11:10	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		02/27/23 11:10	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		02/27/23 11:10	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		02/27/23 11:10	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		02/27/23 11:10	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		02/27/23 11:10	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		02/27/23 11:10	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		02/27/23 11:10	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		02/27/23 11:10	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		02/27/23 11:10	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		02/27/23 11:10	107-06-2	
1,2-Dichloroethene (Total)	0.83J	ug/L	1.0	0.22	1		02/27/23 11:10	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		02/27/23 11:10	75-35-4	
cis-1,2-Dichloroethene	0.54J	ug/L	1.0	0.13	1		02/27/23 11:10	156-59-2	
trans-1,2-Dichloroethene	0.29J	ug/L	1.0	0.10	1		02/27/23 11:10	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		02/27/23 11:10	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		02/27/23 11:10	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		02/27/23 11:10	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		02/27/23 11:10	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		02/27/23 11:10	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		02/27/23 11:10	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 11:10	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		02/27/23 11:10	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		02/27/23 11:10	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		02/27/23 11:10	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		02/27/23 11:10	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		02/27/23 11:10	75-09-2	

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: MW-104		Lab ID: 60422699003		Collected: 02/21/23 12:40		Received: 02/24/23 10:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		02/27/23 11:10	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		02/27/23 11:10	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		02/27/23 11:10	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 11:10	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		02/27/23 11:10	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		02/27/23 11:10	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		02/27/23 11:10	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		02/27/23 11:10	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		02/27/23 11:10	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		02/27/23 11:10	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		02/27/23 11:10	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		02/27/23 11:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		02/27/23 11:10	79-00-5	
Trichloroethene	<b>0.90J</b>	ug/L	1.0	0.21	1		02/27/23 11:10	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		02/27/23 11:10	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		02/27/23 11:10	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		02/27/23 11:10	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		02/27/23 11:10	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.17	1		02/27/23 11:10	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		02/27/23 11:10	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	96	%	80-120		1		02/27/23 11:10	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		02/27/23 11:10	2199-69-1	
Toluene-d8 (S)	99	%	80-120		1		02/27/23 11:10	2037-26-5	
Preservation pH	<b>1.0</b>		0.10		1		02/27/23 11:10		

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

**Sample: MW-101**      **Lab ID: 60422699004**      Collected: 02/21/23 14:30      Received: 02/24/23 10:50      Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
Acetone	ND	ug/L	10.0	2.5	1		02/27/23 11:24	67-64-1	L1
Benzene	ND	ug/L	1.0	0.14	1		02/27/23 11:24	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		02/27/23 11:24	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		02/27/23 11:24	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		02/27/23 11:24	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		02/27/23 11:24	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		02/27/23 11:24	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		02/27/23 11:24	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		02/27/23 11:24	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		02/27/23 11:24	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 11:24	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		02/27/23 11:24	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		02/27/23 11:24	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		02/27/23 11:24	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		02/27/23 11:24	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		02/27/23 11:24	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		02/27/23 11:24	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		02/27/23 11:24	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		02/27/23 11:24	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		02/27/23 11:24	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		02/27/23 11:24	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		02/27/23 11:24	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		02/27/23 11:24	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		02/27/23 11:24	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		02/27/23 11:24	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		02/27/23 11:24	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		02/27/23 11:24	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		02/27/23 11:24	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		02/27/23 11:24	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	0.22	1		02/27/23 11:24	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		02/27/23 11:24	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		02/27/23 11:24	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		02/27/23 11:24	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		02/27/23 11:24	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		02/27/23 11:24	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		02/27/23 11:24	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		02/27/23 11:24	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		02/27/23 11:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		02/27/23 11:24	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 11:24	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		02/27/23 11:24	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		02/27/23 11:24	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		02/27/23 11:24	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		02/27/23 11:24	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		02/27/23 11:24	75-09-2	

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: MW-101		Lab ID: 60422699004		Collected: 02/21/23 14:30		Received: 02/24/23 10:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		02/27/23 11:24	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		02/27/23 11:24	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		02/27/23 11:24	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 11:24	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		02/27/23 11:24	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		02/27/23 11:24	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		02/27/23 11:24	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		02/27/23 11:24	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		02/27/23 11:24	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		02/27/23 11:24	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		02/27/23 11:24	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		02/27/23 11:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		02/27/23 11:24	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		02/27/23 11:24	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		02/27/23 11:24	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		02/27/23 11:24	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		02/27/23 11:24	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		02/27/23 11:24	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.17	1		02/27/23 11:24	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		02/27/23 11:24	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	96	%	80-120		1		02/27/23 11:24	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		02/27/23 11:24	2199-69-1	
Toluene-d8 (S)	96	%	80-120		1		02/27/23 11:24	2037-26-5	
Preservation pH	1.0		0.10		1		02/27/23 11:24		

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: MW-102 Lab ID: 60422699005 Collected: 02/21/23 16:25 Received: 02/24/23 10:50 Matrix: Water

Parameters	Results	Units	Report	MDL	DF	Prepared	Analyzed	CAS No.	Qual
			Limit						
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
Acetone	ND	ug/L	10.0	2.5	1		02/27/23 11:37	67-64-1	L1
Benzene	ND	ug/L	1.0	0.14	1		02/27/23 11:37	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		02/27/23 11:37	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		02/27/23 11:37	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		02/27/23 11:37	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		02/27/23 11:37	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		02/27/23 11:37	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		02/27/23 11:37	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		02/27/23 11:37	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		02/27/23 11:37	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 11:37	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		02/27/23 11:37	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		02/27/23 11:37	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		02/27/23 11:37	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		02/27/23 11:37	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		02/27/23 11:37	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		02/27/23 11:37	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		02/27/23 11:37	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		02/27/23 11:37	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		02/27/23 11:37	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		02/27/23 11:37	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		02/27/23 11:37	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		02/27/23 11:37	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		02/27/23 11:37	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		02/27/23 11:37	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		02/27/23 11:37	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		02/27/23 11:37	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		02/27/23 11:37	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		02/27/23 11:37	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	0.22	1		02/27/23 11:37	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		02/27/23 11:37	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		02/27/23 11:37	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		02/27/23 11:37	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		02/27/23 11:37	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		02/27/23 11:37	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		02/27/23 11:37	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		02/27/23 11:37	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		02/27/23 11:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		02/27/23 11:37	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 11:37	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		02/27/23 11:37	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		02/27/23 11:37	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		02/27/23 11:37	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		02/27/23 11:37	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		02/27/23 11:37	75-09-2	

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: MW-102		Lab ID: 60422699005		Collected: 02/21/23 16:25		Received: 02/24/23 10:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		02/27/23 11:37	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		02/27/23 11:37	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		02/27/23 11:37	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 11:37	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		02/27/23 11:37	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		02/27/23 11:37	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		02/27/23 11:37	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		02/27/23 11:37	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		02/27/23 11:37	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		02/27/23 11:37	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		02/27/23 11:37	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		02/27/23 11:37	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		02/27/23 11:37	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		02/27/23 11:37	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		02/27/23 11:37	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		02/27/23 11:37	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		02/27/23 11:37	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		02/27/23 11:37	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.17	1		02/27/23 11:37	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		02/27/23 11:37	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	96	%	80-120		1		02/27/23 11:37	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		02/27/23 11:37	2199-69-1	
Toluene-d8 (S)	98	%	80-120		1		02/27/23 11:37	2037-26-5	
Preservation pH	1.0		0.10		1		02/27/23 11:37		

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: MW-13 Lab ID: 60422699006 Collected: 02/22/23 08:20 Received: 02/24/23 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b> Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City									
Acetone	ND	ug/L	10.0	2.5	1		02/27/23 11:51	67-64-1	L1
Benzene	ND	ug/L	1.0	0.14	1		02/27/23 11:51	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		02/27/23 11:51	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		02/27/23 11:51	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		02/27/23 11:51	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		02/27/23 11:51	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		02/27/23 11:51	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		02/27/23 11:51	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		02/27/23 11:51	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		02/27/23 11:51	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 11:51	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		02/27/23 11:51	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		02/27/23 11:51	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		02/27/23 11:51	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		02/27/23 11:51	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		02/27/23 11:51	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		02/27/23 11:51	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		02/27/23 11:51	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		02/27/23 11:51	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		02/27/23 11:51	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		02/27/23 11:51	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		02/27/23 11:51	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		02/27/23 11:51	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		02/27/23 11:51	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		02/27/23 11:51	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		02/27/23 11:51	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		02/27/23 11:51	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		02/27/23 11:51	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		02/27/23 11:51	107-06-2	
1,2-Dichloroethene (Total)	2.8	ug/L	1.0	0.22	1		02/27/23 11:51	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		02/27/23 11:51	75-35-4	
cis-1,2-Dichloroethene	2.8	ug/L	1.0	0.13	1		02/27/23 11:51	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		02/27/23 11:51	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		02/27/23 11:51	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		02/27/23 11:51	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		02/27/23 11:51	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		02/27/23 11:51	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		02/27/23 11:51	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		02/27/23 11:51	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 11:51	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		02/27/23 11:51	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		02/27/23 11:51	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		02/27/23 11:51	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		02/27/23 11:51	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		02/27/23 11:51	75-09-2	

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: MW-13		Lab ID: 60422699006		Collected: 02/22/23 08:20		Received: 02/24/23 10:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b> Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City									
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		02/27/23 11:51	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		02/27/23 11:51	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		02/27/23 11:51	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 11:51	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		02/27/23 11:51	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		02/27/23 11:51	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		02/27/23 11:51	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		02/27/23 11:51	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		02/27/23 11:51	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		02/27/23 11:51	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		02/27/23 11:51	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		02/27/23 11:51	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		02/27/23 11:51	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		02/27/23 11:51	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		02/27/23 11:51	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		02/27/23 11:51	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		02/27/23 11:51	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		02/27/23 11:51	108-67-8	
Vinyl chloride	2.9	ug/L	1.0	0.17	1		02/27/23 11:51	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		02/27/23 11:51	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	96	%	80-120		1		02/27/23 11:51	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		02/27/23 11:51	2199-69-1	
Toluene-d8 (S)	101	%	80-120		1		02/27/23 11:51	2037-26-5	
Preservation pH	1.0		0.10		1		02/27/23 11:51		

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: MW-12		Lab ID: 60422699007		Collected: 02/22/23 09:30		Received: 02/24/23 10:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
Acetone	ND	ug/L	500	127	50		02/27/23 13:59	67-64-1	L1
Benzene	ND	ug/L	50.0	6.8	50		02/27/23 13:59	71-43-2	
Bromobenzene	ND	ug/L	50.0	4.4	50		02/27/23 13:59	108-86-1	
Bromochloromethane	ND	ug/L	50.0	10.1	50		02/27/23 13:59	74-97-5	
Bromodichloromethane	ND	ug/L	50.0	7.8	50		02/27/23 13:59	75-27-4	
Bromoform	ND	ug/L	50.0	33.8	50		02/27/23 13:59	75-25-2	
Bromomethane	ND	ug/L	250	23.0	50		02/27/23 13:59	74-83-9	
2-Butanone (MEK)	ND	ug/L	500	48.8	50		02/27/23 13:59	78-93-3	
n-Butylbenzene	ND	ug/L	50.0	7.6	50		02/27/23 13:59	104-51-8	
sec-Butylbenzene	ND	ug/L	50.0	5.5	50		02/27/23 13:59	135-98-8	
tert-Butylbenzene	ND	ug/L	50.0	6.0	50		02/27/23 13:59	98-06-6	
Carbon disulfide	ND	ug/L	250	48.9	50		02/27/23 13:59	75-15-0	
Carbon tetrachloride	ND	ug/L	50.0	8.6	50		02/27/23 13:59	56-23-5	
Chlorobenzene	ND	ug/L	50.0	4.4	50		02/27/23 13:59	108-90-7	
Chloroethane	ND	ug/L	50.0	18.7	50		02/27/23 13:59	75-00-3	
Chloroform	ND	ug/L	50.0	11.0	50		02/27/23 13:59	67-66-3	
Chloromethane	ND	ug/L	50.0	14.2	50		02/27/23 13:59	74-87-3	
2-Chlorotoluene	ND	ug/L	50.0	5.4	50		02/27/23 13:59	95-49-8	
4-Chlorotoluene	ND	ug/L	50.0	7.4	50		02/27/23 13:59	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	125	39.0	50		02/27/23 13:59	96-12-8	
Dibromochloromethane	ND	ug/L	50.0	15.2	50		02/27/23 13:59	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	50.0	9.8	50		02/27/23 13:59	106-93-4	
Dibromomethane	ND	ug/L	50.0	5.4	50		02/27/23 13:59	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	50.0	6.2	50		02/27/23 13:59	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	50.0	6.6	50		02/27/23 13:59	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	50.0	6.6	50		02/27/23 13:59	106-46-7	
Dichlorodifluoromethane	ND	ug/L	50.0	10	50		02/27/23 13:59	75-71-8	
1,1-Dichloroethane	ND	ug/L	50.0	6.1	50		02/27/23 13:59	75-34-3	
1,2-Dichloroethane	ND	ug/L	50.0	10.6	50		02/27/23 13:59	107-06-2	
1,2-Dichloroethene (Total)	<b>1370</b>	ug/L	50.0	11.1	50		02/27/23 13:59	540-59-0	
1,1-Dichloroethene	ND	ug/L	50.0	11.0	50		02/27/23 13:59	75-35-4	
cis-1,2-Dichloroethene	<b>702</b>	ug/L	50.0	6.4	50		02/27/23 13:59	156-59-2	
trans-1,2-Dichloroethene	<b>668</b>	ug/L	50.0	5.1	50		02/27/23 13:59	156-60-5	
1,2-Dichloropropane	ND	ug/L	50.0	7.0	50		02/27/23 13:59	78-87-5	
1,3-Dichloropropane	ND	ug/L	50.0	5.2	50		02/27/23 13:59	142-28-9	
2,2-Dichloropropane	ND	ug/L	50.0	8.1	50		02/27/23 13:59	594-20-7	
1,1-Dichloropropene	ND	ug/L	50.0	6.8	50		02/27/23 13:59	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	50.0	3.9	50		02/27/23 13:59	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	50.0	9.1	50		02/27/23 13:59	10061-02-6	
Ethylbenzene	ND	ug/L	50.0	6.0	50		02/27/23 13:59	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	50.0	20.8	50		02/27/23 13:59	87-68-3	
2-Hexanone	ND	ug/L	500	55.0	50		02/27/23 13:59	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	50.0	4.8	50		02/27/23 13:59	98-82-8	
p-Isopropyltoluene	ND	ug/L	50.0	6.4	50		02/27/23 13:59	99-87-6	
Methylene Chloride	ND	ug/L	50.0	19.6	50		02/27/23 13:59	75-09-2	

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: MW-12		Lab ID: 60422699007		Collected: 02/22/23 09:30		Received: 02/24/23 10:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
4-Methyl-2-pentanone (MIBK)	ND	ug/L	500	36.8	50		02/27/23 13:59	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	50.0	6.4	50		02/27/23 13:59	1634-04-4	
Naphthalene	ND	ug/L	500	41.1	50		02/27/23 13:59	91-20-3	
n-Propylbenzene	ND	ug/L	50.0	6.0	50		02/27/23 13:59	103-65-1	
Styrene	ND	ug/L	50.0	6.2	50		02/27/23 13:59	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	50.0	4.2	50		02/27/23 13:59	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	50.0	7.7	50		02/27/23 13:59	79-34-5	
Tetrachloroethene	ND	ug/L	50.0	16.5	50		02/27/23 13:59	127-18-4	
Toluene	ND	ug/L	50.0	12.6	50		02/27/23 13:59	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	50.0	46.4	50		02/27/23 13:59	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	50.0	36.6	50		02/27/23 13:59	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	50.0	5.4	50		02/27/23 13:59	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	50.0	7.1	50		02/27/23 13:59	79-00-5	
Trichloroethene	<b>4060</b>	ug/L	50.0	10.5	50		02/27/23 13:59	79-01-6	
Trichlorofluoromethane	ND	ug/L	50.0	8.2	50		02/27/23 13:59	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	125	20.4	50		02/27/23 13:59	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	50.0	16.2	50		02/27/23 13:59	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	50.0	4.5	50		02/27/23 13:59	108-67-8	
Vinyl chloride	<b>20.2J</b>	ug/L	50.0	8.4	50		02/27/23 13:59	75-01-4	
Xylene (Total)	ND	ug/L	150	14.1	50		02/27/23 13:59	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	93	%	80-120		50		02/27/23 13:59	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		50		02/27/23 13:59	2199-69-1	
Toluene-d8 (S)	97	%	80-120		50		02/27/23 13:59	2037-26-5	
Preservation pH	<b>1.0</b>		0.10		50		02/27/23 13:59		

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES  
Pace Project No.: 60422699

Sample: MW-09		Lab ID: 60422699008		Collected: 02/22/23 10:30		Received: 02/24/23 10:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
Acetone	ND	ug/L	10.0	2.5	1		02/27/23 12:45	67-64-1	L1
Benzene	ND	ug/L	1.0	0.14	1		02/27/23 12:45	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		02/27/23 12:45	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		02/27/23 12:45	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		02/27/23 12:45	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		02/27/23 12:45	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		02/27/23 12:45	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		02/27/23 12:45	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		02/27/23 12:45	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		02/27/23 12:45	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 12:45	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		02/27/23 12:45	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		02/27/23 12:45	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		02/27/23 12:45	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		02/27/23 12:45	75-00-3	
Chloroform	<b>0.31J</b>	ug/L	1.0	0.22	1		02/27/23 12:45	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		02/27/23 12:45	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		02/27/23 12:45	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		02/27/23 12:45	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		02/27/23 12:45	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		02/27/23 12:45	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		02/27/23 12:45	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		02/27/23 12:45	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		02/27/23 12:45	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		02/27/23 12:45	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		02/27/23 12:45	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		02/27/23 12:45	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		02/27/23 12:45	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		02/27/23 12:45	107-06-2	
1,2-Dichloroethene (Total)	<b>116</b>	ug/L	1.0	0.22	1		02/27/23 12:45	540-59-0	
1,1-Dichloroethene	<b>0.75J</b>	ug/L	1.0	0.22	1		02/27/23 12:45	75-35-4	
cis-1,2-Dichloroethene	<b>114</b>	ug/L	1.0	0.13	1		02/27/23 12:45	156-59-2	
trans-1,2-Dichloroethene	<b>1.5</b>	ug/L	1.0	0.10	1		02/27/23 12:45	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		02/27/23 12:45	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		02/27/23 12:45	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		02/27/23 12:45	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		02/27/23 12:45	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		02/27/23 12:45	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		02/27/23 12:45	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 12:45	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		02/27/23 12:45	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		02/27/23 12:45	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		02/27/23 12:45	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		02/27/23 12:45	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		02/27/23 12:45	75-09-2	

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: MW-09		Lab ID: 60422699008		Collected: 02/22/23 10:30		Received: 02/24/23 10:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		02/27/23 12:45	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		02/27/23 12:45	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		02/27/23 12:45	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 12:45	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		02/27/23 12:45	100-42-5	
1,1,1,2-Tetrachloroethane	<b>0.16J</b>	ug/L	1.0	0.084	1		02/27/23 12:45	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		02/27/23 12:45	79-34-5	
Tetrachloroethene	<b>0.44J</b>	ug/L	1.0	0.33	1		02/27/23 12:45	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		02/27/23 12:45	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		02/27/23 12:45	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		02/27/23 12:45	120-82-1	
1,1,1-Trichloroethane	<b>2.5</b>	ug/L	1.0	0.11	1		02/27/23 12:45	71-55-6	
1,1,2-Trichloroethane	<b>0.18J</b>	ug/L	1.0	0.14	1		02/27/23 12:45	79-00-5	
Trichloroethene	<b>1270</b>	ug/L	20.0	4.2	20		02/28/23 15:36	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		02/27/23 12:45	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		02/27/23 12:45	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		02/27/23 12:45	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		02/27/23 12:45	108-67-8	
Vinyl chloride	<b>0.50J</b>	ug/L	1.0	0.17	1		02/27/23 12:45	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		02/27/23 12:45	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	94	%	80-120		1		02/27/23 12:45	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		02/27/23 12:45	2199-69-1	
Toluene-d8 (S)	100	%	80-120		1		02/27/23 12:45	2037-26-5	
Preservation pH	<b>1.0</b>		0.10		1		02/27/23 12:45		

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: MW-11		Lab ID: 60422699009		Collected: 02/22/23 11:45		Received: 02/24/23 10:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
Acetone	ND	ug/L	10.0	2.5	1		02/27/23 12:04	67-64-1	L1
Benzene	ND	ug/L	1.0	0.14	1		02/27/23 12:04	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		02/27/23 12:04	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		02/27/23 12:04	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		02/27/23 12:04	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		02/27/23 12:04	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		02/27/23 12:04	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		02/27/23 12:04	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		02/27/23 12:04	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		02/27/23 12:04	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 12:04	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		02/27/23 12:04	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		02/27/23 12:04	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		02/27/23 12:04	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		02/27/23 12:04	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		02/27/23 12:04	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		02/27/23 12:04	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		02/27/23 12:04	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		02/27/23 12:04	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		02/27/23 12:04	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		02/27/23 12:04	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		02/27/23 12:04	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		02/27/23 12:04	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		02/27/23 12:04	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		02/27/23 12:04	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		02/27/23 12:04	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		02/27/23 12:04	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		02/27/23 12:04	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		02/27/23 12:04	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	0.22	1		02/27/23 12:04	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		02/27/23 12:04	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		02/27/23 12:04	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		02/27/23 12:04	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		02/27/23 12:04	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		02/27/23 12:04	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		02/27/23 12:04	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		02/27/23 12:04	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		02/27/23 12:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		02/27/23 12:04	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 12:04	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		02/27/23 12:04	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		02/27/23 12:04	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		02/27/23 12:04	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		02/27/23 12:04	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		02/27/23 12:04	75-09-2	

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: MW-11		Lab ID: 60422699009		Collected: 02/22/23 11:45		Received: 02/24/23 10:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		02/27/23 12:04	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		02/27/23 12:04	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		02/27/23 12:04	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 12:04	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		02/27/23 12:04	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		02/27/23 12:04	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		02/27/23 12:04	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		02/27/23 12:04	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		02/27/23 12:04	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		02/27/23 12:04	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		02/27/23 12:04	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		02/27/23 12:04	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		02/27/23 12:04	79-00-5	
Trichloroethene	<b>0.30J</b>	ug/L	1.0	0.21	1		02/27/23 12:04	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		02/27/23 12:04	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		02/27/23 12:04	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		02/27/23 12:04	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		02/27/23 12:04	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.17	1		02/27/23 12:04	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		02/27/23 12:04	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	97	%	80-120		1		02/27/23 12:04	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		02/27/23 12:04	2199-69-1	
Toluene-d8 (S)	97	%	80-120		1		02/27/23 12:04	2037-26-5	
Preservation pH	<b>1.0</b>		0.10		1		02/27/23 12:04		

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: MW-4B Lab ID: 60422699010 Collected: 02/22/23 12:40 Received: 02/24/23 10:50 Matrix: Water

Parameters	Results	Units	Report	MDL	DF	Prepared	Analyzed	CAS No.	Qual
			Limit						
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
Acetone	ND	ug/L	10.0	2.5	1		02/27/23 12:18	67-64-1	L1
Benzene	ND	ug/L	1.0	0.14	1		02/27/23 12:18	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		02/27/23 12:18	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		02/27/23 12:18	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		02/27/23 12:18	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		02/27/23 12:18	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		02/27/23 12:18	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		02/27/23 12:18	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		02/27/23 12:18	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		02/27/23 12:18	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 12:18	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		02/27/23 12:18	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		02/27/23 12:18	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		02/27/23 12:18	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		02/27/23 12:18	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		02/27/23 12:18	67-66-3	
Chloromethane	0.31J	ug/L	1.0	0.28	1		02/27/23 12:18	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		02/27/23 12:18	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		02/27/23 12:18	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		02/27/23 12:18	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		02/27/23 12:18	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		02/27/23 12:18	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		02/27/23 12:18	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		02/27/23 12:18	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		02/27/23 12:18	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		02/27/23 12:18	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		02/27/23 12:18	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		02/27/23 12:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		02/27/23 12:18	107-06-2	
1,2-Dichloroethene (Total)	1.0	ug/L	1.0	0.22	1		02/27/23 12:18	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		02/27/23 12:18	75-35-4	
cis-1,2-Dichloroethene	0.89J	ug/L	1.0	0.13	1		02/27/23 12:18	156-59-2	
trans-1,2-Dichloroethene	0.15J	ug/L	1.0	0.10	1		02/27/23 12:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		02/27/23 12:18	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		02/27/23 12:18	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		02/27/23 12:18	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		02/27/23 12:18	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		02/27/23 12:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		02/27/23 12:18	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 12:18	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		02/27/23 12:18	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		02/27/23 12:18	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		02/27/23 12:18	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		02/27/23 12:18	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		02/27/23 12:18	75-09-2	

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: MW-4B		Lab ID: 60422699010		Collected: 02/22/23 12:40		Received: 02/24/23 10:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		02/27/23 12:18	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		02/27/23 12:18	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		02/27/23 12:18	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 12:18	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		02/27/23 12:18	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		02/27/23 12:18	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		02/27/23 12:18	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		02/27/23 12:18	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		02/27/23 12:18	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		02/27/23 12:18	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		02/27/23 12:18	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		02/27/23 12:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		02/27/23 12:18	79-00-5	
Trichloroethene	1.5	ug/L	1.0	0.21	1		02/27/23 12:18	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		02/27/23 12:18	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		02/27/23 12:18	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		02/27/23 12:18	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		02/27/23 12:18	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.17	1		02/27/23 12:18	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		02/27/23 12:18	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	92	%	80-120		1		02/27/23 12:18	460-00-4	
1,2-Dichlorobenzene-d4 (S)	97	%	80-120		1		02/27/23 12:18	2199-69-1	
Toluene-d8 (S)	99	%	80-120		1		02/27/23 12:18	2037-26-5	
Preservation pH	1.0		0.10		1		02/27/23 12:18		

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: MW-6B Lab ID: 60422699011 Collected: 02/22/23 14:10 Received: 02/24/23 10:50 Matrix: Water

Parameters	Results	Units	Report			Prepared	Analyzed	CAS No.	Qual
			Limit	MDL	DF				
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
Acetone	ND	ug/L	10.0	2.5	1		02/27/23 12:32	67-64-1	L1
Benzene	ND	ug/L	1.0	0.14	1		02/27/23 12:32	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		02/27/23 12:32	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		02/27/23 12:32	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		02/27/23 12:32	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		02/27/23 12:32	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		02/27/23 12:32	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		02/27/23 12:32	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		02/27/23 12:32	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		02/27/23 12:32	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 12:32	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		02/27/23 12:32	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		02/27/23 12:32	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		02/27/23 12:32	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		02/27/23 12:32	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		02/27/23 12:32	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		02/27/23 12:32	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		02/27/23 12:32	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		02/27/23 12:32	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		02/27/23 12:32	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		02/27/23 12:32	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		02/27/23 12:32	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		02/27/23 12:32	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		02/27/23 12:32	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		02/27/23 12:32	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		02/27/23 12:32	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		02/27/23 12:32	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		02/27/23 12:32	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		02/27/23 12:32	107-06-2	
1,2-Dichloroethene (Total)	2.6	ug/L	1.0	0.22	1		02/27/23 12:32	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		02/27/23 12:32	75-35-4	
cis-1,2-Dichloroethene	2.5	ug/L	1.0	0.13	1		02/27/23 12:32	156-59-2	
trans-1,2-Dichloroethene	0.14J	ug/L	1.0	0.10	1		02/27/23 12:32	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		02/27/23 12:32	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		02/27/23 12:32	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		02/27/23 12:32	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		02/27/23 12:32	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		02/27/23 12:32	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		02/27/23 12:32	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 12:32	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		02/27/23 12:32	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		02/27/23 12:32	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		02/27/23 12:32	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		02/27/23 12:32	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		02/27/23 12:32	75-09-2	

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: MW-6B		Lab ID: 60422699011		Collected: 02/22/23 14:10		Received: 02/24/23 10:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b> Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City									
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		02/27/23 12:32	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		02/27/23 12:32	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		02/27/23 12:32	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 12:32	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		02/27/23 12:32	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		02/27/23 12:32	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		02/27/23 12:32	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		02/27/23 12:32	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		02/27/23 12:32	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		02/27/23 12:32	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		02/27/23 12:32	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		02/27/23 12:32	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		02/27/23 12:32	79-00-5	
Trichloroethene	7.0	ug/L	1.0	0.21	1		02/27/23 12:32	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		02/27/23 12:32	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		02/27/23 12:32	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		02/27/23 12:32	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		02/27/23 12:32	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.17	1		02/27/23 12:32	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		02/27/23 12:32	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	96	%	80-120		1		02/27/23 12:32	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		02/27/23 12:32	2199-69-1	
Toluene-d8 (S)	99	%	80-120		1		02/27/23 12:32	2037-26-5	
Preservation pH	1.0		0.10		1		02/27/23 12:32		

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: MW-8B Lab ID: 60422699012 Collected: 02/22/23 16:15 Received: 02/24/23 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b> Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City									
Acetone	ND	ug/L	1000	254	100		02/27/23 16:15	67-64-1	L1
Benzene	21.9J	ug/L	100	13.6	100		02/27/23 16:15	71-43-2	
Bromobenzene	ND	ug/L	100	8.8	100		02/27/23 16:15	108-86-1	
Bromochloromethane	ND	ug/L	100	20.2	100		02/27/23 16:15	74-97-5	
Bromodichloromethane	ND	ug/L	100	15.5	100		02/27/23 16:15	75-27-4	
Bromoform	ND	ug/L	100	67.6	100		02/27/23 16:15	75-25-2	
Bromomethane	ND	ug/L	500	46.0	100		02/27/23 16:15	74-83-9	
2-Butanone (MEK)	ND	ug/L	1000	97.5	100		02/27/23 16:15	78-93-3	
n-Butylbenzene	ND	ug/L	100	15.3	100		02/27/23 16:15	104-51-8	
sec-Butylbenzene	ND	ug/L	100	11.0	100		02/27/23 16:15	135-98-8	
tert-Butylbenzene	ND	ug/L	100	12.0	100		02/27/23 16:15	98-06-6	
Carbon disulfide	ND	ug/L	500	97.8	100		02/27/23 16:15	75-15-0	
Carbon tetrachloride	ND	ug/L	100	17.2	100		02/27/23 16:15	56-23-5	
Chlorobenzene	ND	ug/L	100	8.9	100		02/27/23 16:15	108-90-7	
Chloroethane	ND	ug/L	100	37.4	100		02/27/23 16:15	75-00-3	
Chloroform	ND	ug/L	100	22.0	100		02/27/23 16:15	67-66-3	
Chloromethane	ND	ug/L	100	28.3	100		02/27/23 16:15	74-87-3	
2-Chlorotoluene	ND	ug/L	100	10.8	100		02/27/23 16:15	95-49-8	
4-Chlorotoluene	ND	ug/L	100	14.9	100		02/27/23 16:15	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	250	78.0	100		02/27/23 16:15	96-12-8	
Dibromochloromethane	ND	ug/L	100	30.5	100		02/27/23 16:15	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	100	19.6	100		02/27/23 16:15	106-93-4	
Dibromomethane	ND	ug/L	100	10.9	100		02/27/23 16:15	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	100	12.5	100		02/27/23 16:15	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	100	13.2	100		02/27/23 16:15	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	100	13.3	100		02/27/23 16:15	106-46-7	
Dichlorodifluoromethane	ND	ug/L	100	19.9	100		02/27/23 16:15	75-71-8	
1,1-Dichloroethane	ND	ug/L	100	12.2	100		02/27/23 16:15	75-34-3	
1,2-Dichloroethane	ND	ug/L	100	21.2	100		02/27/23 16:15	107-06-2	
1,2-Dichloroethene (Total)	10700	ug/L	100	22.2	100		02/27/23 16:15	540-59-0	
1,1-Dichloroethene	ND	ug/L	100	21.9	100		02/27/23 16:15	75-35-4	
cis-1,2-Dichloroethene	9880	ug/L	100	12.9	100		02/27/23 16:15	156-59-2	
trans-1,2-Dichloroethene	834	ug/L	100	10.2	100		02/27/23 16:15	156-60-5	
1,2-Dichloropropane	ND	ug/L	100	13.9	100		02/27/23 16:15	78-87-5	
1,3-Dichloropropane	ND	ug/L	100	10.4	100		02/27/23 16:15	142-28-9	
2,2-Dichloropropane	ND	ug/L	100	16.2	100		02/27/23 16:15	594-20-7	
1,1-Dichloropropene	ND	ug/L	100	13.5	100		02/27/23 16:15	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	100	7.8	100		02/27/23 16:15	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	100	18.2	100		02/27/23 16:15	10061-02-6	
Ethylbenzene	ND	ug/L	100	12.0	100		02/27/23 16:15	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	100	41.7	100		02/27/23 16:15	87-68-3	
2-Hexanone	ND	ug/L	1000	110	100		02/27/23 16:15	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	100	9.7	100		02/27/23 16:15	98-82-8	
p-Isopropyltoluene	ND	ug/L	100	12.7	100		02/27/23 16:15	99-87-6	
Methylene Chloride	ND	ug/L	100	39.1	100		02/27/23 16:15	75-09-2	

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: MW-8B		Lab ID: 60422699012		Collected: 02/22/23 16:15		Received: 02/24/23 10:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
4-Methyl-2-pentanone (MIBK)	ND	ug/L	1000	73.6	100		02/27/23 16:15	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	100	12.8	100		02/27/23 16:15	1634-04-4	
Naphthalene	ND	ug/L	1000	82.2	100		02/27/23 16:15	91-20-3	
n-Propylbenzene	ND	ug/L	100	11.9	100		02/27/23 16:15	103-65-1	
Styrene	ND	ug/L	100	12.3	100		02/27/23 16:15	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	100	8.4	100		02/27/23 16:15	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	100	15.4	100		02/27/23 16:15	79-34-5	
Tetrachloroethene	ND	ug/L	100	33.0	100		02/27/23 16:15	127-18-4	
Toluene	ND	ug/L	100	25.3	100		02/27/23 16:15	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	100	92.7	100		02/27/23 16:15	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	100	73.2	100		02/27/23 16:15	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	100	10.9	100		02/27/23 16:15	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	100	14.2	100		02/27/23 16:15	79-00-5	
Trichloroethene	7700	ug/L	100	21.0	100		02/27/23 16:15	79-01-6	
Trichlorofluoromethane	ND	ug/L	100	16.4	100		02/27/23 16:15	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	250	40.8	100		02/27/23 16:15	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	100	32.4	100		02/27/23 16:15	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	100	9.0	100		02/27/23 16:15	108-67-8	
Vinyl chloride	258	ug/L	100	16.7	100		02/27/23 16:15	75-01-4	
Xylene (Total)	ND	ug/L	300	28.2	100		02/27/23 16:15	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	98	%	80-120		100		02/27/23 16:15	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	80-120		100		02/27/23 16:15	2199-69-1	
Toluene-d8 (S)	98	%	80-120		100		02/27/23 16:15	2037-26-5	
Preservation pH	1.0		0.10		100		02/27/23 16:15		

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

**Sample: MW-2B**      **Lab ID: 60422699013**      Collected: 02/22/23 15:10      Received: 02/24/23 10:50      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
Acetone	ND	ug/L	250	63.5	25		02/27/23 16:02	67-64-1	L1
Benzene	ND	ug/L	25.0	3.4	25		02/27/23 16:02	71-43-2	
Bromobenzene	ND	ug/L	25.0	2.2	25		02/27/23 16:02	108-86-1	
Bromochloromethane	ND	ug/L	25.0	5.0	25		02/27/23 16:02	74-97-5	
Bromodichloromethane	ND	ug/L	25.0	3.9	25		02/27/23 16:02	75-27-4	
Bromoform	ND	ug/L	25.0	16.9	25		02/27/23 16:02	75-25-2	
Bromomethane	ND	ug/L	125	11.5	25		02/27/23 16:02	74-83-9	
2-Butanone (MEK)	ND	ug/L	250	24.4	25		02/27/23 16:02	78-93-3	
n-Butylbenzene	ND	ug/L	25.0	3.8	25		02/27/23 16:02	104-51-8	
sec-Butylbenzene	ND	ug/L	25.0	2.8	25		02/27/23 16:02	135-98-8	
tert-Butylbenzene	ND	ug/L	25.0	3.0	25		02/27/23 16:02	98-06-6	
Carbon disulfide	ND	ug/L	125	24.4	25		02/27/23 16:02	75-15-0	
Carbon tetrachloride	ND	ug/L	25.0	4.3	25		02/27/23 16:02	56-23-5	
Chlorobenzene	ND	ug/L	25.0	2.2	25		02/27/23 16:02	108-90-7	
Chloroethane	ND	ug/L	25.0	9.4	25		02/27/23 16:02	75-00-3	
Chloroform	ND	ug/L	25.0	5.5	25		02/27/23 16:02	67-66-3	
Chloromethane	ND	ug/L	25.0	7.1	25		02/27/23 16:02	74-87-3	
2-Chlorotoluene	ND	ug/L	25.0	2.7	25		02/27/23 16:02	95-49-8	
4-Chlorotoluene	ND	ug/L	25.0	3.7	25		02/27/23 16:02	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	62.5	19.5	25		02/27/23 16:02	96-12-8	
Dibromochloromethane	ND	ug/L	25.0	7.6	25		02/27/23 16:02	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	25.0	4.9	25		02/27/23 16:02	106-93-4	
Dibromomethane	ND	ug/L	25.0	2.7	25		02/27/23 16:02	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	25.0	3.1	25		02/27/23 16:02	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	25.0	3.3	25		02/27/23 16:02	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	25.0	3.3	25		02/27/23 16:02	106-46-7	
Dichlorodifluoromethane	ND	ug/L	25.0	5.0	25		02/27/23 16:02	75-71-8	
1,1-Dichloroethane	ND	ug/L	25.0	3.0	25		02/27/23 16:02	75-34-3	
1,2-Dichloroethane	ND	ug/L	25.0	5.3	25		02/27/23 16:02	107-06-2	
1,2-Dichloroethene (Total)	<b>997</b>	ug/L	25.0	5.6	25		02/27/23 16:02	540-59-0	
1,1-Dichloroethene	ND	ug/L	25.0	5.5	25		02/27/23 16:02	75-35-4	
cis-1,2-Dichloroethene	<b>945</b>	ug/L	25.0	3.2	25		02/27/23 16:02	156-59-2	
trans-1,2-Dichloroethene	<b>52.0</b>	ug/L	25.0	2.6	25		02/27/23 16:02	156-60-5	
1,2-Dichloropropane	ND	ug/L	25.0	3.5	25		02/27/23 16:02	78-87-5	
1,3-Dichloropropane	ND	ug/L	25.0	2.6	25		02/27/23 16:02	142-28-9	
2,2-Dichloropropane	ND	ug/L	25.0	4.0	25		02/27/23 16:02	594-20-7	
1,1-Dichloropropene	ND	ug/L	25.0	3.4	25		02/27/23 16:02	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	25.0	1.9	25		02/27/23 16:02	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	25.0	4.6	25		02/27/23 16:02	10061-02-6	
Ethylbenzene	ND	ug/L	25.0	3.0	25		02/27/23 16:02	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	25.0	10.4	25		02/27/23 16:02	87-68-3	
2-Hexanone	ND	ug/L	250	27.5	25		02/27/23 16:02	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	25.0	2.4	25		02/27/23 16:02	98-82-8	
p-Isopropyltoluene	ND	ug/L	25.0	3.2	25		02/27/23 16:02	99-87-6	
Methylene Chloride	ND	ug/L	25.0	9.8	25		02/27/23 16:02	75-09-2	

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: MW-2B		Lab ID: 60422699013		Collected: 02/22/23 15:10		Received: 02/24/23 10:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
4-Methyl-2-pentanone (MIBK)	ND	ug/L	250	18.4	25		02/27/23 16:02	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	25.0	3.2	25		02/27/23 16:02	1634-04-4	
Naphthalene	ND	ug/L	250	20.6	25		02/27/23 16:02	91-20-3	
n-Propylbenzene	ND	ug/L	25.0	3.0	25		02/27/23 16:02	103-65-1	
Styrene	ND	ug/L	25.0	3.1	25		02/27/23 16:02	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	25.0	2.1	25		02/27/23 16:02	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	25.0	3.8	25		02/27/23 16:02	79-34-5	
Tetrachloroethene	ND	ug/L	25.0	8.2	25		02/27/23 16:02	127-18-4	
Toluene	ND	ug/L	25.0	6.3	25		02/27/23 16:02	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	25.0	23.2	25		02/27/23 16:02	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	25.0	18.3	25		02/27/23 16:02	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	25.0	2.7	25		02/27/23 16:02	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	25.0	3.6	25		02/27/23 16:02	79-00-5	
Trichloroethene	<b>2180</b>	ug/L	25.0	5.2	25		02/27/23 16:02	79-01-6	
Trichlorofluoromethane	ND	ug/L	25.0	4.1	25		02/27/23 16:02	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	62.5	10.2	25		02/27/23 16:02	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	25.0	8.1	25		02/27/23 16:02	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	25.0	2.2	25		02/27/23 16:02	108-67-8	
Vinyl chloride	<b>57.2</b>	ug/L	25.0	4.2	25		02/27/23 16:02	75-01-4	
Xylene (Total)	ND	ug/L	75.0	7.0	25		02/27/23 16:02	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	96	%	80-120		25		02/27/23 16:02	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	80-120		25		02/27/23 16:02	2199-69-1	
Toluene-d8 (S)	101	%	80-120		25		02/27/23 16:02	2037-26-5	
Preservation pH	<b>1.0</b>		0.10		25		02/27/23 16:02		

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES  
Pace Project No.: 60422699

**Sample: MW-3B**      **Lab ID: 60422699014**      Collected: 02/22/23 17:20      Received: 02/24/23 10:50      Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b> Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City									
Acetone	ND	ug/L	100	25.4	10		02/27/23 15:48	67-64-1	L1
Benzene	<b>2.9J</b>	ug/L	10.0	1.4	10		02/27/23 15:48	71-43-2	
Bromobenzene	ND	ug/L	10.0	0.88	10		02/27/23 15:48	108-86-1	
Bromochloromethane	ND	ug/L	10.0	2.0	10		02/27/23 15:48	74-97-5	
Bromodichloromethane	ND	ug/L	10.0	1.6	10		02/27/23 15:48	75-27-4	
Bromoform	ND	ug/L	10.0	6.8	10		02/27/23 15:48	75-25-2	
Bromomethane	ND	ug/L	50.0	4.6	10		02/27/23 15:48	74-83-9	
2-Butanone (MEK)	ND	ug/L	100	9.8	10		02/27/23 15:48	78-93-3	
n-Butylbenzene	ND	ug/L	10.0	1.5	10		02/27/23 15:48	104-51-8	
sec-Butylbenzene	ND	ug/L	10.0	1.1	10		02/27/23 15:48	135-98-8	
tert-Butylbenzene	ND	ug/L	10.0	1.2	10		02/27/23 15:48	98-06-6	
Carbon disulfide	ND	ug/L	50.0	9.8	10		02/27/23 15:48	75-15-0	
Carbon tetrachloride	<b>29.4</b>	ug/L	10.0	1.7	10		02/27/23 15:48	56-23-5	
Chlorobenzene	ND	ug/L	10.0	0.89	10		02/27/23 15:48	108-90-7	
Chloroethane	ND	ug/L	10.0	3.7	10		02/27/23 15:48	75-00-3	
Chloroform	<b>19.5</b>	ug/L	10.0	2.2	10		02/27/23 15:48	67-66-3	
Chloromethane	ND	ug/L	10.0	2.8	10		02/27/23 15:48	74-87-3	
2-Chlorotoluene	ND	ug/L	10.0	1.1	10		02/27/23 15:48	95-49-8	
4-Chlorotoluene	ND	ug/L	10.0	1.5	10		02/27/23 15:48	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	25.0	7.8	10		02/27/23 15:48	96-12-8	
Dibromochloromethane	ND	ug/L	10.0	3.0	10		02/27/23 15:48	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	10.0	2.0	10		02/27/23 15:48	106-93-4	
Dibromomethane	ND	ug/L	10.0	1.1	10		02/27/23 15:48	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	10.0	1.2	10		02/27/23 15:48	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.0	1.3	10		02/27/23 15:48	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.0	1.3	10		02/27/23 15:48	106-46-7	
Dichlorodifluoromethane	ND	ug/L	10.0	2.0	10		02/27/23 15:48	75-71-8	
1,1-Dichloroethane	ND	ug/L	10.0	1.2	10		02/27/23 15:48	75-34-3	
1,2-Dichloroethane	ND	ug/L	10.0	2.1	10		02/27/23 15:48	107-06-2	
1,2-Dichloroethene (Total)	<b>650</b>	ug/L	10.0	2.2	10		02/27/23 15:48	540-59-0	
1,1-Dichloroethene	ND	ug/L	10.0	2.2	10		02/27/23 15:48	75-35-4	
cis-1,2-Dichloroethene	<b>624</b>	ug/L	10.0	1.3	10		02/27/23 15:48	156-59-2	
trans-1,2-Dichloroethene	<b>25.8</b>	ug/L	10.0	1.0	10		02/27/23 15:48	156-60-5	
1,2-Dichloropropane	ND	ug/L	10.0	1.4	10		02/27/23 15:48	78-87-5	
1,3-Dichloropropane	ND	ug/L	10.0	1.0	10		02/27/23 15:48	142-28-9	
2,2-Dichloropropane	ND	ug/L	10.0	1.6	10		02/27/23 15:48	594-20-7	
1,1-Dichloropropene	ND	ug/L	10.0	1.4	10		02/27/23 15:48	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	10.0	0.78	10		02/27/23 15:48	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	10.0	1.8	10		02/27/23 15:48	10061-02-6	
Ethylbenzene	ND	ug/L	10.0	1.2	10		02/27/23 15:48	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	10.0	4.2	10		02/27/23 15:48	87-68-3	
2-Hexanone	ND	ug/L	100	11.0	10		02/27/23 15:48	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	10.0	0.97	10		02/27/23 15:48	98-82-8	
p-Isopropyltoluene	ND	ug/L	10.0	1.3	10		02/27/23 15:48	99-87-6	
Methylene Chloride	ND	ug/L	10.0	3.9	10		02/27/23 15:48	75-09-2	

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: MW-3B		Lab ID: 60422699014		Collected: 02/22/23 17:20		Received: 02/24/23 10:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
4-Methyl-2-pentanone (MIBK)	ND	ug/L	100	7.4	10		02/27/23 15:48	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	10.0	1.3	10		02/27/23 15:48	1634-04-4	
Naphthalene	ND	ug/L	100	8.2	10		02/27/23 15:48	91-20-3	
n-Propylbenzene	ND	ug/L	10.0	1.2	10		02/27/23 15:48	103-65-1	
Styrene	ND	ug/L	10.0	1.2	10		02/27/23 15:48	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	10.0	0.84	10		02/27/23 15:48	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	10.0	1.5	10		02/27/23 15:48	79-34-5	
Tetrachloroethene	<b>7.7J</b>	ug/L	10.0	3.3	10		02/27/23 15:48	127-18-4	
Toluene	ND	ug/L	10.0	2.5	10		02/27/23 15:48	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	10.0	9.3	10		02/27/23 15:48	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	10.0	7.3	10		02/27/23 15:48	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	10.0	1.1	10		02/27/23 15:48	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	10.0	1.4	10		02/27/23 15:48	79-00-5	
Trichloroethene	<b>715</b>	ug/L	10.0	2.1	10		02/27/23 15:48	79-01-6	
Trichlorofluoromethane	ND	ug/L	10.0	1.6	10		02/27/23 15:48	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	25.0	4.1	10		02/27/23 15:48	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	10.0	3.2	10		02/27/23 15:48	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	10.0	0.90	10		02/27/23 15:48	108-67-8	
Vinyl chloride	<b>30.5</b>	ug/L	10.0	1.7	10		02/27/23 15:48	75-01-4	
Xylene (Total)	ND	ug/L	30.0	2.8	10		02/27/23 15:48	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	92	%	80-120		10		02/27/23 15:48	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		10		02/27/23 15:48	2199-69-1	
Toluene-d8 (S)	100	%	80-120		10		02/27/23 15:48	2037-26-5	
Preservation pH	<b>1.0</b>		0.10		10		02/27/23 15:48		

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES  
Pace Project No.: 60422699

Sample: MW-X		Lab ID: 60422699015		Collected: 02/22/23 17:20		Received: 02/24/23 10:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
Acetone	ND	ug/L	10.0	2.5	1		02/27/23 15:34	67-64-1	L1
Benzene	2.9	ug/L	1.0	0.14	1		02/27/23 15:34	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		02/27/23 15:34	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		02/27/23 15:34	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		02/27/23 15:34	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		02/27/23 15:34	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		02/27/23 15:34	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		02/27/23 15:34	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		02/27/23 15:34	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		02/27/23 15:34	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 15:34	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		02/27/23 15:34	75-15-0	
Carbon tetrachloride	36.7	ug/L	1.0	0.17	1		02/27/23 15:34	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		02/27/23 15:34	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		02/27/23 15:34	75-00-3	
Chloroform	20.7	ug/L	1.0	0.22	1		02/27/23 15:34	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		02/27/23 15:34	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		02/27/23 15:34	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		02/27/23 15:34	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		02/27/23 15:34	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		02/27/23 15:34	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		02/27/23 15:34	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		02/27/23 15:34	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		02/27/23 15:34	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		02/27/23 15:34	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		02/27/23 15:34	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		02/27/23 15:34	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		02/27/23 15:34	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		02/27/23 15:34	107-06-2	
1,2-Dichloroethene (Total)	479	ug/L	20.0	4.4	20		02/28/23 15:52	540-59-0	
1,1-Dichloroethene	0.96J	ug/L	1.0	0.22	1		02/27/23 15:34	75-35-4	
cis-1,2-Dichloroethene	479	ug/L	20.0	2.6	20		02/28/23 15:52	156-59-2	
trans-1,2-Dichloroethene	16.5J	ug/L	20.0	2.0	20		02/28/23 15:52	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		02/27/23 15:34	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		02/27/23 15:34	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		02/27/23 15:34	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		02/27/23 15:34	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		02/27/23 15:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		02/27/23 15:34	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 15:34	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		02/27/23 15:34	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		02/27/23 15:34	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		02/27/23 15:34	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		02/27/23 15:34	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		02/27/23 15:34	75-09-2	

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: MW-X		Lab ID: 60422699015		Collected: 02/22/23 17:20		Received: 02/24/23 10:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		02/27/23 15:34	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		02/27/23 15:34	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		02/27/23 15:34	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 15:34	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		02/27/23 15:34	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		02/27/23 15:34	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		02/27/23 15:34	79-34-5	
Tetrachloroethene	<b>10.3</b>	ug/L	1.0	0.33	1		02/27/23 15:34	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		02/27/23 15:34	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		02/27/23 15:34	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		02/27/23 15:34	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		02/27/23 15:34	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		02/27/23 15:34	79-00-5	
Trichloroethene	<b>582</b>	ug/L	20.0	4.2	20		02/28/23 15:52	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		02/27/23 15:34	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		02/27/23 15:34	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		02/27/23 15:34	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		02/27/23 15:34	108-67-8	
Vinyl chloride	<b>35.0</b>	ug/L	1.0	0.17	1		02/27/23 15:34	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		02/27/23 15:34	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	106	%	80-120		1		02/27/23 15:34	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		02/27/23 15:34	2199-69-1	
Toluene-d8 (S)	101	%	80-120		1		02/27/23 15:34	2037-26-5	
Preservation pH	<b>1.0</b>		0.10		1		02/27/23 15:34		

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES  
Pace Project No.: 60422699

**Sample: MW-1B**      **Lab ID: 60422699016**      Collected: 02/23/23 08:20      Received: 02/24/23 10:50      Matrix: Water

Parameters	Results	Units	Report	MDL	DF	Prepared	Analyzed	CAS No.	Qual
			Limit						
<b>8260 MSV</b>									
Analytical Method: EPA 5030B/8260									
Pace Analytical Services - Kansas City									
Acetone	ND	ug/L	50.0	12.7	5		02/27/23 21:16	67-64-1	L1
Benzene	3.6J	ug/L	5.0	0.68	5		02/27/23 21:16	71-43-2	
Bromobenzene	ND	ug/L	5.0	0.44	5		02/27/23 21:16	108-86-1	
Bromochloromethane	ND	ug/L	5.0	1.0	5		02/27/23 21:16	74-97-5	
Bromodichloromethane	ND	ug/L	5.0	0.78	5		02/27/23 21:16	75-27-4	
Bromoform	ND	ug/L	5.0	3.4	5		02/27/23 21:16	75-25-2	
Bromomethane	ND	ug/L	25.0	2.3	5		02/27/23 21:16	74-83-9	
2-Butanone (MEK)	ND	ug/L	50.0	4.9	5		02/27/23 21:16	78-93-3	
n-Butylbenzene	ND	ug/L	5.0	0.76	5		02/27/23 21:16	104-51-8	
sec-Butylbenzene	ND	ug/L	5.0	0.55	5		02/27/23 21:16	135-98-8	
tert-Butylbenzene	ND	ug/L	5.0	0.60	5		02/27/23 21:16	98-06-6	
Carbon disulfide	ND	ug/L	25.0	4.9	5		02/27/23 21:16	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.86	5		02/27/23 21:16	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.44	5		02/27/23 21:16	108-90-7	
Chloroethane	11.4	ug/L	5.0	1.9	5		02/27/23 21:16	75-00-3	
Chloroform	ND	ug/L	5.0	1.1	5		02/27/23 21:16	67-66-3	
Chloromethane	ND	ug/L	5.0	1.4	5		02/27/23 21:16	74-87-3	
2-Chlorotoluene	ND	ug/L	5.0	0.54	5		02/27/23 21:16	95-49-8	
4-Chlorotoluene	ND	ug/L	5.0	0.74	5		02/27/23 21:16	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	12.5	3.9	5		02/27/23 21:16	96-12-8	
Dibromochloromethane	ND	ug/L	5.0	1.5	5		02/27/23 21:16	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	5.0	0.98	5		02/27/23 21:16	106-93-4	
Dibromomethane	ND	ug/L	5.0	0.54	5		02/27/23 21:16	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	5.0	0.62	5		02/27/23 21:16	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	5.0	0.66	5		02/27/23 21:16	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	5.0	0.66	5		02/27/23 21:16	106-46-7	
Dichlorodifluoromethane	ND	ug/L	5.0	1.0	5		02/27/23 21:16	75-71-8	
1,1-Dichloroethane	ND	ug/L	5.0	0.61	5		02/27/23 21:16	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	1.1	5		02/27/23 21:16	107-06-2	
1,2-Dichloroethene (Total)	365	ug/L	5.0	1.1	5		03/02/23 11:34	540-59-0	
1,1-Dichloroethene	ND	ug/L	5.0	1.1	5		02/27/23 21:16	75-35-4	
cis-1,2-Dichloroethene	362	ug/L	5.0	0.64	5		03/02/23 11:34	156-59-2	
trans-1,2-Dichloroethene	3.8J	ug/L	5.0	0.51	5		03/02/23 11:34	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.70	5		02/27/23 21:16	78-87-5	
1,3-Dichloropropane	ND	ug/L	5.0	0.52	5		02/27/23 21:16	142-28-9	
2,2-Dichloropropane	ND	ug/L	5.0	0.81	5		02/27/23 21:16	594-20-7	
1,1-Dichloropropene	ND	ug/L	5.0	0.68	5		02/27/23 21:16	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	5.0	0.39	5		02/27/23 21:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	5.0	0.91	5		02/27/23 21:16	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.60	5		02/27/23 21:16	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	5.0	2.1	5		02/27/23 21:16	87-68-3	
2-Hexanone	ND	ug/L	50.0	5.5	5		02/27/23 21:16	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	5.0	0.48	5		02/27/23 21:16	98-82-8	
p-Isopropyltoluene	ND	ug/L	5.0	0.64	5		02/27/23 21:16	99-87-6	
Methylene Chloride	ND	ug/L	5.0	2.0	5		02/27/23 21:16	75-09-2	

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: MW-1B		Lab ID: 60422699016		Collected: 02/23/23 08:20		Received: 02/24/23 10:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
4-Methyl-2-pentanone (MIBK)	ND	ug/L	50.0	3.7	5		02/27/23 21:16	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	5.0	0.64	5		02/27/23 21:16	1634-04-4	
Naphthalene	ND	ug/L	50.0	4.1	5		02/27/23 21:16	91-20-3	
n-Propylbenzene	ND	ug/L	5.0	0.60	5		02/27/23 21:16	103-65-1	
Styrene	ND	ug/L	5.0	0.62	5		02/27/23 21:16	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	5.0	0.42	5		02/27/23 21:16	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	0.77	5		02/27/23 21:16	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	1.6	5		02/27/23 21:16	127-18-4	
Toluene	ND	ug/L	5.0	1.3	5		02/27/23 21:16	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	5.0	4.6	5		02/27/23 21:16	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	5.0	3.7	5		02/27/23 21:16	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.54	5		02/27/23 21:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.71	5		02/27/23 21:16	79-00-5	
Trichloroethene	2.2J	ug/L	5.0	1.0	5		03/02/23 11:34	79-01-6	
Trichlorofluoromethane	ND	ug/L	5.0	0.82	5		02/27/23 21:16	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	12.5	2.0	5		02/27/23 21:16	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	5.0	1.6	5		02/27/23 21:16	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	5.0	0.45	5		02/27/23 21:16	108-67-8	
Vinyl chloride	126	ug/L	5.0	0.84	5		03/02/23 11:34	75-01-4	
Xylene (Total)	ND	ug/L	15.0	1.4	5		02/27/23 21:16	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	91	%	80-120		5		02/27/23 21:16	460-00-4	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		5		02/27/23 21:16	2199-69-1	
Toluene-d8 (S)	100	%	80-120		5		02/27/23 21:16	2037-26-5	
Preservation pH	1.0		0.10		5		02/27/23 21:16		

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: MW-10A Lab ID: 60422699017 Collected: 02/23/23 09:10 Received: 02/24/23 10:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b> Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City									
Acetone	ND	ug/L	1000	254	100		02/27/23 21:43	67-64-1	L1
Benzene	ND	ug/L	100	13.6	100		02/27/23 21:43	71-43-2	
Bromobenzene	ND	ug/L	100	8.8	100		02/27/23 21:43	108-86-1	
Bromochloromethane	ND	ug/L	100	20.2	100		02/27/23 21:43	74-97-5	
Bromodichloromethane	ND	ug/L	100	15.5	100		02/27/23 21:43	75-27-4	
Bromoform	ND	ug/L	100	67.6	100		02/27/23 21:43	75-25-2	
Bromomethane	ND	ug/L	500	46.0	100		02/27/23 21:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	1000	97.5	100		02/27/23 21:43	78-93-3	
n-Butylbenzene	ND	ug/L	100	15.3	100		02/27/23 21:43	104-51-8	
sec-Butylbenzene	ND	ug/L	100	11.0	100		02/27/23 21:43	135-98-8	
tert-Butylbenzene	ND	ug/L	100	12.0	100		02/27/23 21:43	98-06-6	
Carbon disulfide	ND	ug/L	500	97.8	100		02/27/23 21:43	75-15-0	
Carbon tetrachloride	ND	ug/L	100	17.2	100		02/27/23 21:43	56-23-5	
Chlorobenzene	ND	ug/L	100	8.9	100		02/27/23 21:43	108-90-7	
Chloroethane	ND	ug/L	100	37.4	100		02/27/23 21:43	75-00-3	
Chloroform	ND	ug/L	100	22.0	100		02/27/23 21:43	67-66-3	
Chloromethane	ND	ug/L	100	28.3	100		02/27/23 21:43	74-87-3	
2-Chlorotoluene	ND	ug/L	100	10.8	100		02/27/23 21:43	95-49-8	
4-Chlorotoluene	ND	ug/L	100	14.9	100		02/27/23 21:43	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	250	78.0	100		02/27/23 21:43	96-12-8	
Dibromochloromethane	ND	ug/L	100	30.5	100		02/27/23 21:43	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	100	19.6	100		02/27/23 21:43	106-93-4	
Dibromomethane	ND	ug/L	100	10.9	100		02/27/23 21:43	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	100	12.5	100		02/27/23 21:43	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	100	13.2	100		02/27/23 21:43	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	100	13.3	100		02/27/23 21:43	106-46-7	
Dichlorodifluoromethane	ND	ug/L	100	19.9	100		02/27/23 21:43	75-71-8	
1,1-Dichloroethane	ND	ug/L	100	12.2	100		02/27/23 21:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	100	21.2	100		02/27/23 21:43	107-06-2	
1,2-Dichloroethene (Total)	2410	ug/L	100	22.2	100		02/27/23 21:43	540-59-0	
1,1-Dichloroethene	ND	ug/L	100	21.9	100		02/27/23 21:43	75-35-4	
cis-1,2-Dichloroethene	2390	ug/L	100	12.9	100		02/27/23 21:43	156-59-2	
trans-1,2-Dichloroethene	24.9J	ug/L	100	10.2	100		02/27/23 21:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	100	13.9	100		02/27/23 21:43	78-87-5	
1,3-Dichloropropane	ND	ug/L	100	10.4	100		02/27/23 21:43	142-28-9	
2,2-Dichloropropane	ND	ug/L	100	16.2	100		02/27/23 21:43	594-20-7	
1,1-Dichloropropene	ND	ug/L	100	13.5	100		02/27/23 21:43	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	100	7.8	100		02/27/23 21:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	100	18.2	100		02/27/23 21:43	10061-02-6	
Ethylbenzene	ND	ug/L	100	12.0	100		02/27/23 21:43	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	100	41.7	100		02/27/23 21:43	87-68-3	
2-Hexanone	ND	ug/L	1000	110	100		02/27/23 21:43	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	100	9.7	100		02/27/23 21:43	98-82-8	
p-Isopropyltoluene	ND	ug/L	100	12.7	100		02/27/23 21:43	99-87-6	
Methylene Chloride	ND	ug/L	100	39.1	100		02/27/23 21:43	75-09-2	

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: MW-10A		Lab ID: 60422699017		Collected: 02/23/23 09:10		Received: 02/24/23 10:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
4-Methyl-2-pentanone (MIBK)	ND	ug/L	1000	73.6	100		02/27/23 21:43	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	100	12.8	100		02/27/23 21:43	1634-04-4	
Naphthalene	ND	ug/L	1000	82.2	100		02/27/23 21:43	91-20-3	
n-Propylbenzene	ND	ug/L	100	11.9	100		02/27/23 21:43	103-65-1	
Styrene	ND	ug/L	100	12.3	100		02/27/23 21:43	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	100	8.4	100		02/27/23 21:43	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	100	15.4	100		02/27/23 21:43	79-34-5	
Tetrachloroethene	ND	ug/L	100	33.0	100		02/27/23 21:43	127-18-4	
Toluene	ND	ug/L	100	25.3	100		02/27/23 21:43	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	100	92.7	100		02/27/23 21:43	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	100	73.2	100		02/27/23 21:43	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	100	10.9	100		02/27/23 21:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	100	14.2	100		02/27/23 21:43	79-00-5	
Trichloroethene	<b>7830</b>	ug/L	100	21.0	100		02/27/23 21:43	79-01-6	
Trichlorofluoromethane	ND	ug/L	100	16.4	100		02/27/23 21:43	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	250	40.8	100		02/27/23 21:43	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	100	32.4	100		02/27/23 21:43	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	100	9.0	100		02/27/23 21:43	108-67-8	
Vinyl chloride	<b>134</b>	ug/L	100	16.7	100		02/27/23 21:43	75-01-4	
Xylene (Total)	ND	ug/L	300	28.2	100		02/27/23 21:43	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	100	%	80-120		100		02/27/23 21:43	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		100		02/27/23 21:43	2199-69-1	
Toluene-d8 (S)	101	%	80-120		100		02/27/23 21:43	2037-26-5	
Preservation pH	<b>1.0</b>		0.10		100		02/27/23 21:43		

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: MW-10B		Lab ID: 60422699018		Collected: 02/23/23 09:55		Received: 02/24/23 10:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
Acetone	ND	ug/L	500	127	50		02/27/23 21:30	67-64-1	L1
Benzene	ND	ug/L	50.0	6.8	50		02/27/23 21:30	71-43-2	
Bromobenzene	ND	ug/L	50.0	4.4	50		02/27/23 21:30	108-86-1	
Bromochloromethane	ND	ug/L	50.0	10.1	50		02/27/23 21:30	74-97-5	
Bromodichloromethane	ND	ug/L	50.0	7.8	50		02/27/23 21:30	75-27-4	
Bromoform	ND	ug/L	50.0	33.8	50		02/27/23 21:30	75-25-2	
Bromomethane	ND	ug/L	250	23.0	50		02/27/23 21:30	74-83-9	
2-Butanone (MEK)	ND	ug/L	500	48.8	50		02/27/23 21:30	78-93-3	
n-Butylbenzene	ND	ug/L	50.0	7.6	50		02/27/23 21:30	104-51-8	
sec-Butylbenzene	ND	ug/L	50.0	5.5	50		02/27/23 21:30	135-98-8	
tert-Butylbenzene	ND	ug/L	50.0	6.0	50		02/27/23 21:30	98-06-6	
Carbon disulfide	ND	ug/L	250	48.9	50		02/27/23 21:30	75-15-0	
Carbon tetrachloride	ND	ug/L	50.0	8.6	50		02/27/23 21:30	56-23-5	
Chlorobenzene	ND	ug/L	50.0	4.4	50		02/27/23 21:30	108-90-7	
Chloroethane	ND	ug/L	50.0	18.7	50		02/27/23 21:30	75-00-3	
Chloroform	ND	ug/L	50.0	11.0	50		02/27/23 21:30	67-66-3	
Chloromethane	ND	ug/L	50.0	14.2	50		02/27/23 21:30	74-87-3	
2-Chlorotoluene	ND	ug/L	50.0	5.4	50		02/27/23 21:30	95-49-8	
4-Chlorotoluene	ND	ug/L	50.0	7.4	50		02/27/23 21:30	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	125	39.0	50		02/27/23 21:30	96-12-8	
Dibromochloromethane	ND	ug/L	50.0	15.2	50		02/27/23 21:30	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	50.0	9.8	50		02/27/23 21:30	106-93-4	
Dibromomethane	ND	ug/L	50.0	5.4	50		02/27/23 21:30	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	50.0	6.2	50		02/27/23 21:30	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	50.0	6.6	50		02/27/23 21:30	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	50.0	6.6	50		02/27/23 21:30	106-46-7	
Dichlorodifluoromethane	ND	ug/L	50.0	10	50		02/27/23 21:30	75-71-8	
1,1-Dichloroethane	ND	ug/L	50.0	6.1	50		02/27/23 21:30	75-34-3	
1,2-Dichloroethane	ND	ug/L	50.0	10.6	50		02/27/23 21:30	107-06-2	
1,2-Dichloroethene (Total)	978	ug/L	50.0	11.1	50		02/27/23 21:30	540-59-0	
1,1-Dichloroethene	ND	ug/L	50.0	11.0	50		02/27/23 21:30	75-35-4	
cis-1,2-Dichloroethene	970	ug/L	50.0	6.4	50		02/27/23 21:30	156-59-2	
trans-1,2-Dichloroethene	8.3J	ug/L	50.0	5.1	50		02/27/23 21:30	156-60-5	
1,2-Dichloropropane	ND	ug/L	50.0	7.0	50		02/27/23 21:30	78-87-5	
1,3-Dichloropropane	ND	ug/L	50.0	5.2	50		02/27/23 21:30	142-28-9	
2,2-Dichloropropane	ND	ug/L	50.0	8.1	50		02/27/23 21:30	594-20-7	
1,1-Dichloropropene	ND	ug/L	50.0	6.8	50		02/27/23 21:30	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	50.0	3.9	50		02/27/23 21:30	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	50.0	9.1	50		02/27/23 21:30	10061-02-6	
Ethylbenzene	ND	ug/L	50.0	6.0	50		02/27/23 21:30	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	50.0	20.8	50		02/27/23 21:30	87-68-3	
2-Hexanone	ND	ug/L	500	55.0	50		02/27/23 21:30	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	50.0	4.8	50		02/27/23 21:30	98-82-8	
p-Isopropyltoluene	ND	ug/L	50.0	6.4	50		02/27/23 21:30	99-87-6	
Methylene Chloride	ND	ug/L	50.0	19.6	50		02/27/23 21:30	75-09-2	

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: MW-10B		Lab ID: 60422699018		Collected: 02/23/23 09:55		Received: 02/24/23 10:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
4-Methyl-2-pentanone (MIBK)	ND	ug/L	500	36.8	50		02/27/23 21:30	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	50.0	6.4	50		02/27/23 21:30	1634-04-4	
Naphthalene	ND	ug/L	500	41.1	50		02/27/23 21:30	91-20-3	
n-Propylbenzene	ND	ug/L	50.0	6.0	50		02/27/23 21:30	103-65-1	
Styrene	ND	ug/L	50.0	6.2	50		02/27/23 21:30	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	50.0	4.2	50		02/27/23 21:30	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	50.0	7.7	50		02/27/23 21:30	79-34-5	
Tetrachloroethene	ND	ug/L	50.0	16.5	50		02/27/23 21:30	127-18-4	
Toluene	ND	ug/L	50.0	12.6	50		02/27/23 21:30	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	50.0	46.4	50		02/27/23 21:30	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	50.0	36.6	50		02/27/23 21:30	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	50.0	5.4	50		02/27/23 21:30	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	50.0	7.1	50		02/27/23 21:30	79-00-5	
Trichloroethene	<b>3670</b>	ug/L	50.0	10.5	50		02/27/23 21:30	79-01-6	
Trichlorofluoromethane	ND	ug/L	50.0	8.2	50		02/27/23 21:30	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	125	20.4	50		02/27/23 21:30	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	50.0	16.2	50		02/27/23 21:30	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	50.0	4.5	50		02/27/23 21:30	108-67-8	
Vinyl chloride	<b>49.4J</b>	ug/L	50.0	8.4	50		02/27/23 21:30	75-01-4	
Xylene (Total)	ND	ug/L	150	14.1	50		02/27/23 21:30	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	95	%	80-120		50		02/27/23 21:30	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		50		02/27/23 21:30	2199-69-1	
Toluene-d8 (S)	102	%	80-120		50		02/27/23 21:30	2037-26-5	
Preservation pH	<b>1.0</b>		0.10		50		02/27/23 21:30		

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: MW-Y		Lab ID: 60422699019		Collected: 02/23/23 09:55		Received: 02/24/23 10:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
Acetone	ND	ug/L	10.0	2.5	1		02/27/23 21:02	67-64-1	L1
Benzene	2.8	ug/L	1.0	0.14	1		02/27/23 21:02	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		02/27/23 21:02	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		02/27/23 21:02	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		02/27/23 21:02	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		02/27/23 21:02	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		02/27/23 21:02	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		02/27/23 21:02	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		02/27/23 21:02	104-51-8	
sec-Butylbenzene	0.15J	ug/L	1.0	0.11	1		02/27/23 21:02	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 21:02	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		02/27/23 21:02	75-15-0	
Carbon tetrachloride	1.3	ug/L	1.0	0.17	1		02/27/23 21:02	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		02/27/23 21:02	108-90-7	
Chloroethane	0.95J	ug/L	1.0	0.37	1		02/27/23 21:02	75-00-3	
Chloroform	4.2	ug/L	1.0	0.22	1		02/27/23 21:02	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		02/27/23 21:02	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		02/27/23 21:02	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		02/27/23 21:02	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		02/27/23 21:02	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		02/27/23 21:02	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		02/27/23 21:02	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		02/27/23 21:02	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		02/27/23 21:02	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		02/27/23 21:02	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		02/27/23 21:02	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		02/27/23 21:02	75-71-8	
1,1-Dichloroethane	0.87J	ug/L	1.0	0.12	1		02/27/23 21:02	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		02/27/23 21:02	107-06-2	
1,2-Dichloroethene (Total)	973	ug/L	100	22.2	100		03/02/23 11:48	540-59-0	
1,1-Dichloroethene	5.2	ug/L	1.0	0.22	1		02/27/23 21:02	75-35-4	
cis-1,2-Dichloroethene	973	ug/L	100	12.9	100		03/02/23 11:48	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	100	10.2	100		03/02/23 11:48	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		02/27/23 21:02	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		02/27/23 21:02	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		02/27/23 21:02	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		02/27/23 21:02	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		02/27/23 21:02	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		02/27/23 21:02	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 21:02	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		02/27/23 21:02	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		02/27/23 21:02	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		02/27/23 21:02	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		02/27/23 21:02	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		02/27/23 21:02	75-09-2	

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: MW-Y		Lab ID: 60422699019		Collected: 02/23/23 09:55		Received: 02/24/23 10:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b> Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City									
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		02/27/23 21:02	108-10-1	
Methyl-tert-butyl ether	<b>0.49J</b>	ug/L	1.0	0.13	1		02/27/23 21:02	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		02/27/23 21:02	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 21:02	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		02/27/23 21:02	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		02/27/23 21:02	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		02/27/23 21:02	79-34-5	
Tetrachloroethene	<b>1.5</b>	ug/L	1.0	0.33	1		02/27/23 21:02	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		02/27/23 21:02	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		02/27/23 21:02	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		02/27/23 21:02	120-82-1	
1,1,1-Trichloroethane	<b>1.9</b>	ug/L	1.0	0.11	1		02/27/23 21:02	71-55-6	
1,1,2-Trichloroethane	<b>0.41J</b>	ug/L	1.0	0.14	1		02/27/23 21:02	79-00-5	
Trichloroethene	<b>3640</b>	ug/L	100	21.0	100		03/02/23 11:48	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		02/27/23 21:02	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		02/27/23 21:02	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		02/27/23 21:02	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		02/27/23 21:02	108-67-8	
Vinyl chloride	<b>49.4</b>	ug/L	1.0	0.17	1		02/27/23 21:02	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		02/27/23 21:02	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	97	%	80-120		1		02/27/23 21:02	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	80-120		1		02/27/23 21:02	2199-69-1	
Toluene-d8 (S)	102	%	80-120		1		02/27/23 21:02	2037-26-5	
Preservation pH	<b>1.0</b>		0.10		1		02/27/23 21:02		

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: TRIP BLANK		Lab ID: 60422699020		Collected: 02/23/23 16:45		Received: 02/24/23 10:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
Acetone	ND	ug/L	10.0	2.5	1		02/27/23 20:35	67-64-1	L1
Benzene	ND	ug/L	1.0	0.14	1		02/27/23 20:35	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		02/27/23 20:35	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		02/27/23 20:35	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		02/27/23 20:35	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		02/27/23 20:35	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		02/27/23 20:35	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		02/27/23 20:35	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		02/27/23 20:35	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		02/27/23 20:35	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 20:35	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		02/27/23 20:35	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		02/27/23 20:35	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		02/27/23 20:35	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		02/27/23 20:35	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		02/27/23 20:35	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		02/27/23 20:35	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		02/27/23 20:35	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		02/27/23 20:35	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		02/27/23 20:35	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		02/27/23 20:35	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		02/27/23 20:35	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		02/27/23 20:35	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		02/27/23 20:35	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		02/27/23 20:35	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		02/27/23 20:35	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		02/27/23 20:35	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		02/27/23 20:35	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		02/27/23 20:35	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	0.22	1		02/27/23 20:35	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		02/27/23 20:35	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		02/27/23 20:35	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		02/27/23 20:35	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		02/27/23 20:35	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		02/27/23 20:35	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		02/27/23 20:35	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		02/27/23 20:35	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		02/27/23 20:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		02/27/23 20:35	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 20:35	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		02/27/23 20:35	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		02/27/23 20:35	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		02/27/23 20:35	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		02/27/23 20:35	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		02/27/23 20:35	75-09-2	

## REPORT OF LABORATORY ANALYSIS

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: TRIP BLANK		Lab ID: 60422699020		Collected: 02/23/23 16:45		Received: 02/24/23 10:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		02/27/23 20:35	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		02/27/23 20:35	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		02/27/23 20:35	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 20:35	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		02/27/23 20:35	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		02/27/23 20:35	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		02/27/23 20:35	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		02/27/23 20:35	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		02/27/23 20:35	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		02/27/23 20:35	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		02/27/23 20:35	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		02/27/23 20:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		02/27/23 20:35	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		02/27/23 20:35	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		02/27/23 20:35	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		02/27/23 20:35	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		02/27/23 20:35	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		02/27/23 20:35	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.17	1		02/27/23 20:35	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		02/27/23 20:35	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	95	%	80-120		1		02/27/23 20:35	460-00-4	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		02/27/23 20:35	2199-69-1	
Toluene-d8 (S)	100	%	80-120		1		02/27/23 20:35	2037-26-5	
Preservation pH	1.0		0.10		1		02/27/23 20:35		

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: FIELD BLANK		Lab ID: 60422699021		Collected: 02/24/23 10:00		Received: 02/24/23 10:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
Acetone	ND	ug/L	10.0	2.5	1		02/27/23 20:49	67-64-1	L1
Benzene	ND	ug/L	1.0	0.14	1		02/27/23 20:49	71-43-2	
Bromobenzene	ND	ug/L	1.0	0.088	1		02/27/23 20:49	108-86-1	
Bromochloromethane	ND	ug/L	1.0	0.20	1		02/27/23 20:49	74-97-5	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		02/27/23 20:49	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		02/27/23 20:49	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		02/27/23 20:49	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		02/27/23 20:49	78-93-3	
n-Butylbenzene	ND	ug/L	1.0	0.15	1		02/27/23 20:49	104-51-8	
sec-Butylbenzene	ND	ug/L	1.0	0.11	1		02/27/23 20:49	135-98-8	
tert-Butylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 20:49	98-06-6	
Carbon disulfide	ND	ug/L	5.0	0.98	1		02/27/23 20:49	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		02/27/23 20:49	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		02/27/23 20:49	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		02/27/23 20:49	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		02/27/23 20:49	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		02/27/23 20:49	74-87-3	
2-Chlorotoluene	ND	ug/L	1.0	0.11	1		02/27/23 20:49	95-49-8	
4-Chlorotoluene	ND	ug/L	1.0	0.15	1		02/27/23 20:49	106-43-4	
1,2-Dibromo-3-chloropropane	ND	ug/L	2.5	0.78	1		02/27/23 20:49	96-12-8	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		02/27/23 20:49	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/L	1.0	0.20	1		02/27/23 20:49	106-93-4	
Dibromomethane	ND	ug/L	1.0	0.11	1		02/27/23 20:49	74-95-3	
1,2-Dichlorobenzene	ND	ug/L	1.0	0.12	1		02/27/23 20:49	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	1.0	0.13	1		02/27/23 20:49	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	1.0	0.13	1		02/27/23 20:49	106-46-7	
Dichlorodifluoromethane	ND	ug/L	1.0	0.20	1		02/27/23 20:49	75-71-8	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		02/27/23 20:49	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		02/27/23 20:49	107-06-2	
1,2-Dichloroethene (Total)	ND	ug/L	1.0	0.22	1		02/27/23 20:49	540-59-0	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		02/27/23 20:49	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		02/27/23 20:49	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		02/27/23 20:49	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		02/27/23 20:49	78-87-5	
1,3-Dichloropropane	ND	ug/L	1.0	0.10	1		02/27/23 20:49	142-28-9	
2,2-Dichloropropane	ND	ug/L	1.0	0.16	1		02/27/23 20:49	594-20-7	
1,1-Dichloropropene	ND	ug/L	1.0	0.14	1		02/27/23 20:49	563-58-6	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		02/27/23 20:49	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		02/27/23 20:49	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 20:49	100-41-4	
Hexachloro-1,3-butadiene	ND	ug/L	1.0	0.42	1		02/27/23 20:49	87-68-3	
2-Hexanone	ND	ug/L	10.0	1.1	1		02/27/23 20:49	591-78-6	
Isopropylbenzene (Cumene)	ND	ug/L	1.0	0.097	1		02/27/23 20:49	98-82-8	
p-Isopropyltoluene	ND	ug/L	1.0	0.13	1		02/27/23 20:49	99-87-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		02/27/23 20:49	75-09-2	

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## ANALYTICAL RESULTS

Project: CLINTON ENGINES

Pace Project No.: 60422699

Sample: FIELD BLANK		Lab ID: 60422699021		Collected: 02/24/23 10:00		Received: 02/24/23 10:50		Matrix: Water	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV</b>		Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City							
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		02/27/23 20:49	108-10-1	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.13	1		02/27/23 20:49	1634-04-4	
Naphthalene	ND	ug/L	10.0	0.82	1		02/27/23 20:49	91-20-3	
n-Propylbenzene	ND	ug/L	1.0	0.12	1		02/27/23 20:49	103-65-1	
Styrene	ND	ug/L	1.0	0.12	1		02/27/23 20:49	100-42-5	
1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.084	1		02/27/23 20:49	630-20-6	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		02/27/23 20:49	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		02/27/23 20:49	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		02/27/23 20:49	108-88-3	
1,2,3-Trichlorobenzene	ND	ug/L	1.0	0.93	1		02/27/23 20:49	87-61-6	
1,2,4-Trichlorobenzene	ND	ug/L	1.0	0.73	1		02/27/23 20:49	120-82-1	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		02/27/23 20:49	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		02/27/23 20:49	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		02/27/23 20:49	79-01-6	
Trichlorofluoromethane	ND	ug/L	1.0	0.16	1		02/27/23 20:49	75-69-4	
1,2,3-Trichloropropane	ND	ug/L	2.5	0.41	1		02/27/23 20:49	96-18-4	
1,2,4-Trimethylbenzene	ND	ug/L	1.0	0.32	1		02/27/23 20:49	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/L	1.0	0.090	1		02/27/23 20:49	108-67-8	
Vinyl chloride	ND	ug/L	1.0	0.17	1		02/27/23 20:49	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		02/27/23 20:49	1330-20-7	
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	94	%	80-120		1		02/27/23 20:49	460-00-4	
1,2-Dichlorobenzene-d4 (S)	103	%	80-120		1		02/27/23 20:49	2199-69-1	
Toluene-d8 (S)	98	%	80-120		1		02/27/23 20:49	2037-26-5	
Preservation pH	1.0		0.10		1		02/27/23 20:49		

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## QUALITY CONTROL DATA

Project: CLINTON ENGINES

Pace Project No.: 60422699

QC Batch:	833836	Analysis Method:	EPA 5030B/8260
QC Batch Method:	EPA 5030B/8260	Analysis Description:	8260 MSV Water 10 mL Purge
		Laboratory:	Pace Analytical Services - Kansas City
Associated Lab Samples:	60422699001, 60422699003, 60422699004, 60422699005, 60422699006, 60422699007, 60422699008, 60422699009, 60422699010, 60422699011		

METHOD BLANK: 3308589

Matrix: Water

Associated Lab Samples: 60422699001, 60422699003, 60422699004, 60422699005, 60422699006, 60422699007, 60422699008, 60422699009, 60422699010, 60422699011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	0.084	02/27/23 08:39	
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	02/27/23 08:39	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	02/27/23 08:39	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	02/27/23 08:39	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	02/27/23 08:39	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	02/27/23 08:39	
1,1-Dichloropropene	ug/L	ND	1.0	0.14	02/27/23 08:39	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	0.93	02/27/23 08:39	
1,2,3-Trichloropropane	ug/L	ND	2.5	0.41	02/27/23 08:39	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	0.73	02/27/23 08:39	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	0.32	02/27/23 08:39	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.5	0.78	02/27/23 08:39	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	0.20	02/27/23 08:39	
1,2-Dichlorobenzene	ug/L	ND	1.0	0.12	02/27/23 08:39	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	02/27/23 08:39	
1,2-Dichloroethene (Total)	ug/L	ND	1.0	0.22	02/27/23 08:39	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	02/27/23 08:39	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	0.090	02/27/23 08:39	
1,3-Dichlorobenzene	ug/L	ND	1.0	0.13	02/27/23 08:39	
1,3-Dichloropropane	ug/L	ND	1.0	0.10	02/27/23 08:39	
1,4-Dichlorobenzene	ug/L	ND	1.0	0.13	02/27/23 08:39	
2,2-Dichloropropane	ug/L	ND	1.0	0.16	02/27/23 08:39	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	02/27/23 08:39	
2-Chlorotoluene	ug/L	ND	1.0	0.11	02/27/23 08:39	
2-Hexanone	ug/L	ND	10.0	1.1	02/27/23 08:39	
4-Chlorotoluene	ug/L	ND	1.0	0.15	02/27/23 08:39	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	02/27/23 08:39	
Acetone	ug/L	ND	10.0	2.5	02/27/23 08:39	
Benzene	ug/L	ND	1.0	0.14	02/27/23 08:39	
Bromobenzene	ug/L	ND	1.0	0.088	02/27/23 08:39	
Bromochloromethane	ug/L	ND	1.0	0.20	02/27/23 08:39	
Bromodichloromethane	ug/L	ND	1.0	0.16	02/27/23 08:39	
Bromoform	ug/L	ND	1.0	0.68	02/27/23 08:39	
Bromomethane	ug/L	ND	5.0	0.46	02/27/23 08:39	
Carbon disulfide	ug/L	ND	5.0	0.98	02/27/23 08:39	
Carbon tetrachloride	ug/L	ND	1.0	0.17	02/27/23 08:39	
Chlorobenzene	ug/L	ND	1.0	0.089	02/27/23 08:39	
Chloroethane	ug/L	ND	1.0	0.37	02/27/23 08:39	
Chloroform	ug/L	ND	1.0	0.22	02/27/23 08:39	

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## QUALITY CONTROL DATA

Project: CLINTON ENGINES

Pace Project No.: 60422699

METHOD BLANK: 3308589

Matrix: Water

Associated Lab Samples: 60422699001, 60422699003, 60422699004, 60422699005, 60422699006, 60422699007, 60422699008, 60422699009, 60422699010, 60422699011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloromethane	ug/L	ND	1.0	0.28	02/27/23 08:39	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	02/27/23 08:39	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	02/27/23 08:39	
Dibromochloromethane	ug/L	ND	1.0	0.30	02/27/23 08:39	
Dibromomethane	ug/L	ND	1.0	0.11	02/27/23 08:39	
Dichlorodifluoromethane	ug/L	ND	1.0	0.20	02/27/23 08:39	
Ethylbenzene	ug/L	ND	1.0	0.12	02/27/23 08:39	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	0.42	02/27/23 08:39	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	0.097	02/27/23 08:39	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.13	02/27/23 08:39	
Methylene Chloride	ug/L	ND	1.0	0.39	02/27/23 08:39	
n-Butylbenzene	ug/L	ND	1.0	0.15	02/27/23 08:39	
n-Propylbenzene	ug/L	ND	1.0	0.12	02/27/23 08:39	
Naphthalene	ug/L	ND	10.0	0.82	02/27/23 08:39	
p-Isopropyltoluene	ug/L	ND	1.0	0.13	02/27/23 08:39	
sec-Butylbenzene	ug/L	ND	1.0	0.11	02/27/23 08:39	
Styrene	ug/L	ND	1.0	0.12	02/27/23 08:39	
tert-Butylbenzene	ug/L	ND	1.0	0.12	02/27/23 08:39	
Tetrachloroethene	ug/L	ND	1.0	0.33	02/27/23 08:39	
Toluene	ug/L	ND	1.0	0.25	02/27/23 08:39	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	02/27/23 08:39	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	02/27/23 08:39	
Trichloroethene	ug/L	ND	1.0	0.21	02/27/23 08:39	
Trichlorofluoromethane	ug/L	ND	1.0	0.16	02/27/23 08:39	
Vinyl chloride	ug/L	ND	1.0	0.17	02/27/23 08:39	
Xylene (Total)	ug/L	ND	3.0	0.28	02/27/23 08:39	
1,2-Dichlorobenzene-d4 (S)	%	99	80-120		02/27/23 08:39	
4-Bromofluorobenzene (S)	%	99	80-120		02/27/23 08:39	
Toluene-d8 (S)	%	99	80-120		02/27/23 08:39	

LABORATORY CONTROL SAMPLE: 3308590

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	21.4	107	80-120	
1,1,1-Trichloroethane	ug/L	20	20.5	102	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	17.9	90	80-120	
1,1,2-Trichloroethane	ug/L	20	18.7	93	80-120	
1,1-Dichloroethane	ug/L	20	21.5	107	75-120	
1,1-Dichloroethene	ug/L	20	20.5	103	75-120	
1,1-Dichloropropene	ug/L	20	21.2	106	75-125	
1,2,3-Trichlorobenzene	ug/L	20	17.7	88	60-135	
1,2,3-Trichloropropane	ug/L	20	19.1	96	75-120	
1,2,4-Trichlorobenzene	ug/L	20	17.8	89	65-130	

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## QUALITY CONTROL DATA

Project: CLINTON ENGINES

Pace Project No.: 60422699

LABORATORY CONTROL SAMPLE: 3308590

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/L	20	18.5	92	80-120	
1,2-Dibromo-3-chloropropane	ug/L	20	18.2	91	65-130	
1,2-Dibromoethane (EDB)	ug/L	20	19.8	99	80-120	
1,2-Dichlorobenzene	ug/L	20	19.0	95	80-120	
1,2-Dichloroethane	ug/L	20	19.4	97	80-120	
1,2-Dichloroethene (Total)	ug/L	40	42.9	107	80-120	
1,2-Dichloropropane	ug/L	20	17.7	88	80-120	
1,3,5-Trimethylbenzene	ug/L	20	18.6	93	75-120	
1,3-Dichlorobenzene	ug/L	20	19.6	98	80-120	
1,3-Dichloropropane	ug/L	20	18.7	93	80-120	
1,4-Dichlorobenzene	ug/L	20	19.2	96	80-120	
2,2-Dichloropropane	ug/L	20	21.1	106	55-135	
2-Butanone (MEK)	ug/L	100	134	134	50-155	
2-Chlorotoluene	ug/L	20	19.1	95	80-120	
2-Hexanone	ug/L	100	119	119	55-145	
4-Chlorotoluene	ug/L	20	19.6	98	80-120	
4-Methyl-2-pentanone (MIBK)	ug/L	100	79.0	79	70-130	
Acetone	ug/L	100	176	176	35-160	L1
Benzene	ug/L	20	20.5	102	80-120	
Bromobenzene	ug/L	20	20.1	101	80-120	
Bromochloromethane	ug/L	20	19.8	99	80-120	
Bromodichloromethane	ug/L	20	17.9	90	80-120	
Bromoform	ug/L	20	21.7	108	60-130	
Bromomethane	ug/L	20	17.6	88	50-140	
Carbon disulfide	ug/L	20	20.6	103	75-125	
Carbon tetrachloride	ug/L	20	21.0	105	70-130	
Chlorobenzene	ug/L	20	20.6	103	80-120	
Chloroethane	ug/L	20	20.1	100	70-130	
Chloroform	ug/L	20	20.5	102	75-120	
Chloromethane	ug/L	20	16.9	85	45-145	
cis-1,2-Dichloroethene	ug/L	20	21.1	106	80-120	
cis-1,3-Dichloropropene	ug/L	20	17.7	88	75-125	
Dibromochloromethane	ug/L	20	21.0	105	75-125	
Dibromomethane	ug/L	20	17.4	87	80-120	
Dichlorodifluoromethane	ug/L	20	22.0	110	25-180	
Ethylbenzene	ug/L	20	20.4	102	80-120	
Hexachloro-1,3-butadiene	ug/L	20	21.2	106	65-125	
Isopropylbenzene (Cumene)	ug/L	20	21.3	107	80-125	
Methyl-tert-butyl ether	ug/L	20	19.3	97	75-125	
Methylene Chloride	ug/L	20	21.2	106	70-140	
n-Butylbenzene	ug/L	20	18.4	92	70-125	
n-Propylbenzene	ug/L	20	19.8	99	80-120	
Naphthalene	ug/L	20	16.1	80	60-140	
p-Isopropyltoluene	ug/L	20	20.1	100	80-120	
sec-Butylbenzene	ug/L	20	20.1	101	80-120	
Styrene	ug/L	20	21.0	105	80-120	
tert-Butylbenzene	ug/L	20	19.5	97	80-120	

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: CLINTON ENGINES

Pace Project No.: 60422699

LABORATORY CONTROL SAMPLE: 3308590

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Tetrachloroethene	ug/L	20	21.5	108	80-125	
Toluene	ug/L	20	20.1	100	80-120	
trans-1,2-Dichloroethene	ug/L	20	21.7	109	80-120	
trans-1,3-Dichloropropene	ug/L	20	19.5	97	75-125	
Trichloroethene	ug/L	20	20.2	101	80-125	
Trichlorofluoromethane	ug/L	20	20.4	102	75-125	
Vinyl chloride	ug/L	20	19.1	95	65-140	
Xylene (Total)	ug/L	60	62.5	104	80-120	
1,2-Dichlorobenzene-d4 (S)	%			98	80-120	
4-Bromofluorobenzene (S)	%			96	80-120	
Toluene-d8 (S)	%			98	80-120	

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: CLINTON ENGINES  
Pace Project No.: 60422699

QC Batch: 833838 Analysis Method: EPA 5030B/8260  
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge  
Laboratory: Pace Analytical Services - Kansas City  
Associated Lab Samples: 60422699012, 60422699013, 60422699014, 60422699015

METHOD BLANK: 3308594 Matrix: Water  
Associated Lab Samples: 60422699012, 60422699013, 60422699014, 60422699015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	0.084	02/27/23 14:53	
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	02/27/23 14:53	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	02/27/23 14:53	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	02/27/23 14:53	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	02/27/23 14:53	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	02/27/23 14:53	
1,1-Dichloropropene	ug/L	ND	1.0	0.14	02/27/23 14:53	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	0.93	02/27/23 14:53	
1,2,3-Trichloropropane	ug/L	ND	2.5	0.41	02/27/23 14:53	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	0.73	02/27/23 14:53	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	0.32	02/27/23 14:53	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.5	0.78	02/27/23 14:53	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	0.20	02/27/23 14:53	
1,2-Dichlorobenzene	ug/L	ND	1.0	0.12	02/27/23 14:53	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	02/27/23 14:53	
1,2-Dichloroethene (Total)	ug/L	ND	1.0	0.22	02/27/23 14:53	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	02/27/23 14:53	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	0.090	02/27/23 14:53	
1,3-Dichlorobenzene	ug/L	ND	1.0	0.13	02/27/23 14:53	
1,3-Dichloropropane	ug/L	ND	1.0	0.10	02/27/23 14:53	
1,4-Dichlorobenzene	ug/L	ND	1.0	0.13	02/27/23 14:53	
2,2-Dichloropropane	ug/L	ND	1.0	0.16	02/27/23 14:53	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	02/27/23 14:53	
2-Chlorotoluene	ug/L	ND	1.0	0.11	02/27/23 14:53	
2-Hexanone	ug/L	ND	10.0	1.1	02/27/23 14:53	
4-Chlorotoluene	ug/L	ND	1.0	0.15	02/27/23 14:53	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	02/27/23 14:53	
Acetone	ug/L	ND	10.0	2.5	02/27/23 14:53	
Benzene	ug/L	ND	1.0	0.14	02/27/23 14:53	
Bromobenzene	ug/L	ND	1.0	0.088	02/27/23 14:53	
Bromochloromethane	ug/L	ND	1.0	0.20	02/27/23 14:53	
Bromodichloromethane	ug/L	ND	1.0	0.16	02/27/23 14:53	
Bromoform	ug/L	ND	1.0	0.68	02/27/23 14:53	
Bromomethane	ug/L	ND	5.0	0.46	02/27/23 14:53	
Carbon disulfide	ug/L	ND	5.0	0.98	02/27/23 14:53	
Carbon tetrachloride	ug/L	ND	1.0	0.17	02/27/23 14:53	
Chlorobenzene	ug/L	ND	1.0	0.089	02/27/23 14:53	
Chloroethane	ug/L	ND	1.0	0.37	02/27/23 14:53	
Chloroform	ug/L	ND	1.0	0.22	02/27/23 14:53	
Chloromethane	ug/L	ND	1.0	0.28	02/27/23 14:53	

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## QUALITY CONTROL DATA

Project: CLINTON ENGINES

Pace Project No.: 60422699

METHOD BLANK: 3308594

Matrix: Water

Associated Lab Samples: 60422699012, 60422699013, 60422699014, 60422699015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	02/27/23 14:53	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	02/27/23 14:53	
Dibromochloromethane	ug/L	ND	1.0	0.30	02/27/23 14:53	
Dibromomethane	ug/L	ND	1.0	0.11	02/27/23 14:53	
Dichlorodifluoromethane	ug/L	ND	1.0	0.20	02/27/23 14:53	
Ethylbenzene	ug/L	ND	1.0	0.12	02/27/23 14:53	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	0.42	02/27/23 14:53	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	0.097	02/27/23 14:53	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.13	02/27/23 14:53	
Methylene Chloride	ug/L	ND	1.0	0.39	02/27/23 14:53	
n-Butylbenzene	ug/L	ND	1.0	0.15	02/27/23 14:53	
n-Propylbenzene	ug/L	ND	1.0	0.12	02/27/23 14:53	
Naphthalene	ug/L	ND	10.0	0.82	02/27/23 14:53	
p-Isopropyltoluene	ug/L	ND	1.0	0.13	02/27/23 14:53	
sec-Butylbenzene	ug/L	ND	1.0	0.11	02/27/23 14:53	
Styrene	ug/L	ND	1.0	0.12	02/27/23 14:53	
tert-Butylbenzene	ug/L	ND	1.0	0.12	02/27/23 14:53	
Tetrachloroethene	ug/L	ND	1.0	0.33	02/27/23 14:53	
Toluene	ug/L	ND	1.0	0.25	02/27/23 14:53	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	02/27/23 14:53	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	02/27/23 14:53	
Trichloroethene	ug/L	ND	1.0	0.21	02/27/23 14:53	
Trichlorofluoromethane	ug/L	ND	1.0	0.16	02/27/23 14:53	
Vinyl chloride	ug/L	ND	1.0	0.17	02/27/23 14:53	
Xylene (Total)	ug/L	ND	3.0	0.28	02/27/23 14:53	
1,2-Dichlorobenzene-d4 (S)	%	103	80-120		02/27/23 14:53	
4-Bromofluorobenzene (S)	%	95	80-120		02/27/23 14:53	
Toluene-d8 (S)	%	99	80-120		02/27/23 14:53	

LABORATORY CONTROL SAMPLE: 3308595

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	21.6	108	80-120	
1,1,1-Trichloroethane	ug/L	20	19.8	99	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	17.1	85	80-120	
1,1,2-Trichloroethane	ug/L	20	19.0	95	80-120	
1,1-Dichloroethane	ug/L	20	20.5	102	75-120	
1,1-Dichloroethene	ug/L	20	19.2	96	75-120	
1,1-Dichloropropene	ug/L	20	20.2	101	75-125	
1,2,3-Trichlorobenzene	ug/L	20	14.7	74	60-135	
1,2,3-Trichloropropane	ug/L	20	19.6	98	75-120	
1,2,4-Trichlorobenzene	ug/L	20	16.1	81	65-130	
1,2,4-Trimethylbenzene	ug/L	20	17.8	89	80-120	
1,2-Dibromo-3-chloropropane	ug/L	20	17.0	85	65-130	

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: CLINTON ENGINES

Pace Project No.: 60422699

LABORATORY CONTROL SAMPLE: 3308595

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	20	20.2	101	80-120	
1,2-Dichlorobenzene	ug/L	20	19.2	96	80-120	
1,2-Dichloroethane	ug/L	20	19.7	99	80-120	
1,2-Dichloroethene (Total)	ug/L	40	41.2	103	80-120	
1,2-Dichloropropane	ug/L	20	17.1	86	80-120	
1,3,5-Trimethylbenzene	ug/L	20	18.1	90	75-120	
1,3-Dichlorobenzene	ug/L	20	19.0	95	80-120	
1,3-Dichloropropane	ug/L	20	18.7	94	80-120	
1,4-Dichlorobenzene	ug/L	20	19.0	95	80-120	
2,2-Dichloropropane	ug/L	20	17.6	88	55-135	
2-Butanone (MEK)	ug/L	100	141	141	50-155	
2-Chlorotoluene	ug/L	20	18.4	92	80-120	
2-Hexanone	ug/L	100	116	116	55-145	
4-Chlorotoluene	ug/L	20	18.7	94	80-120	
4-Methyl-2-pentanone (MIBK)	ug/L	100	77.2	77	70-130	
Acetone	ug/L	100	184	184	35-160	L1
Benzene	ug/L	20	20.3	102	80-120	
Bromobenzene	ug/L	20	20.1	101	80-120	
Bromochloromethane	ug/L	20	20.2	101	80-120	
Bromodichloromethane	ug/L	20	16.9	84	80-120	
Bromoform	ug/L	20	22.3	111	60-130	
Bromomethane	ug/L	20	15.7	79	50-140	
Carbon disulfide	ug/L	20	19.3	96	75-125	
Carbon tetrachloride	ug/L	20	20.4	102	70-130	
Chlorobenzene	ug/L	20	20.8	104	80-120	
Chloroethane	ug/L	20	20.3	102	70-130	
Chloroform	ug/L	20	20.6	103	75-120	
Chloromethane	ug/L	20	14.8	74	45-145	
cis-1,2-Dichloroethene	ug/L	20	20.8	104	80-120	
cis-1,3-Dichloropropene	ug/L	20	16.5	83	75-125	
Dibromochloromethane	ug/L	20	20.8	104	75-125	
Dibromomethane	ug/L	20	16.8	84	80-120	
Dichlorodifluoromethane	ug/L	20	20.2	101	25-180	
Ethylbenzene	ug/L	20	20.2	101	80-120	
Hexachloro-1,3-butadiene	ug/L	20	18.9	95	65-125	
Isopropylbenzene (Cumene)	ug/L	20	21.3	107	80-125	
Methyl-tert-butyl ether	ug/L	20	19.1	96	75-125	
Methylene Chloride	ug/L	20	21.4	107	70-140	
n-Butylbenzene	ug/L	20	17.5	87	70-125	
n-Propylbenzene	ug/L	20	18.7	93	80-120	
Naphthalene	ug/L	20	13.1	66	60-140	
p-Isopropyltoluene	ug/L	20	19.3	97	80-120	
sec-Butylbenzene	ug/L	20	18.9	95	80-120	
Styrene	ug/L	20	20.9	104	80-120	
tert-Butylbenzene	ug/L	20	19.2	96	80-120	
Tetrachloroethene	ug/L	20	21.2	106	80-125	
Toluene	ug/L	20	20.0	100	80-120	

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## QUALITY CONTROL DATA

Project: CLINTON ENGINES

Pace Project No.: 60422699

LABORATORY CONTROL SAMPLE: 3308595

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
trans-1,2-Dichloroethene	ug/L	20	20.4	102	80-120	
trans-1,3-Dichloropropene	ug/L	20	18.5	93	75-125	
Trichloroethene	ug/L	20	20.2	101	80-125	
Trichlorofluoromethane	ug/L	20	19.6	98	75-125	
Vinyl chloride	ug/L	20	17.6	88	65-140	
Xylene (Total)	ug/L	60	61.7	103	80-120	
1,2-Dichlorobenzene-d4 (S)	%			96	80-120	
4-Bromofluorobenzene (S)	%			92	80-120	
Toluene-d8 (S)	%			99	80-120	

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## QUALITY CONTROL DATA

Project: CLINTON ENGINES

Pace Project No.: 60422699

QC Batch: 833904

Analysis Method: EPA 5030B/8260

QC Batch Method: EPA 5030B/8260

Analysis Description: 8260 MSV Water 10 mL Purge

Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60422699016, 60422699017, 60422699018, 60422699019, 60422699020, 60422699021

METHOD BLANK: 3308762

Matrix: Water

Associated Lab Samples: 60422699016, 60422699017, 60422699018, 60422699019, 60422699020, 60422699021

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	0.084	02/27/23 20:22	
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	02/27/23 20:22	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	02/27/23 20:22	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	02/27/23 20:22	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	02/27/23 20:22	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	02/27/23 20:22	
1,1-Dichloropropene	ug/L	ND	1.0	0.14	02/27/23 20:22	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	0.93	02/27/23 20:22	
1,2,3-Trichloropropane	ug/L	ND	2.5	0.41	02/27/23 20:22	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	0.73	02/27/23 20:22	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	0.32	02/27/23 20:22	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.5	0.78	02/27/23 20:22	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	0.20	02/27/23 20:22	
1,2-Dichlorobenzene	ug/L	ND	1.0	0.12	02/27/23 20:22	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	02/27/23 20:22	
1,2-Dichloroethene (Total)	ug/L	ND	1.0	0.22	02/27/23 20:22	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	02/27/23 20:22	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	0.090	02/27/23 20:22	
1,3-Dichlorobenzene	ug/L	ND	1.0	0.13	02/27/23 20:22	
1,3-Dichloropropane	ug/L	ND	1.0	0.10	02/27/23 20:22	
1,4-Dichlorobenzene	ug/L	ND	1.0	0.13	02/27/23 20:22	
2,2-Dichloropropane	ug/L	ND	1.0	0.16	02/27/23 20:22	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	02/27/23 20:22	
2-Chlorotoluene	ug/L	ND	1.0	0.11	02/27/23 20:22	
2-Hexanone	ug/L	ND	10.0	1.1	02/27/23 20:22	
4-Chlorotoluene	ug/L	ND	1.0	0.15	02/27/23 20:22	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	02/27/23 20:22	
Acetone	ug/L	ND	10.0	2.5	02/27/23 20:22	
Benzene	ug/L	ND	1.0	0.14	02/27/23 20:22	
Bromobenzene	ug/L	ND	1.0	0.088	02/27/23 20:22	
Bromochloromethane	ug/L	ND	1.0	0.20	02/27/23 20:22	
Bromodichloromethane	ug/L	ND	1.0	0.16	02/27/23 20:22	
Bromoform	ug/L	ND	1.0	0.68	02/27/23 20:22	
Bromomethane	ug/L	ND	5.0	0.46	02/27/23 20:22	
Carbon disulfide	ug/L	ND	5.0	0.98	02/27/23 20:22	
Carbon tetrachloride	ug/L	ND	1.0	0.17	02/27/23 20:22	
Chlorobenzene	ug/L	ND	1.0	0.089	02/27/23 20:22	
Chloroethane	ug/L	ND	1.0	0.37	02/27/23 20:22	
Chloroform	ug/L	ND	1.0	0.22	02/27/23 20:22	
Chloromethane	ug/L	ND	1.0	0.28	02/27/23 20:22	

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## QUALITY CONTROL DATA

Project: CLINTON ENGINES

Pace Project No.: 60422699

METHOD BLANK: 3308762

Matrix: Water

Associated Lab Samples: 60422699016, 60422699017, 60422699018, 60422699019, 60422699020, 60422699021

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	02/27/23 20:22	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	02/27/23 20:22	
Dibromochloromethane	ug/L	ND	1.0	0.30	02/27/23 20:22	
Dibromomethane	ug/L	ND	1.0	0.11	02/27/23 20:22	
Dichlorodifluoromethane	ug/L	ND	1.0	0.20	02/27/23 20:22	
Ethylbenzene	ug/L	ND	1.0	0.12	02/27/23 20:22	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	0.42	02/27/23 20:22	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	0.097	02/27/23 20:22	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.13	02/27/23 20:22	
Methylene Chloride	ug/L	ND	1.0	0.39	02/27/23 20:22	
n-Butylbenzene	ug/L	ND	1.0	0.15	02/27/23 20:22	
n-Propylbenzene	ug/L	ND	1.0	0.12	02/27/23 20:22	
Naphthalene	ug/L	ND	10.0	0.82	02/27/23 20:22	
p-Isopropyltoluene	ug/L	ND	1.0	0.13	02/27/23 20:22	
sec-Butylbenzene	ug/L	ND	1.0	0.11	02/27/23 20:22	
Styrene	ug/L	ND	1.0	0.12	02/27/23 20:22	
tert-Butylbenzene	ug/L	ND	1.0	0.12	02/27/23 20:22	
Tetrachloroethene	ug/L	ND	1.0	0.33	02/27/23 20:22	
Toluene	ug/L	ND	1.0	0.25	02/27/23 20:22	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	02/27/23 20:22	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	02/27/23 20:22	
Trichloroethene	ug/L	ND	1.0	0.21	02/27/23 20:22	
Trichlorofluoromethane	ug/L	ND	1.0	0.16	02/27/23 20:22	
Vinyl chloride	ug/L	ND	1.0	0.17	02/27/23 20:22	
Xylene (Total)	ug/L	ND	3.0	0.28	02/27/23 20:22	
1,2-Dichlorobenzene-d4 (S)	%	101	80-120		02/27/23 20:22	
4-Bromofluorobenzene (S)	%	93	80-120		02/27/23 20:22	
Toluene-d8 (S)	%	98	80-120		02/27/23 20:22	

LABORATORY CONTROL SAMPLE: 3308763

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	20.8	104	80-120	
1,1,1-Trichloroethane	ug/L	20	18.5	92	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	16.0	80	80-120	
1,1,2-Trichloroethane	ug/L	20	18.4	92	80-120	
1,1-Dichloroethane	ug/L	20	22.3	111	75-120	
1,1-Dichloroethene	ug/L	20	21.7	108	75-120	
1,1-Dichloropropene	ug/L	20	19.2	96	75-125	
1,2,3-Trichlorobenzene	ug/L	20	15.2	76	60-135	
1,2,3-Trichloropropane	ug/L	20	18.4	92	75-120	
1,2,4-Trichlorobenzene	ug/L	20	16.9	85	65-130	
1,2,4-Trimethylbenzene	ug/L	20	17.0	85	80-120	
1,2-Dibromo-3-chloropropane	ug/L	20	15.6	78	65-130	

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: CLINTON ENGINES

Pace Project No.: 60422699

LABORATORY CONTROL SAMPLE: 3308763

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	20	18.9	94	80-120	
1,2-Dichlorobenzene	ug/L	20	18.3	91	80-120	
1,2-Dichloroethane	ug/L	20	18.9	95	80-120	
1,2-Dichloroethene (Total)	ug/L	40	43.1	108	80-120	
1,2-Dichloropropane	ug/L	20	18.6	93	80-120	
1,3,5-Trimethylbenzene	ug/L	20	17.4	87	75-120	
1,3-Dichlorobenzene	ug/L	20	18.8	94	80-120	
1,3-Dichloropropane	ug/L	20	18.2	91	80-120	
1,4-Dichlorobenzene	ug/L	20	18.4	92	80-120	
2,2-Dichloropropane	ug/L	20	16.9	84	55-135	
2-Butanone (MEK)	ug/L	100	120	120	50-155	
2-Chlorotoluene	ug/L	20	17.9	89	80-120	
2-Hexanone	ug/L	100	106	106	55-145	
4-Chlorotoluene	ug/L	20	18.4	92	80-120	
4-Methyl-2-pentanone (MIBK)	ug/L	100	78.0	78	70-130	
Acetone	ug/L	100	196	196	35-160	L1
Benzene	ug/L	20	19.2	96	80-120	
Bromobenzene	ug/L	20	19.0	95	80-120	
Bromochloromethane	ug/L	20	20.3	102	80-120	
Bromodichloromethane	ug/L	20	19.8	99	80-120	
Bromoform	ug/L	20	21.3	107	60-130	
Bromomethane	ug/L	20	18.8	94	50-140	
Carbon disulfide	ug/L	20	21.6	108	75-125	
Carbon tetrachloride	ug/L	20	19.7	98	70-130	
Chlorobenzene	ug/L	20	20.3	102	80-120	
Chloroethane	ug/L	20	22.8	114	70-130	
Chloroform	ug/L	20	19.4	97	75-120	
Chloromethane	ug/L	20	17.5	88	45-145	
cis-1,2-Dichloroethene	ug/L	20	20.0	100	80-120	
cis-1,3-Dichloropropene	ug/L	20	18.5	92	75-125	
Dibromochloromethane	ug/L	20	21.2	106	75-125	
Dibromomethane	ug/L	20	19.3	97	80-120	
Dichlorodifluoromethane	ug/L	20	22.9	114	25-180	
Ethylbenzene	ug/L	20	20.1	100	80-120	
Hexachloro-1,3-butadiene	ug/L	20	19.1	96	65-125	
Isopropylbenzene (Cumene)	ug/L	20	21.3	107	80-125	
Methyl-tert-butyl ether	ug/L	20	20.4	102	75-125	
Methylene Chloride	ug/L	20	22.8	114	70-140	
n-Butylbenzene	ug/L	20	17.8	89	70-125	
n-Propylbenzene	ug/L	20	17.9	89	80-120	
Naphthalene	ug/L	20	13.8	69	60-140	
p-Isopropyltoluene	ug/L	20	19.0	95	80-120	
sec-Butylbenzene	ug/L	20	18.9	95	80-120	
Styrene	ug/L	20	20.8	104	80-120	
tert-Butylbenzene	ug/L	20	18.3	91	80-120	
Tetrachloroethene	ug/L	20	21.5	108	80-125	
Toluene	ug/L	20	19.1	96	80-120	

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## QUALITY CONTROL DATA

Project: CLINTON ENGINES

Pace Project No.: 60422699

LABORATORY CONTROL SAMPLE: 3308763

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
trans-1,2-Dichloroethene	ug/L	20	23.1	116	80-120	
trans-1,3-Dichloropropene	ug/L	20	17.9	90	75-125	
Trichloroethene	ug/L	20	19.2	96	80-125	
Trichlorofluoromethane	ug/L	20	21.4	107	75-125	
Vinyl chloride	ug/L	20	20.1	101	65-140	
Xylene (Total)	ug/L	60	61.8	103	80-120	
1,2-Dichlorobenzene-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			93	80-120	
Toluene-d8 (S)	%			101	80-120	

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## QUALITY CONTROL DATA

Project: CLINTON ENGINES  
Pace Project No.: 60422699

QC Batch:	834070	Analysis Method:	EPA 5030B/8260
QC Batch Method:	EPA 5030B/8260	Analysis Description:	8260 MSV Water 10 mL Purge
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60422699002

METHOD BLANK: 3309311 Matrix: Water

Associated Lab Samples: 60422699002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	ND	1.0	0.084	02/28/23 14:23	
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	02/28/23 14:23	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	02/28/23 14:23	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	02/28/23 14:23	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	02/28/23 14:23	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	02/28/23 14:23	
1,1-Dichloropropene	ug/L	ND	1.0	0.14	02/28/23 14:23	
1,2,3-Trichlorobenzene	ug/L	ND	1.0	0.93	02/28/23 14:23	
1,2,3-Trichloropropane	ug/L	ND	2.5	0.41	02/28/23 14:23	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	0.73	02/28/23 14:23	
1,2,4-Trimethylbenzene	ug/L	ND	1.0	0.32	02/28/23 14:23	
1,2-Dibromo-3-chloropropane	ug/L	ND	2.5	0.78	02/28/23 14:23	
1,2-Dibromoethane (EDB)	ug/L	ND	1.0	0.20	02/28/23 14:23	
1,2-Dichlorobenzene	ug/L	ND	1.0	0.12	02/28/23 14:23	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	02/28/23 14:23	
1,2-Dichloroethene (Total)	ug/L	ND	1.0	0.22	02/28/23 14:23	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	02/28/23 14:23	
1,3,5-Trimethylbenzene	ug/L	ND	1.0	0.090	02/28/23 14:23	
1,3-Dichlorobenzene	ug/L	ND	1.0	0.13	02/28/23 14:23	
1,3-Dichloropropane	ug/L	ND	1.0	0.10	02/28/23 14:23	
1,4-Dichlorobenzene	ug/L	ND	1.0	0.13	02/28/23 14:23	
2,2-Dichloropropane	ug/L	ND	1.0	0.16	02/28/23 14:23	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	02/28/23 14:23	
2-Chlorotoluene	ug/L	ND	1.0	0.11	02/28/23 14:23	
2-Hexanone	ug/L	ND	10.0	1.1	02/28/23 14:23	
4-Chlorotoluene	ug/L	ND	1.0	0.15	02/28/23 14:23	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	02/28/23 14:23	
Acetone	ug/L	ND	10.0	2.5	02/28/23 14:23	
Benzene	ug/L	ND	1.0	0.14	02/28/23 14:23	
Bromobenzene	ug/L	ND	1.0	0.088	02/28/23 14:23	
Bromochloromethane	ug/L	ND	1.0	0.20	02/28/23 14:23	
Bromodichloromethane	ug/L	ND	1.0	0.16	02/28/23 14:23	
Bromoform	ug/L	ND	1.0	0.68	02/28/23 14:23	
Bromomethane	ug/L	ND	5.0	0.46	02/28/23 14:23	
Carbon disulfide	ug/L	ND	5.0	0.98	02/28/23 14:23	
Carbon tetrachloride	ug/L	ND	1.0	0.17	02/28/23 14:23	
Chlorobenzene	ug/L	ND	1.0	0.089	02/28/23 14:23	
Chloroethane	ug/L	ND	1.0	0.37	02/28/23 14:23	
Chloroform	ug/L	ND	1.0	0.22	02/28/23 14:23	
Chloromethane	ug/L	ND	1.0	0.28	02/28/23 14:23	

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## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: CLINTON ENGINES

Pace Project No.: 60422699

METHOD BLANK: 3309311

Matrix: Water

Associated Lab Samples: 60422699002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	02/28/23 14:23	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	02/28/23 14:23	
Dibromochloromethane	ug/L	ND	1.0	0.30	02/28/23 14:23	
Dibromomethane	ug/L	ND	1.0	0.11	02/28/23 14:23	
Dichlorodifluoromethane	ug/L	ND	1.0	0.20	02/28/23 14:23	
Ethylbenzene	ug/L	ND	1.0	0.12	02/28/23 14:23	
Hexachloro-1,3-butadiene	ug/L	ND	1.0	0.42	02/28/23 14:23	
Isopropylbenzene (Cumene)	ug/L	ND	1.0	0.097	02/28/23 14:23	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.13	02/28/23 14:23	
Methylene Chloride	ug/L	ND	1.0	0.39	02/28/23 14:23	
n-Butylbenzene	ug/L	ND	1.0	0.15	02/28/23 14:23	
n-Propylbenzene	ug/L	ND	1.0	0.12	02/28/23 14:23	
Naphthalene	ug/L	ND	10.0	0.82	02/28/23 14:23	
p-Isopropyltoluene	ug/L	ND	1.0	0.13	02/28/23 14:23	
sec-Butylbenzene	ug/L	ND	1.0	0.11	02/28/23 14:23	
Styrene	ug/L	ND	1.0	0.12	02/28/23 14:23	
tert-Butylbenzene	ug/L	ND	1.0	0.12	02/28/23 14:23	
Tetrachloroethene	ug/L	ND	1.0	0.33	02/28/23 14:23	
Toluene	ug/L	ND	1.0	0.25	02/28/23 14:23	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	02/28/23 14:23	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	02/28/23 14:23	
Trichloroethene	ug/L	ND	1.0	0.21	02/28/23 14:23	
Trichlorofluoromethane	ug/L	ND	1.0	0.16	02/28/23 14:23	
Vinyl chloride	ug/L	ND	1.0	0.17	02/28/23 14:23	
Xylene (Total)	ug/L	ND	3.0	0.28	02/28/23 14:23	
1,2-Dichlorobenzene-d4 (S)	%	104	80-120		02/28/23 14:23	
4-Bromofluorobenzene (S)	%	98	80-120		02/28/23 14:23	
Toluene-d8 (S)	%	99	80-120		02/28/23 14:23	

LABORATORY CONTROL SAMPLE: 3309312

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	20.6	103	80-120	
1,1,1-Trichloroethane	ug/L	20	18.6	93	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	17.5	87	80-120	
1,1,2-Trichloroethane	ug/L	20	18.7	93	80-120	
1,1-Dichloroethane	ug/L	20	19.4	97	75-120	
1,1-Dichloroethene	ug/L	20	18.8	94	75-120	
1,1-Dichloropropene	ug/L	20	18.8	94	75-125	
1,2,3-Trichlorobenzene	ug/L	20	14.1	71	60-135	
1,2,3-Trichloropropane	ug/L	20	18.9	94	75-120	
1,2,4-Trichlorobenzene	ug/L	20	15.2	76	65-130	
1,2,4-Trimethylbenzene	ug/L	20	17.1	86	80-120	
1,2-Dibromo-3-chloropropane	ug/L	20	15.6	78	65-130	

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## QUALITY CONTROL DATA

Project: CLINTON ENGINES

Pace Project No.: 60422699

LABORATORY CONTROL SAMPLE: 3309312

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	20	19.3	97	80-120	
1,2-Dichlorobenzene	ug/L	20	18.9	95	80-120	
1,2-Dichloroethane	ug/L	20	18.4	92	80-120	
1,2-Dichloroethene (Total)	ug/L	40	40.5	101	80-120	
1,2-Dichloropropane	ug/L	20	17.8	89	80-120	
1,3,5-Trimethylbenzene	ug/L	20	17.5	88	75-120	
1,3-Dichlorobenzene	ug/L	20	18.8	94	80-120	
1,3-Dichloropropane	ug/L	20	18.6	93	80-120	
1,4-Dichlorobenzene	ug/L	20	18.4	92	80-120	
2,2-Dichloropropane	ug/L	20	17.3	87	55-135	
2-Butanone (MEK)	ug/L	100	110	110	50-155	
2-Chlorotoluene	ug/L	20	17.8	89	80-120	
2-Hexanone	ug/L	100	93.6	94	55-145	
4-Chlorotoluene	ug/L	20	18.5	93	80-120	
4-Methyl-2-pentanone (MIBK)	ug/L	100	70.1	70	70-130	
Acetone	ug/L	100	146	146	35-160	
Benzene	ug/L	20	19.2	96	80-120	
Bromobenzene	ug/L	20	19.7	99	80-120	
Bromochloromethane	ug/L	20	20.2	101	80-120	
Bromodichloromethane	ug/L	20	16.6	83	80-120	
Bromoform	ug/L	20	21.8	109	60-130	
Bromomethane	ug/L	20	15.3	76	50-140	
Carbon disulfide	ug/L	20	18.4	92	75-125	
Carbon tetrachloride	ug/L	20	19.2	96	70-130	
Chlorobenzene	ug/L	20	20.8	104	80-120	
Chloroethane	ug/L	20	19.4	97	70-130	
Chloroform	ug/L	20	19.5	98	75-120	
Chloromethane	ug/L	20	14.6	73	45-145	
cis-1,2-Dichloroethene	ug/L	20	20.2	101	80-120	
cis-1,3-Dichloropropene	ug/L	20	16.0	80	75-125	
Dibromochloromethane	ug/L	20	20.7	103	75-125	
Dibromomethane	ug/L	20	17.3	87	80-120	
Dichlorodifluoromethane	ug/L	20	19.2	96	25-180	
Ethylbenzene	ug/L	20	19.3	97	80-120	
Hexachloro-1,3-butadiene	ug/L	20	18.4	92	65-125	
Isopropylbenzene (Cumene)	ug/L	20	20.7	103	80-125	
Methyl-tert-butyl ether	ug/L	20	18.5	92	75-125	
Methylene Chloride	ug/L	20	20.4	102	70-140	
n-Butylbenzene	ug/L	20	17.0	85	70-125	
n-Propylbenzene	ug/L	20	18.0	90	80-120	
Naphthalene	ug/L	20	12.4	62	60-140	
p-Isopropyltoluene	ug/L	20	18.7	94	80-120	
sec-Butylbenzene	ug/L	20	18.5	92	80-120	
Styrene	ug/L	20	20.3	102	80-120	
tert-Butylbenzene	ug/L	20	17.9	90	80-120	
Tetrachloroethene	ug/L	20	20.5	103	80-125	
Toluene	ug/L	20	19.3	97	80-120	

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## QUALITY CONTROL DATA

Project: CLINTON ENGINES

Pace Project No.: 60422699

LABORATORY CONTROL SAMPLE: 3309312

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
trans-1,2-Dichloroethene	ug/L	20	20.3	102	80-120	
trans-1,3-Dichloropropene	ug/L	20	17.7	89	75-125	
Trichloroethene	ug/L	20	19.1	95	80-125	
Trichlorofluoromethane	ug/L	20	18.6	93	75-125	
Vinyl chloride	ug/L	20	16.6	83	65-140	
Xylene (Total)	ug/L	60	61.4	102	80-120	
1,2-Dichlorobenzene-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			92	80-120	
Toluene-d8 (S)	%			101	80-120	

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## QUALITY CONTROL DATA

Project: CLINTON ENGINES  
Pace Project No.: 60422699

QC Batch:	834121	Analysis Method:	EPA 5030B/8260
QC Batch Method:	EPA 5030B/8260	Analysis Description:	8260 MSV Water 10 mL Purge
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60422699008, 60422699015

METHOD BLANK: 3309477 Matrix: Water  
Associated Lab Samples: 60422699008, 60422699015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dichloroethene (Total)	ug/L	ND	1.0	0.22	02/28/23 10:29	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	02/28/23 10:29	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	02/28/23 10:29	
Trichloroethene	ug/L	ND	1.0	0.21	02/28/23 10:29	
1,2-Dichlorobenzene-d4 (S)	%	97	80-120		02/28/23 10:29	
4-Bromofluorobenzene (S)	%	100	80-120		02/28/23 10:29	
Toluene-d8 (S)	%	103	80-120		02/28/23 10:29	

LABORATORY CONTROL SAMPLE: 3309478

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethene (Total)	ug/L	40	42.6	107	80-120	
cis-1,2-Dichloroethene	ug/L	20	18.5	93	80-120	
trans-1,2-Dichloroethene	ug/L	20	24.1	120	80-120	
Trichloroethene	ug/L	20	19.0	95	80-125	
1,2-Dichlorobenzene-d4 (S)	%			98	80-120	
4-Bromofluorobenzene (S)	%			95	80-120	
Toluene-d8 (S)	%			100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3309479 3309480

Parameter	Units	60422601013		MS		MSD		MS		MSD		% Rec		Max	
		Result	Conc.	Spike Conc.	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Limits	RPD	RPD	Qual
1,2-Dichloroethene (Total)	ug/L	ND	400	400	238	387	60	97	80-120	48	20				
cis-1,2-Dichloroethene	ug/L	ND	200	200	117	162	58	81	80-120	33	20	M1, R1			
trans-1,2-Dichloroethene	ug/L	ND	200	200	121	224	61	112	80-120	60	20	M1, R1			
Trichloroethene	ug/L	ND	200	200	120	168	60	84	80-125	34	20	M1, R1			
1,2-Dichlorobenzene-d4 (S)	%							100	100	80-120					
4-Bromofluorobenzene (S)	%							96	96	80-120					
Toluene-d8 (S)	%							104	101	80-120					

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Project: CLINTON ENGINES  
Pace Project No.: 60422699

QC Batch:	834457	Analysis Method:	EPA 5030B/8260
QC Batch Method:	EPA 5030B/8260	Analysis Description:	8260 MSV Water 10 mL Purge
		Laboratory:	Pace Analytical Services - Kansas City

Associated Lab Samples: 60422699016, 60422699019

METHOD BLANK: 3310447 Matrix: Water  
Associated Lab Samples: 60422699016, 60422699019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dichloroethene (Total)	ug/L	ND	1.0	0.22	03/02/23 08:23	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	03/02/23 08:23	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	03/02/23 08:23	
Trichloroethene	ug/L	ND	1.0	0.21	03/02/23 08:23	
Vinyl chloride	ug/L	ND	1.0	0.17	03/02/23 08:23	
1,2-Dichlorobenzene-d4 (S)	%	97	80-120		03/02/23 08:23	
4-Bromofluorobenzene (S)	%	95	80-120		03/02/23 08:23	
Toluene-d8 (S)	%	99	80-120		03/02/23 08:23	

LABORATORY CONTROL SAMPLE: 3310448

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethene (Total)	ug/L	40	42.6	107	80-120	
cis-1,2-Dichloroethene	ug/L	20	20.8	104	80-120	
trans-1,2-Dichloroethene	ug/L	20	21.8	109	80-120	
Trichloroethene	ug/L	20	19.2	96	80-125	
Vinyl chloride	ug/L	20	18.5	92	65-140	
1,2-Dichlorobenzene-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3310710 3310711

Parameter	Units	60422882002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethene (Total)	ug/L	ND	200	200	196	226	98	113	80-120	14	20	
cis-1,2-Dichloroethene	ug/L	ND	100	100	97.7	112	98	112	80-120	13	20	
trans-1,2-Dichloroethene	ug/L	ND	100	100	98.4	114	98	114	80-120	15	20	
Trichloroethene	ug/L	ND	100	100	96.5	96.3	96	96	80-125	0	20	
Vinyl chloride	ug/L	ND	100	100	88.4	96.5	88	96	65-140	9	25	
1,2-Dichlorobenzene-d4 (S)	%						94	97	80-120			
4-Bromofluorobenzene (S)	%						82	95	80-120			
Toluene-d8 (S)	%						99	98	80-120			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

## REPORT OF LABORATORY ANALYSIS

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## QUALIFIERS

Project: CLINTON ENGINES

Pace Project No.: 60422699

### DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### BATCH QUALIFIERS

Batch: 833836

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: 833838

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: 833904

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: 834070

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

### ANALYTE QUALIFIERS

L1 Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

R1 RPD value was outside control limits.

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: CLINTON ENGINES

Pace Project No.: 60422699

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60422699001	MW-103	EPA 5030B/8260	833836		
60422699002	MW-14	EPA 5030B/8260	834070		
60422699003	MW-104	EPA 5030B/8260	833836		
60422699004	MW-101	EPA 5030B/8260	833836		
60422699005	MW-102	EPA 5030B/8260	833836		
60422699006	MW-13	EPA 5030B/8260	833836		
60422699007	MW-12	EPA 5030B/8260	833836		
60422699008	MW-09	EPA 5030B/8260	833836		
60422699008	MW-09	EPA 5030B/8260	834121		
60422699009	MW-11	EPA 5030B/8260	833836		
60422699010	MW-4B	EPA 5030B/8260	833836		
60422699011	MW-6B	EPA 5030B/8260	833836		
60422699012	MW-8B	EPA 5030B/8260	833838		
60422699013	MW-2B	EPA 5030B/8260	833838		
60422699014	MW-3B	EPA 5030B/8260	833838		
60422699015	MW-X	EPA 5030B/8260	833838		
60422699015	MW-X	EPA 5030B/8260	834121		
60422699016	MW-1B	EPA 5030B/8260	833904		
60422699016	MW-1B	EPA 5030B/8260	834457		
60422699017	MW-10A	EPA 5030B/8260	833904		
60422699018	MW-10B	EPA 5030B/8260	833904		
60422699019	MW-Y	EPA 5030B/8260	833904		
60422699019	MW-Y	EPA 5030B/8260	834457		
60422699020	TRIP BLANK	EPA 5030B/8260	833904		
60422699021	FIELD BLANK	EPA 5030B/8260	833904		

## REPORT OF LABORATORY ANALYSIS

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WO#: 60422699



60422699



DC#\_Title: ENV-FRM-LENE-0009\_Sample C

Revision: 2

Effective Date: 01/12/2022

Issued By: Lenexa

Client Name: Tetra Tech EMICourier: FedEx ☐ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☐ Client ☒ Other ☐Tracking #: \_\_\_\_\_ Pace Shipping Label Used? Yes ☐ No ☒Custody Seal on Cooler/Box Present: Yes ☐ No ☒ Seals intact: Yes ☐ No ☒Packing Material: Bubble Wrap ☐ Bubble Bags ☒ Foam ☐ None ☐ Other ☐Thermometer Used: T296 Type of Ice: Wet Blue ☐ None ☐Cooler Temperature (°C): As-read 0.3 Corr. Factor -0.1 Corrected 0.2Date and initials of person  
examining contents:

Temperature should be above freezing to 6°C

pv 2/24/23

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Sample labels match COC: Date / time / ID / analyses	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Samples contain multiple phases? Matrix: <u>wt</u>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Containers requiring pH preservation in compliance? (HNO <sub>3</sub> , H <sub>2</sub> SO <sub>4</sub> , HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks:		
Lead acetate strip turns dark? (Record only)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Potassium iodide test strip turns blue/purple? (Preserve)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Samples from USDA Regulated Area: State:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	

Client Notification/ Resolution:

Copy COC to Client? Y / N

Field Data Required? Y / N

Person Contacted: \_\_\_\_\_

Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

Project Manager Review: \_\_\_\_\_

Date: \_\_\_\_\_



# CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.  
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at <https://info.pacelabs.com/hubs/pas-standard-terms.pdf>.

## Section A

### Required Client Information:

Company: TETRA TECH EMI Address: 415 Oak Kansas City, MO 64106 Email: kaitlyn.mitchell@tetratech.com Phone: (816)412-1742 Fax: Project Name: Clinton Engines Project #: Requested Due Date:

## Section B

### Required Project Information:

Report To: Kaitlyn Mitchell Copy To: Purchase Order #: Project Name: Clinton Engines Project #: Requested Due Date:

## Section C

### Invoice Information:

Attention: Company Name: Address: Pace Quote: Pace Project Manager: janie.church@pacelabs.com Pace Profile #: 15191, line 5

## Section D

### Requested Analysis:

Requested Analysis Filtered (Y/N)

## Section E

### Regulatory Agency

Regulatory Agency

## Section F

### State / Location

State / Location

## Section G

### Page : 1 Of 1

Page : 1 Of 1

ITEM #	MATRIX	CODE	COLLECTED		SAMPLE TYPE (G=GRAB C=COMP)	MATRIX CODE (see valid codes to left)	DATE		TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS	Received on	Custody Sealed (Y/N)	Cooler (Y/N)	Samples Intact (Y/N)
			START	END			DATE	TIME									
1	MW-103		2/21/23	1000		X	2/21/23	1000	3								
2	MW-14		2/21/23	1130		X	2/21/23	1130	3								
3	MW-104		2/21/23	1210		X	2/21/23	1210	3								
4	MW-101		2/21/23	1430		X	2/21/23	1430	3								
5	MW-102		2/21/23	1625		X	2/21/23	1625	3								
6	MW-13		2/21/23	0810		X	2/21/23	0810	3								
7	MW-12		2/21/23	0930		X	2/21/23	0930	3								
8	MW-09		2/21/23	1030		X	2/21/23	1030	3								
9	MW-11		2/21/23	1145		X	2/21/23	1145	3								
10	MW-4B		2/21/23	1240		X	2/21/23	1240	3								
11	MW-6B		2/21/23	1410		X	2/21/23	1410	3								
12	MW-8B		2/21/23	1615		X	2/21/23	1615	3								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	TEMP in C	Received on	Custody Sealed (Y/N)	Cooler (Y/N)	Samples Intact (Y/N)
Thomas Kory / Tetra Tech	Thomas Kory	2/21/23	1017	PL	2/24/23	1650	6.2		Y	N	Y







## DATA VERIFICATION REPORT

**Prepared by:** Ellen McEntee  
**Date:** March 12, 2023  
**Site Name/Job Number:** Clinton Engines / 103G65210190.009.03  
**Laboratory:** Pace Analytical, Lenexa, KS

**Data Package or SDG Number:** 60422699

**Sample Designations/Names:**

MW-1B	MW-2B	MW-3B	MW-4B	MW-6B	MW-8B
MW-09	MW10A	MW10B	MW-11	MW-12	MW-13
MW-14	MW-101	MW-102	MW-103	MW-104	MW-X
MW-Y	FIELD BLANK	TRIP BLANK			

**Matrices:** Water  
**Analytical Parameters:** VOCs by SW-846 Method 8260

Data Package Element	Usable	Rejected	NA	Description of Affected Data (note specific samples and analytical parameters affected)
Chain of custody	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The chain of custody was completed appropriately with the following exception. The "Relinquished By" section of the second page of the chain of custody was not signed and dated. Results were not qualified.
Data package completeness	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The data package contains all the required elements.
Sample preservation, storage, and holding times	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The samples were received on 02/24/2023; the samples arrived in good condition. Custody seals were not present. All samples were analyzed within the recommended holding time.
Method and field blank contamination	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The method blanks, field blank and trip blank were non-detect for all target analytes.
Surrogate spikes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Surrogate spikes were within control limits.
Matrix spikes/matrix spike duplicates (MS/MSD)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	MS/MSDs from other data packages were not assessed.
Laboratory control samples/Laboratory control sample duplicates (LCS/LCSD)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>LCS 3308590, 3308595, and 3308763:</b> The LCS recoveries for acetone were above the laboratory acceptance limit. The associated sample results are non-detect for acetone and were not qualified.

Data Package Element	Usable	Rejected	NA	Description of Affected Data (note specific samples and analytical parameters affected)
Other (Field Duplicates)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p><b>MW-3B/MW-X:</b> The relative percent differences for 1,2-dichloroethene (total), carbon tetrachloride, trichloroethene, and cis-1,2-dichloroethene were above the acceptance limit. The results in the parent sample and field duplicate were qualified as estimated (flagged J).</p> <p><b>MW-10B/MW-Y:</b> The relative percent differences for all analytes were within the acceptance limit.</p>
<p><b>Summary</b> Data are usable as qualified based on the findings for this validation effort.</p>				