2018

Supplemental Alternatives Analysis Report
South Buffalo Development, Area C
Buffalo, New York



John Black, P.E.

JBlack Consulting, LLC

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EXECUTIVE SUMMARY

JBlack Consulting, LLC has prepared this Supplemental Alternatives Analysis Report (AAR) under the direction of Inventum Engineering, P.C. on behalf of South Buffalo Development LLC (SBD) for the Buffalo Color Corporation (BCC) Area C Site (Site). MACTEC Engineering and Consulting, Inc. (MACTEC) had prepared an AAR for Areas ABCE (MACTEC 2009) pursuant to the Brownfield Cleanup Program Guide (Draft) NYSDEC (2004) (Guide). The original AAR satisfied the requirements under Honeywell International Inc.'s (Honeywell's) Administrative Consent Order No. B9-0707-05-10 (Order) with NYSDEC.

- Subsequent to the February 2009 AAR, the site was remediated (documented in the 2010 Final Engineering Report) and managed in accordance with the Site Management Plan (MACTEC 2010).
- The MACTEC AAR was based on remediating the site to an industrial/commercial standard.
- This supplemental AAR enhances the approved AAR to address the work required to achieve appropriate controls and remedial activities to bring the Area C Site to restricted residential standards.

Honeywell and SBD jointly remediated the property to prepare the site for commercial/industrial redevelopment. Their collective vision for this property was to transform the property into environmentally sustainable commercial/industrial buildings that would support jobs and economic stability for the region. The vision also included substantial open space. Since that original vision was developed, the local economy has evolved and the need for restricted residential space has emerged. SBD would like to enhance the existing remedy to include restricted residential use.

SBD is submitting this supplemental AAR in support of its 60-Day Advance Notification of Site Change of Use Form under the New York State Brownfield Cleanup Program (BCP) Site ID No. C915231. SBD envisions SBD conducting selective additional capping, stormwater controls, soil vapor mitigation and redevelopment in addition to the demolition and remediation of the Site that has been completed. SBD holds title to the available property formerly owned by BCC.

SBD intends to complete the remediation and redevelopment of the Site under the Track 4 cleanup track of the BCP in the following manner.

- Demolish a portion of the former BCC facility floor;
- Install sub-slab vapor mitigation;
- Replace floor slabs;
- Remediate the Site as outlined in Section 9.0;
- Redevelop the site; and
- Perform long-term operations, maintenance and monitoring (OM&M) as necessary to support the final remedy.

Site-specific COCs were determined by MACTEC as a comparison of contaminant levels detected on the property to the potentially applicable standards, criteria, and guidance (SCGs) and to the current and future land use proposed under SBD's redevelopment scenario. The SCGs applicable to the Site and which will be used as the remediation goals for the project are as follows:

- Soil: the Restricted Residential and Protection of Groundwater Soil Cleanup Objectives (SCOs), as set forth in the relevant portions of 6 NYCRR Part 375, Environmental Remediation Programs. This includes the NYSDEC-calculated SCOs for aniline and nitrobenzene (per NYSDEC's letter to Honeywell dated December 28, 2007).

- Groundwater: Plume containment and, ultimately, a goal of attaining the NY Class GA standards, as set forth in 6 NYCRR Part 703, Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations (NY SDEC, 1999).

As set forth in the MACTEC AAR, a detailed analysis of remedial alternative was performed using the evaluation criteria outlined in the Guide as well as relevant portions of DER-10 (NYSDEC, 2002). The preferred remedy for the Site consists of the following components:

- Soil, Installation of a cover system has been selected as the preferred alternative for the Site soil. The cover system will use a combination of soil, pavement, and existing/new building structures to provide protection from direct contact exposure to contaminated surface soils, consistent with the presumptive remedy as identified in 6 NYCRR Part 375. The soil cover will be increased to a minimum of 2-feet to facilitate limited restricted residential use.
- Area C Groundwater, Monitoring for the limited chlorobenzene plumes identified at Area C.
- Vapor Intrusion - An environmental easement has been implemented to ensure that occupied structures associated with future development at the Site are constructed such that the vapor intrusion (VI) pathway is eliminated. An active sub-slab system will be installed in the existing structures to protect future occupants and visitors. Monitoring will be conducted to verify the effectiveness of the sub-slab system.
- Site Sewers, Existing underground sanitary/process and storm sewer lines have been capped, removed or rehabilitated, as determined appropriate on an area-by-area basis by SBD.
- Use of institutional/engineering controls and environmental easements have been implemented that prohibit groundwater use, limit future land use to commercial or industrial, require elimination of the vapor intrusion pathway for all occupied structures, and require the development and continued implementation of the Site Management Plan (MACTEC 2006). The environmental easements will be amended or replaced to allow restricted residential occupancy.

The preferred remedy is driven by the requirements of the BCP and is consistent with SBD's proposed redevelopment approach in that it is:

- Fully protective of human health and the environment;
- Eliminates the risks and hazards posed by the formerly deteriorating infrastructure; and
- Meshes well with SBD's schedule for redevelopment of the Site.

The demolition and redevelopment plans are contingent on acceptance of the Change of Site Use for the Site, the acceptance of the preferred remedy set forth in this supplemental AAR by NYSDEC, and the execution of a contract to implement the remedy.

1 INTRODUCTION

JBlack Consulting has revised the MACTEC Alternatives Analysis Report (AAR) (MACTEC, 2009) on behalf of South Buffalo Development LLC (SBD) for the Buffalo Color Corporation (BCC) Area C Site (Site) (Figure 1). MACTEC Engineering and Consulting, Inc. (MACTEC) had prepared an AAR for Areas ABCE pursuant to the Brownfield Cleanup Program Guide (Draft) NYSDEC (2004) (Guide). The original AAR satisfied the requirements under Honeywell International Inc.'s (Honeywell's) Administrative Consent Order No. B9-0707-05-10 (Order) with NYSDEC to prepare a Feasibility Study for the Site.

Subsequent to the February 2009 AAR, the Site was remediated (documented in the 2010 Final Engineering Report) and managed in accordance with the Site Management Plan (SMP, MACTEC, 2006).

Honeywell and SBD jointly transformed Area C of the former BCC Site into a viable, commercial/industrial redevelopment Site. After the Site was remediated the surrounding area has emerged as a vibrant commercial and residential district. The 2009 AAR did not envision the opportunity or demand for a restricted residential component to the redevelopment, that is the driver for this supplemental AAR.

SBD is submitting this supplemental AAR in support of its 60-Day Advance Notification of Site Change of Use Form under the New York State Brownfield Cleanup Program (BCP) Site ID No. C915231. SBD envisions SBD conducting selective demolition (floor removal and remodeling), enhancement of the capping system (remediation), stormwater management enhancements (redevelopment), sub-slab vapor controls (long-term effectiveness) and redevelopment of the Site. SBD holds title to the available Area C property formerly owned by BCC.

1.1 PROPOSED REDEVELOPMENT APPROACH

The proposed improvements to the remediation and redevelopment approach for the Site crafted by SBD utilized the Track 4 cleanup methodology developed by MACTEC for the excavations and design and construction of the existing cover system following the BCP regulations to transform the Site into viable commercial/industrial property. The goal for this supplemental AAR and ultimately the Site is to improve the cover system, stormwater management, vapor mitigation and monitoring program in a manner that preserves the character of the existing structures and creates renovated, environmentally sustainable commercial/residential facilities that will support jobs and promote the economic stability of the region. The plan also calls for maintenance of the open space created during the previous remedial action.

The proposed uses of the Site, as envisioned by SBD, are further discussed later in this section. The brownfield redevelopment process allows the remediation to support the proposed uses of the Site and speeds the process to productive utilization. The remedial approach described in this AAR is fully protective of human health and the environment.

This redevelopment Vision will unfold through the administrative vehicle of the BCP. The redevelopment integrates Site demolition and remediation with the redevelopment. SBD intends to complete the remediation and redevelopment of the Site under the BCP in the following manner.

- Demolish portions of the former BCC facility floor;
- Install vapor mitigation;
- Replace slabs, clean and seal existing slabs in buildings to be occupied that are in contact with soil;
- Remediate the Site as outlined in Section 9.0;
- Redevelop the site; and
- Perform long-term operations, maintenance and monitoring (OM&M) as necessary to support the final remedy.

SBD's preliminary redevelopment plan is summarized below. This plan is in the conceptual stage and subject to change but the final plan, if modified, will retain the large open areas developed during the previous remedial program.

1.1.1 Area C

This area was originally targeted for use as a light industrial/commercial office park to possibly include a Transportation Logistics Center for the City of Buffalo (SBD submitted a proposal to the City for this purpose) and other light industrial/commercial uses. The real estate market in this area has reinvigorated and the need for commercial/restricted residential use has become the primary goal for the site.

The benefits of SBD's proposed redevelopment scenario include:

- Provides for the accelerated demolition of the floor of the abandoned manufacturing plant;
- Provides an economic driver for renovation of the structure;
- Results in creation of jobs and potentially expands the local tax base;
- Involves local government and non-government organizations (NGOs);
- Eliminates the risks and hazards posed by the currently deteriorating infrastructure;
- Improves the aesthetics and visual impact of the neighborhood; and
- Provides a potential catalyst for broader, area-wide redevelopment of the Buffalo River corridor.

1.2 SITE DESCRIPTION

The Site is located on the south side of the City of Buffalo, Erie County, New York, in an area formerly dominated by heavy industrial development that dated to the mid-1800s. The physical address of the Site building, which is located on Area C, is 140 Lee Street. Area C is bounded by Elk Street to the north, Lee Street to the east, a rail spur and Area B to the south, and railroad tracks to the west.

The Site occupies approximately 6 acres near Lee and Elk Streets (Figure l). The present layout of Area C) is shown on Figure 2 and can be described as:

- Area C is located on the northwestern comer of the former BCC Site. It is fenced and accessible by vehicle from gated entrances along Lee Street. Area C covers approximately 6 acres and included the former powerhouse building and former ice house.
- Under the BCP, a fuel oil above ground storage tank (AST) and portions of the former Ice House had been removed and a commercial/industrial cover was placed.

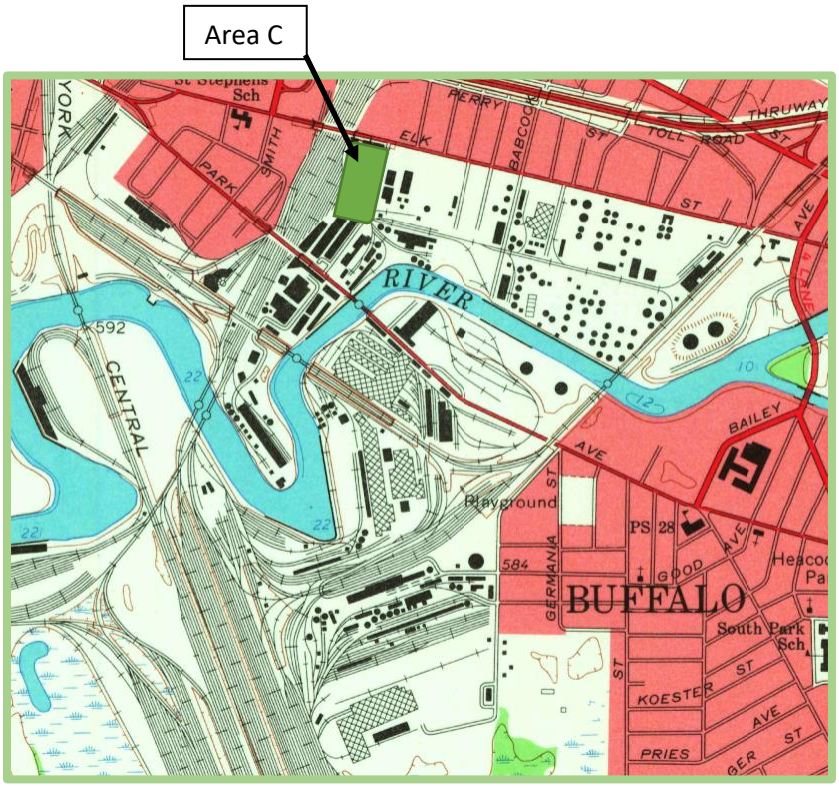

Figure 1
USGS Mapping, 1965

Potable water is provided to the Site and surrounding area by the City of Buffalo. Site sewage and wastewater is conveyed off site via a network of underground sewer lines to the Buffalo Sewer Authority (BSA) wastewater treatment plant.

Regionally, the ground surface is generally flat (estimated to be 0.008 feet/foot by MACTEC) and has a gentle slope to the west toward Lake Erie. The groundwater surface elevation at the site was measured to vary from 579- to 584 feet above mean sea level (ft-msl) in February 2018.

Ground surface elevations at the site are typically about 584 to 586 ft-msl. Surface runoff at the site typically is conveyed to the facility's underground storm sewer lines. The storm sewers discharge to the Buffalo River via two main outfalls: Outfall 006 is located on Area A and Outfall 011 runs from Area E south across PVS property. Locally, shallow groundwater is recharged by rainfall or snow-melt that does not run off to surface water. Figure AAR-002 shows existing ground surface conditions for Area C. As depicted on Figures AAR-002 and AAR-003, nearly 30 percent of the facility is currently covered by paved areas or existing structures. The remaining area is covered with a minimum 1-foot thick engineered cover.

The former BCC site is situated within the Lake Erie and Niagara River drainage basin. The Buffalo River is the predominant surface drainage near the site. The river is approximately 8 miles in length and is classified as a Class C waterway suitable for secondary contact recreation. The Buffalo River generally flows from east to west and eventually drains into Lake Erie several miles west of the site, although periodic flow reversals occur due to Lake Erie seiche conditions. The Buffalo River has a reported median summer low monthly flow of 48 cubic feet per second (cfs) but, during the spring, runoff conditions reportedly may

exhibit monthly flows as high as 1,200 cfs. Historically, the banks of the Buffalo River have been altered for industrial development. The Buffalo River area has experienced a strong evolution over the past decade due to remedial activities and subsequently for commercial and recreational development.

1.3 SITE HISTORY

A detailed description of Site history is provided in the RI report (Golder, 1997). Originally founded as the Schoellkopf Aniline and Dye Company (Schoellkopf) in 1879, the plant produced dyes and organic chemicals based primarily on aniline and various aniline derivatives. Beginning in 1977 until manufacturing operations ceased in 2003, the operations at the former BCC mainly involved production of Indigo dye, alkylanilines, anhydrides, and dye intermediates.

The plant was reorganized into the National Aniline Chemical Company in 1916. It became one of the five companies which merged to create Allied Chemical Corporation (Allied Chemical) in 1920. The existing dye-making facility and the right to produce certain dyes and intermediates were sold by Allied Chemical to BCC on July 1, 1977. At the time of the sale, the plant was divided into eight areas designated with the letters A, B, C, D, E, F, G, and H. BCC purchased the manufacturing areas A through E, while Allied Chemical retained the acid plant (sold to PVS in 1981), the research and development Area F and the parking lots on Areas G (Elk Street) and H (Smith Street).

In 2005, BCC filed for bankruptcy. During the bankruptcy proceedings, some of the facility's production equipment was sold and removed from the site. In conjunction with the bankruptcy, the office building and former plant hospital located at 100 Lee Street on Area B and the warehouse building (Building 322) located near Elk Street on Area E, along with some of the land under and around those buildings, were sold to other parties. Agreements are in place to preserve access rights to the land for the purposes of any required environmental investigation and remediation activities. The remaining buildings and property on Areas A, B, C and E were conveyed to SBD.

1.4 OBJECTIVE OF SUPPLEMENTAL AAR

The objective of this supplemental AAR is to respond to the evolution of the community and update the evaluation of remedial alternatives conduced in 2009 and provide the basis for enhancement of the selected final remedy to address the proposed change of use that includes restricted residential use, as presented in Section 9 of this document, and facilitate the redevelopment of the Site. Per the Guide, the goal of the remedy selection process is to select a remedy for a site that is fully protective of public health and the environment, taking into account the current, intended and reasonably anticipated future land use of the Site. The use has been confirmed by the changing market conditions in the vicinity of the site and discussions with the City of Buffalo.

1.5 DOCUMENT ORGANIZATION

This AAR Report is structured in general accordance with the guidelines presented in the Guide and, as appropriate, in NYSDEC DER-10 (NYSDEC, 2002). The sections of this AAR are outlined below.

- Section 1.0 Introduction - discusses the physical setting of the site, history of the site, proposed redevelopment approach, and purpose of the report.
- Section 2.0 - Summary of Previous Activities - discusses previous investigations and interim actions at the site since the 2009 AAR. The reader is referred to the 2009 AAR for a complete description of activities prior to its preparation.
- Section 3.0 - Summary of Remedial Investigation - presents highlights of the nature and extent of contamination and physical characteristics of the Site as determined during the RI field program.

The reader is referred to the 2009 AAR for a complete description of activities prior to its preparation.

- Section 4.0 - Remedial Action Objectives - presents the Remedial Action Objectives (RAOs) and General Response Actions which apply to contamination at the Site and identifies the extent of contamination to be addressed through remedial action.
- Section 5.0 - Identification and Screening of Technologies - identifies and screens remediation technologies to address the enhancement to the proposed change of use at the Site. The complete screening process is presented in MACTEC 2009.
- Section 6.0 - Development and Screening of Alternatives - presents the development and screening of enhancements to the remedial alternatives for each of the media requiring remediation at the Site.
- Section 7.0 - Detailed Analysis of Alternatives - presents the detailed analyses of remedial action alternatives for the Site. The detailed analysis is intended to provide decision-makers with the relevant information with which to aid in selection of a site remedy.
- Section 8.0 - Comparative Analysis of Alternatives - evaluates the relative performance of each remedial alternative using the same criteria by which the detailed analysis of each alternative was conducted. The purpose of the comparative analysis is to identify the advantages and disadvantages of each alternative relative to one another to aid in selecting a remedy for the Site.
- Section 9.0 - Remedial Work Plan - provides the recommended alternatives for Site remediation and the rationale for selection of the preferred alternative.
- Section 10.0 - Project Schedule - presents the anticipated schedule for remedy implementation and redevelopment.
- Section 11.0 - References - presents a list of references used in the preparation of this Report.

2 SUMMARY OF PREVIOUS ACTIVITIES

The following draws from the previous reports, and the reader is referred to the RI (Golder 1997) and the AAR (MACTEC 2009) for more detailed analysis of conditions that existed prior to the remedial program. Since 1984, various environmental investigations, closure of RCRA—regulated units, implementation of interim corrective measures, completion of the BCP requirements, selective demolition, and monitoring have been completed at the Site. The following sections discuss these previous activities as they relate to Area C and the proposed reuse.

2.1 HISTORICAL INVESTIGATIONS AND ACTIONS

The historical investigations and actions were triggered by events in Area E. The following chronology includes actions in areas other than Area C, but only the activities in Area C are utilized in the supplemental AAR.

2.1.1 1995

The NYSDEC issued a RCRA Part 373 Post Closure Permit. The permit required the completion of a RCRA Facility Investigation (RFI) for the entire site. No investigation was required for the then-current 90-day hazardous waste storage area since no releases had been documented for that area. The permit was the trigger to require investigation of Area C.

2.1.2 RCRA FACILITY INVESTIGATION

A RCRA Facility Investigation (RFI) was completed in 1996-1997 and the RFI report was issued by Golder Associates (Golder) in 1997. In December 1998, an RFI addendum was issued by Golder Associates to document two supplemental investigations that addressed NYSDEC-identified data gaps. A total of 36 monitoring wells and 13 piezometers were installed during the RFI process. Approximately 160 soil samples were collected during the RFI process for field screening or laboratory testing. The RFI report (including subsequent addendums) was approved by NYSDEC via letter dated March 19, 1999.

2.1.3 INTERIM CORRECTIVE MEASURES

In January of 2000, Golder issued a Corrective Measures Study (CMS) report that specified a proposed scope for the interim remedy at the Site, including the use of a groundwater extraction system at Area A. The CMS was approved by the NYSDEC in July 2000. On August 5, 2003, Conestoga Rovers Associates (CRA) issued a work plan titled "Proposed Scope of Work/Work Plan for Interim Corrective Measure, Buffalo Color Area ABCE, Buffalo, New York". The plan was approved in a letter from the NYSDEC dated January 9, 2004.

Due to Buffalo Color's financial condition, Honeywell negotiated with the NYSDEC to implement the ICM. An Order on Consent with an effective date of April 4, 2005 was entered between Honeywell and the NYSDEC for implementation of the ICM. The specified ICM scope of work included the following tasks, which were included, among others in other Areas, in the approved Site remedy set forth in the CMS:

1. *Area BCE Groundwater Control (passive control via existing sewer network);*
2. *Institutional Controls;*
3. *Groundwater Monitoring;*

3 REMEDIAL INVESTIGATION RESULTS

In 2007, MACTEC completed a Remedial Investigation (RI) for the Site; the RI Report was issued on September 28, 2007. Comments regarding the RI Report were issued by NYSDEC. The final RI report was issued to NYSDEC under separate cover. The RI activities were completed in accordance with the approved RI/FS Scope of Work (SOW) and the existing Order. The RI was designed to incorporate the findings of prior studies, including the RFI conducted in the late 1990s by Golder. The following subsections summarize the information presented in the RI report as they relate to Area C.

3.1 RI METHODS

The following subsections summarize the methods used to complete the initial RI scope of work, a Supplemental Investigation, and a soil Background Study.

3.1.1 INITIAL RI SCOPE OF WORK

The initial scope of work for the RI involved the following tasks:

- Installation of 92 soil borings and 4 test pits at locations across Site and the laboratory analyses of 174 soil samples to characterize Site soils.
- Groundwater monitoring and laboratory analyses of groundwater samples collected from wells and piezometers located across the multi-Area site.
- Collection and laboratory analyses of solid material present within the plant sanitary and storm sewers.

3.1.2 SUPPLEMENTAL INVESTIGATION SCOPE OF WORK

Based on the results of the initial RI work, a Supplemental Investigation (SI) Work Plan was prepared by MACTEC and approved by NYSDEC. The SI scope of work included the following tasks:

- Collection of soil samples from RI soil sample points that contained the highest reported total chromium concentrations to speciate between trivalent and hexavalent chromium concentrations.
- Completion of Membrane Interface Probing (MIP) at locations on Areas C (among other areas, Figure AAR-002) where part per million concentrations of chlorobenzene were found in Site groundwater to further evaluate the horizontal and vertical extent of volatile constituents at each location.

3.1.3 BACKGROUND SOIL STUDY

A Background Study was completed to determine if the concentrations of arsenic and PAHs detected in most of the RI site surface soil samples are consistent with local background levels. MACTEC collected 15 soil samples from off-site background locations along public rights-of-way and City-owned properties (sidewalk areas, utility easements, etc.) in the Vicinity of the Buffalo Color site. The background soil samples were analyzed for PAHs via EPA Method 8270C and arsenic via the EPA Method 6010 series. Soil remediation levels for the Site are set forth in 6 NYCRR Part 375 Soil Cleanup Objectives.

3.2 R1 RESULTS SUMMARY AND CONTAMINANT EVALUATION

The data obtained during the RI, as well as data obtained from previous investigations and studies, were used to identify the areas with Site-related contamination above the 6 NYCRR Part 375 Soil Cleanup Objectives (SCOs) and the New York Class GA standards (6 NYCRR Part 703) for groundwater. The Commercial and Protection of Groundwater SCOs were chosen for direct comparison because they are the most relevant from a risk evaluation standpoint and are appropriate for the planned restricted use scenario for the Site. Figures 1 through 19 of the AAR (MACTEC 2009) illustrate key site feature and RI data.

3.2.1 SURFACE SOIL

The majority of RI surface soil[1] samples (i.e., samples collected from the upper two inches of soil, in many cases immediately below surface pavement) were found to contain concentrations of arsenic and PAHs that exceeded the Commercial and Protection of Groundwater SCOs. It should be noted that most of these samples did not exceed the calculated Site-specific background values for arsenic and PAHs, even though the background values will not be used as SCOs for the Site. Other metals, such as mercury and lead, were found in certain surface soil samples at concentrations that exceeded the SCOs. No VOCs were identified in any RI unsaturated soil sample at levels that exceeded the Commercial SCOs. A limited number of surface samples (two on Area C) were found to contain certain VOCs above the Protection of Groundwater SCOs.

3.2.2 SUBSURFACE SOIL

Many of the RI subsurface soil samples (i.e., samples collected below a depth of two inches and above the first saturated interval) were found to contain concentrations of arsenic and PAHs that exceeded the Commercial and Protection of Groundwater SCOs. These results are consistent with the prior soil sampling results. Similar to the surface soil samples, many of these samples did not exceed the calculated Site-specific background values for arsenic and PAHs. Other metals, such as mercury and lead, were found in certain soil samples at concentrations that exceeded the SCOs. Although RI soil samples at various locations contained concentrations of PAHs and metals/inorganic compounds at concentrations that exceeded the Protection of Groundwater SCOs and have likely been present in soil for decades, these substances were not found at elevated concentrations in Site groundwater and therefore are not known or likely potential sources of groundwater contamination.

As described in the RI report, source areas were not identified on Area C based on the comparison of the presence of elevated concentrations of organic substances in soil samples that are also present in the Site groundwater.

3.2.3 SITE GROUNDWATER - SHALLOW AQUIFER

On Area C, the RI groundwater sample collected from well RFI-20 contained an elevated concentration of chlorobenzene (7.7 mg/L) and lesser concentrations of other VOCs at levels that exceeded the Class GA standards (Figure 16 of MACTEC 2009). The groundwater sample collected from well RFI-31, which is downgradient from RFI-20, contained lower concentrations of a similar suite of VOCs.

The RI soil sampling and MIP survey did not identify any existing on-site soil concentrations that would be representative of a source those VOCs at Area C.

3.2.4 SITE GROUNDWATER - CONFINED AQUIFER

VOCs were not detected at concentrations above the Class GA standards in any confined aquifer groundwater samples (Figure 17 of MACTEC 2009). This included the samples collected from wells RFI-21D and RFI-16, which are located at or downgradient of locations where significant concentrations of chlorobenzene and other VOCs were identified in samples from the shallow aquifer. This supports the findings of the prior RFI study and indicates that the glaciolacustrine clay unit found throughout the site is an effective aquitard limiting migration. Only very low (part per billion) concentrations of aniline, nitrobenzene and naphthalene were reported in several of the confined aquifer samples above the Class GA standards. The effectiveness of the aquitard is reinforced by the fact that this facility had been in operation

[1] In this section surface soils refer to those soils at the surface before the remedial action. None of these soils are surface soils today.

for well over 100 years and absent effective isolation of the aquitard, there would have been significant concentrations in these units.

The transport mechanism that allowed low concentrations of these site related constituents to reach the confined aquifer is not clear but may have occurred due to historic localized conditions (such as old building foundations) that breached the aquitard and allowed limited vertical migration to occur. However, the remedial action selected for the Site addressed concerns regarding potential future vertical contaminant migration from existing areas of contamination in the shallow units. Concentrations of iron, sodium, and magnesium were also reported in one or more confined aquifer groundwater samples at concentrations that exceeded the Class GA standards; however, the available evidence suggests that the presence of these constituents is due to the condition of the regional aquifer, not Site activities.

3.2.5 INDOOR AIR

As described in the RI report, no substances for which the NYSDOH has established indoor air guidelines were identified in the sub-slab soil vapor samples collected from the 100 Lee Street office building.

Benchmark conducted a soil vapor investigation in 2017. As detailed in their Report (Appendix C):

"INVESTIGATION FINDINGS

Based on a review of the analytical results and comparisons to the presented criteria, the

following observations are apparent:

- Table 1: Of the seven NYSDOH cVOCs, the following were detected:
  - 1,1,1-Trichloroethene (1,1,1-TCE) at SSV-4, -5, -6, and -10;
  - Carbon tetrachloride at SSV-6, IA-1, -2, -3, -4, -5, and OA-1, and -2;
  - Tetrachloroethene (PCE) at SSV-4, -5, -6, -7, and -10; and,
  - Trichloroethene (TCE) at OA-1.
- Table 1: Additional petroleum-based constituents were detected at low concentrations in sub slab, indoor, and/or outdoor air.
- Table 1: Freon 11 and Freon 12 were detected at low concentrations in each sub slab, indoor air, and outdoor air sample.
- Table 2: Although four of the seven NYSDOH cVOCs were detected, a comparison using the respective NYSDOH Matrices (1 or 2, as presented in Attachment 5) of each co-located sub slab, indoor air, and outdoor air sample indicate these detections are each characterized as requiring No Further Action (NFA).
- Table 3: VOC concentrations for each indoor air sample were below the NYSDOH guidance criteria for all analyzed compounds except chlorobenzene, which was detected in indoor air sample IA-1 at a concentration slightly above the guidance criteria (0.74 vs. <0.25 ug/m3, respectively). Even though chlorobenzene was also detected in the co-located sub slab vapor samples associated with indoor air sample IA-1 (SSV-1, SSV-2, and SSV-3), the detected concentration was well below the DAR-1 AGC, ACGIH TLV, and OSHA PEL values. Chlorobenzene was not detected in any other sub slab vapor nor indoor air sample."

CONCLUSIONS/RECOMMENDATIONS

Based on the results of the 2017 SVI investigation at the Site, Benchmark TurnKey offered the following conclusions/recommendations:

- The building inventory did not identify any observable chemicals being stored, however one large steam driven ammonia pump was identified. The status and/or presence of petroleum- and/or refrigerant-based fluids remaining within this pump is not known.
- Numerous VOCs were detected in sub slab, indoor air, and outdoor air samples collected for this assessment.
- Several petroleum-based VOCs, typical of urban industrial sites, were detected at low concentrations and may be associated with historic site operations.
- Freon 11 and Freon 12, commonly used refrigerant-based VOCs prior to 1996, were detected at low concentrations in each sample collected; possible remnants of historic refrigeration activities performed in the Icehouse Building (#223). According to the researched literature, if Freon compounds are spilled onto soil, only a portion will evaporate while the remainder will potentially leach downward into groundwater due to its inability to adsorb onto soil. Fully halogenated hydrocarbons such as Freons 11and 12 are very resistant to chemical and biological degradation and are likely to be persistent contaminants if they reach groundwater.
- A comparison of the SVI data to the NYSDOH Matrices indicate NFA for the seven regulated cVOCs.
- Chlorobenzene at indoor air location IA-1 was the only compound reported at a concentration slightly above the NYSDOH guidance criteria. Although chlorobenzene was also detected in the sub slab samples associated with this indoor air location, it was reported at a concentration well below the DAR-1 ACG, ACGIH TLV, and OSHA PEL values.
- Water observed within historic basement areas should be removed and these voids completely filled-in to prevent an obvious potential physical hazard as well as a possible soil vapor pathway (i.e., groundwater to soil vapor).
- It is TurnKey's opinion that based on this assessment, no air quality concerns related to the seven NYSDOH-regulated cVOCs were identified within the Site buildings tested that would require additional action. However, petroleum- and refrigerant-based VOCs were detected in sub slab vapor, indoor air, and outdoor air samples at concentrations that are considered remnants of the industrial past of the Site. Consequently, and at a minimum, installation of a vapor barrier and passive sub slab depressurization system beneath ground level flooring is recommended.

Although Turnkey opined "…at a minimum, installation of a vapor barrier and passive sub slab depressurization system beneath ground level flooring is recommended", SBD recognizes that the test conditions did not represent the proposed conditions as they will be occupied and that an active sub slab vapor mitigation (depressurization) system is appropriate for this Site.

3.2.6 SITE SEWERS AND OUTFALLS

Various substances were detected in the solids samples collected from the Site process sewers (which discharge to the BSA system) and storm sewers (which discharge to the Buffalo River via Outfalls 006 and 011). Detected substances included various metals, VOCs and SVOCs. As expected, concentrations were lower in the solids samples collected from storm sewers (SED-A01 and SED-B01) than concentrations of substances reported in samples collected from the process sewer lines (SED—A02, SED-C01, SED—C03, SED-E01, and SED—E02). As requested by NYSDEC, RI Table 9 (Golder 1996) has been modified from the version provided in the previous RI report to compare (for informational purposes) the sewer sediment results to the Protection of Ecological Resources SCOs. As shown on the revised RI Table 9 (Golder 1996), the results for various constituents in the storm sewer sediment samples, primarily metals, exceeded the Ecological SCOs. The storm sewer system was remediated to address the potential discharge of existing impacted sewer sediment to the Buffalo River.

Various substances were identified in the effluent samples collected from Outfalls 006 and 011. These substances included chlorobenzene and dichlorobenzenes, aniline, and other VOCs/SVOCs. In general, higher concentrations of VOCs and SVOCs were identified in the Outfall 006 sample as compared to the Outfall 011 sample. The presence of these substances in the effluent samples indicates that groundwater is likely infiltrating the storm sewer lines where the lines are below the water table.

3.2.7 TENTATIVELY IDENTIFIED COMPOUNDS (TICS)

As specified in the RI/FS Work Plan, identification of TICs for VOCs and SVOCs was included in the RI sample analytical program (Golder 1996). TIC results are included on the tables and laboratory data validation reports provided in the RI Report. MACTEC has reviewed the TIC results and determined that they are consistent with the concentrations and types of contaminants identified in the Target Compound List analytes selected for the soil and groundwater samples (i.e., soil and groundwater samples with elevated levels of VOCs and SVOCs also contained corresponding levels of TICs) and/or samples with elevated organic TICs are included in the source areas identified on Areas A and E. As such, no remedial action associated with TICs was or is required on Area C.

3.2.8 CONCEPTUAL SITE MODEL

Using the data obtained during the RI, MACTEC developed a Conceptual Site Model (CSM), provided as Figure 19 (MACTEC 2009). The following complete or potentially complete exposure pathways may have existed prior to the BCP response actions with respect to the anticipated future land use of the Site for certain Site contaminants and have been addressed in this AAR:

- SOIL: direct-contact exposure to contaminated soils via dermal contact, ingestion and inhalation of particulates; potential receptors include residents, construction workers, site workers, trespassers, and terrestrial biota.
- AIR: Inhalation of vapors due to volatilization of organic substances from contaminated soil or groundwater; potential receptors include residents, construction workers, site workers, trespassers, and terrestrial biota.
- GROUNDWATER: Exposure to contaminated groundwater via ingestion or dermal contact; potential receptors include construction workers (inhalation and dermal contact) and site workers, trespassers and terrestrial biota (inhalation only). There are no onsite potable water wells that would create a pathway for residential exposure.

3.3 CONCLUSIONS AND RECOMMENDATIONS

The data obtained during completion of the RI, and data from the previous RFI and other investigations were used to develop the following conclusions and recommendations regarding the Site in the context of anticipated future land use:

- FUTURE LAND USE SCENARIOS AND REMEDY SELECTION: As described in Section 1.0, the proposed redevelopment will involve some combination of commercial, restricted residential and green space uses which will utilize engineering controls, amended/new environmental easements and/or deed restrictions.
- SOIL (SOURCES OF GROUNDWATER CONTAMINATION): Based on proximity to shallow groundwater that contains similar contaminants, no likely sources of soil to shallow aquifer impact have been identified above the first zone of saturation in Area C.
- SOIL (DIRECT CONTACT PATHWAY): Metals (primarily arsenic and to a lesser extent mercury) and PAHs were found across the site in both surface and subsurface soil at concentrations that exceed the Commercial SCOs. For the direct contact pathway, surface soil samples are

considered the most relevant data points. The background study completed by MACTEC suggests that the majority of the RI soil samples contained arsenic and PAHs at concentrations that are within the calculated Site-specific background standards. The data also suggests that the locations with concentrations of arsenic and PAHs within background levels are not sources of groundwater contamination. SBD will not use the background values for these substances as SCOs but rather will utilize the Commercial SCOs for protection of the direct contact pathway. The majority of the site (roughly 30%) is currently covered by pavement or buildings (which have concrete floor slabs), as shown on Figures AAR-002 and AAR-003. Remedial options to be evaluated in this AAR to address the soil direct contact pathway (which includes dermal contact and inhalation of particulates) include utilizing the presence of new and/or existing pavement and buildings and identifying covered areas that, in the context of planned future land use at the Site, require additional remedial action. Options to address unpaved or areas where the cover over surface soil concentrations exceeding the Commercial SCOs is only one foot thick include use of NYSDEC presumptive remedies such as removal, capping with two feet of clean soil (an additional one foot), or placement of new facilities (stormwater basin, utilities, and vapor mitigation) or paving. Using the Commercial SCOs as cleanup objectives as shown on Figure 20 (MACTEC 2009), approximately 4 acres of presently commercially capped (one-foot cover) formerly exposed soil exceed the Commercial SCOs and require further consideration under a Commercial/Restricted residential use scenario. Management of soils at depth, which may be encountered during future construction or property redevelopment activities, will be accomplished via use of soil management procedures and environmental easements and/or deed restrictions, as specified in the NYSDEC-approved Site Management Plan.

- SHALLOW AQUIFER: Groundwater is not used or planned for use at the Site or in the vicinity of the Site for drinking purposes. Thus, there is no current human exposure pathway associated with the presence of metals and inorganic compounds in the shallow aquifer at levels that exceed the Class GA standards (which are based on a potable use scenario). Shallow groundwater on Area C flows toward the Buffalo River. However, the RI data indicate the chlorobenzene plumes on Area C has not migrated beyond the property boundaries. This AAR focuses on identification of remedies for the shallow groundwater impacted by chlorobenzene and other organic contaminants at the following location:
    - On the northwestern comer of Area C (at well RFI-20 and extending downgradient toward well RFI-31), where concentrations of chlorobenzene at part per million concentrations were identified prior to treatment. The current data demonstrate that the concentrations of chlorobenzene have been dramatically reduced to 15 to 180 parts per billion (micrograms per liter [ug/L]). Additional monitoring and limited enhanced bioremediation is prudent.
- DEEP GROUNDWATER (CONFINED AQUIFER): As described in the RI Report (Golder 1996), only metals/inorganic compounds and part per billion concentrations of SVOCs were identified sporadically in the groundwater samples collected from the wells screened within the confined aquifer. Chlorobenzene, which in its pure state is heavier than water, was not identified in any of the confined aquifer groundwater samples at concentrations that exceeded the Class GA standards, indicating that the glacial clay unit is an effective aquitard. As with the shallow aquifer, groundwater within the confined aquifer is not used for potable purposes, and no such use is known or planned for the Site or properties in the Vicinity. It is expected that the discharge point for the confined aquifer is likely downgradient along the Buffalo River valley to Lake Erie based on surface water elevations and the southwesterly flow direction of the confined aquifer, which mimics the flow direction of the Buffalo River drainage basin. Based on the types and concentrations of contaminants identified within the confined aquifer groundwater samples collected from the Site,

there is no potential for adverse impact to the Buffalo River or Lake Erie. Thus, it is concluded that (i) institutional controls/environmental easements must be maintained to preclude on-site use of the confined aquifer; and (ii) there is no need for further study or active remediation of the confined aquifer.

- SITE SEWERS AND STORMWATER OUTFALLS: The Site process sewers were connected to the nearby BSA sewer lines. There are no current processes discharging to or from the sewer system. The RI sampling identified the presence of residual contaminants in solids within the facility process sewers (including sediments or sludges). The RI sampling data, along with the fact that sewer invert elevations along Outfalls 006 and 011 are below the water table, suggest that shallow groundwater may have infiltrated portions of facility storm sewers and discharge to the Buffalo River via the outfalls, especially at Outfall 006. However, the mass of contaminants discharged to the river via groundwater infiltration is negligible given the concentrations identified in the effluent and estimated typical groundwater flow rate of 20,000 to 40,000 gallons per day per outfall (based on BCC SPDES monthly reports issued when the plant was no longer operating and thus when no non-contact cooling water was discharging to the outfalls). Even though the discharge may be negligible, the 2009 AAR identified remedial activities associated with plugging or rehabilitating the Site underground sewer system, and that work on Area C was completed. No additional work or analysis associated with the sewer system is required. As part of the redevelopment, additional onsite stormwater sewers will be installed and a detention basin will be constructed to reduce the burden on the municipal system.
- INDOOR AIR: As noted in Section 3.2.5, sampling was conducted at the 140 Lee Street building. This additional sampling was consistent with NYSDOH guidance (to the extent possible with the building in its current condition) and was completed for the change of use determination. The indoor air pathway will be addressed during construction of any future occupied structures on the Site. This requirement shall be addressed by implementation of engineering controls (vapor mitigation and sealing), environmental easements and deed restrictions.

4 REMEDIAL ACTION OBJECTIVES

The remedial action objectives (RAOs) form the basis for identifying remedial technologies and developing remedial alternatives in this supplemental AAR. The RAOs have been developed with an understanding of the issues to be considered in remedy development and selection set forth in Section 4 of the Guide. This section identifies RAOs for site surface soil, subsurface soil, and groundwater. This Section also presents general response actions to address the RAOs and the extent of soil and groundwater contamination requiring remedial action.

As set forth in the Guide, Site-specific remedial objectives were developed with consideration for the frequency of contaminant detection; the chemical and toxicological properties of the Contaminants of Concern (COCs); existing or potential exposure pathways; the present and reasonably anticipated future Site land use; and existing wildlife, their habitats, and other natural resources.

4.1 IDENTIFICATION OF REMEDIAL ACTION OBJECTIVES AND REMEDIATION GOALS

Site-specific COCs were determined by comparison of contaminant concentrations to the potentially applicable standards, criteria, and guidance (SCGs) and to the current and future land use proposed under SBD's revised redevelopment scenario. The SCGs to be used for the Site consider both the identified COCs and the potential exposure pathways and receptors. The SCGs applicable to the Site and which will be used as the remediation goals for the project are as follows:

- Soil: Restricted Residential and Protection of Groundwater SCOs, as set forth in the relevant portions of 6 NYCRR Part 375 4 Environmental Remediation Programs. This includes the NYSDEC-calculated Soil Cleanup Objectives (SCOs) for aniline and nitrobenzene (per NYSDEC's letter to Honeywell dated December 28, 2007).
- Groundwater: Plume containment and, ultimately, a goal of attaining the NY Class GA standards, as set forth in 6 NYCRR Part 703 7 Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations (NYSDEC, 1999).

4.1.1 REMEDIAL ACTION OBJECTIVES FOR SURFACE SOIL

As described in the RI report, the majority of RI surface soil samples were found to contain concentrations of arsenic and PAHs that exceed the Restricted residential, Commercial, Industrial, and Protection of Groundwater SCOs. However, most of these samples do not exceed the calculated Site specific background values for arsenic and PAHs. Other metals, including mercury and lead, were detected at concentrations in surface soil samples at concentrations that exceed the SCOs. VOCs were detected in surface samples from Area C at concentrations above the Protection of Groundwater SCOs. The Conceptual Site Model (Figure 19 of MACTEC 2006) identified direct-contact (i.e., dermal contact, ingestion or inhalation of vapors) with surface soil (as it was exposed on 2009) as a potentially complete exposure pathway for residents, construction workers, Site workers, trespassers, and terrestrial biota in the context of reasonably anticipated future land use at the Site. Similarly, the Conceptual Site Model identified inhalation of particulates due to dispersion of contaminants as a potential exposure pathway for receptors including residents, construction workers, site workers, trespassers, and terrestrial biota. Therefore, the following RAOs were identified for the Site surface soils:

- Protect potential future residents, current and future construction workers, on-site workers, trespassers, and terrestrial biota at the Site from unacceptable risk resulting from direct-contact (via dermal contact or ingestion) with Site surface soils containing contaminants at concentrations exceeding the Site-specific background, or Commercial or Industrial SCOs, as applicable.

- Reduce the potential leaching of contaminants from Site surface soils at concentrations exceeding the Protection of Groundwater SCOs.
- Prevent potential inhalation by future residents, current or future construction workers, site workers, and trespassers, as well as terrestrial biota, of particulates due to dispersion of contaminants in Site surface soils exceeding Site-specific background or the Commercial or Industrial SCOs, as applicable.
- Reduce the potential for overland transport of contaminated soil via erosion and stormwater runoff.

4.1.2 REMEDIAL ACTION OBJECTIVE FOR SUBSURFACE SOIL

The results of the RI (Golder 1996) indicated that samples of vadose zone subsurface soils at the Site contained concentrations of arsenic and PAHs that exceed the Commercial, Industrial, and Protection of Groundwater SCOs. However, similar to the surface soils, most of the associated sampling locations do not exceed the calculated Site-specific background values for arsenic and PAHs. Other metals, such as mercury and lead, were found in certain soil samples at concentrations that exceed the SCOs.

The Conceptual Site Model (Figure 19 of MACTEC 2006) identified direct-contact (via dermal contact or ingestion) with subsurface soil as a potentially complete exposure pathway for residents, construction workers, Site workers, trespassers, and terrestrial biota in the context of then reasonably anticipated future land use at the Site. The same exposure pathways apply to the currently anticipated commercial/restricted residential use. Similarly, the Conceptual Site Model (MACTEC 2006) identifies inhalation of particulates or vapors due to volatilization or dispersion of contaminants as a potential exposure pathway for receptors including residents, construction workers, site workers, occupants, trespassers, and terrestrial biota. Therefore, the following RAOs were identified for the Site subsurface soils:

- Protect potential future residents, current and future construction workers, site workers, occupants, trespassers, and terrestrial biota at the Site from unacceptable risk resulting from direct-contact (via dermal contact, ingestion, or inhalation of vapors) with Site subsurface soils containing contaminants at concentrations exceeding the Commercial SCOs, as applicable.
- Prevent potential inhalation by future residents, current or future construction workers to particulates due to dispersion of contaminants in Site subsurface soils at concentrations exceeding the Commercial SCOs, as applicable.

4.1.3 REMEDIAL ACTION OBJECTIVES FOR GROUNDWATER

Groundwater is not used or planned for use at the Site or in the vicinity of the Site for drinking purposes. Therefore, no existing or reasonably anticipated future ingestion pathway is complete for groundwater in the shallow aquifer at levels that exceed the Class GA standards (which are based on a potable use scenario).

However, the shallow aquifer is impacted by chlorobenzene and other organic contaminants at the following location which will be addressed via remedial action:

- The northwestern comer of Area C (at well RFI-20 and extending downgradient toward well RFI-31), where elevated (up to 7.7 mg/L) concentrations of chlorobenzene were identified during the RI. The concentrations of chlorobenzene in samples from those same wells have been reduced to 15- to 180 ug/L (February 2018 sampling event).

Therefore, the following RAOs were identified for the Site groundwater:

- Protect residents, construction workers, Site workers, visitors, occupants, and terrestrial biota from inhalation of vapors associated with contaminants in the shallow aquifer exceeding the Class GA standards.
- Protect residents, construction workers, Site workers, occupants, and visitors from dermal contact with contaminants in the shallow aquifer exceeding the Class GA standards.

4.2 IDENTIFICATION OF GENERAL RESPONSE ACTIONS AND EXTENT OF CONTAMINATION REQUIRING REMEDIAL ACTION

General response actions include treatment, containment, excavation, disposal, environmental easements, institutional controls. General response actions are medium-specific. Consistent with the issues to be considered in remedy development and selection set forth in the Guide, the general response actions presented in the following subsections include those media identified as potential threats to public health and the environment.

Consistent with reasonably anticipated future land use at the Site, Site-specific RAOs have been developed to address contamination requiring remedial action in surface and subsurface soils, and shallow aquifer groundwater. The following subsections present a discussion of potential general response actions.

4.2.1 GENERAL RESPONSE ACTIONS FOR SOIL

The following general response actions are appropriate and were considered in the 2009 AAR for Site-specific soil contamination requiring remediation:

- No Action (leave the current 1-foot soil cover)
- Access Restrictions
- Containment (Increased cover/new development)
- In-situ Treatment
- Removal/Disposal On-Site or Off-Site
- Ex-situ Treatment

4.2.2 GENERAL RESPONSE ACTIONS FOR GROUNDWATER

These following general response actions are appropriate for site-specific groundwater contamination requiring remediation:

- No Action
- Access Restrictions
- Containment
- Collection
- In-situ Treatment
- On-Site Ex-situ Treatment
- Off-Site Treatment

4.3 EXTENT OF CONTAMINATION REQUIRING REMEDIATION

This subsection identifies, in concept, the extent of impacted media to which the RAOs and general response actions identified above, and the remedial alternatives developed in Sections 5.0 and 6.0 of the 2009 AAR apply. As outlined in Section 1.0, SBD has identified a preliminary conceptual development for the site that involves a mixture of both commercial and limited restricted residential uses.

For comparison purposes, Figures 12 through 15 (MACTEC 2006) identify the locations of surface soil concentrations exceeding Commercial SCOs, subsurface soil concentrations exceeding Commercial and restricted residential SCOs. Figure 20 identifies areas that are currently not covered by pavement or structural slabs but have been protected with a 1-foot soil cover, that will need to be addressed to meet the restricted residential use standards. The extent of soil contamination above Unrestricted Residential SCOs extends generally throughout the Site. Figure 16 identifies the distribution of groundwater concentrations in the Shallow Aquifer exceeding the NYS Class GA groundwater standards and shows the locations of greatest chlorobenzene and aniline impact.

5 IDENTIFICATION AND SCREENING OF TECHNOLOGIES

This section identifies and screens potential remedial technologies. Technologies are identified for the purpose of attaining the remedial action objectives established in Subsection 4.1. Identified technologies correspond to the categories of general response actions described in Subsection 4.2.

Following identification, candidate technologies were screened by MACTEC based on their applicability to site- and contaminant-limiting characteristics as well as the issues to be considered in remedy development and selection set forth in Section 4.3 of the Guide. The purpose of the screening was to produce an inventory of suitable technologies that can be assembled into remedial alternatives capable of mitigating actual or potential risks at the Site. Potential technologies representing a range of general response actions (i.e., no action, limited action, containment, removal, treatment, and disposal) were considered. The result of technology screening was a list of potential remedial technologies that may have been developed into candidate remedial alternatives for proposed reuse scenarios and Site soil and groundwater conditions as they were understood in 2006. This supplemental AAR builds on the recommendations and approvals reached in 2006 to improve the remedial actions for limited restricted residential use.

5.1 TECHNOLOGY IDENTIFICATION

Categories of remedial technologies and specific process options were identified based on a review of literature, vendor information, performance data, and MACTEC'S experience. These sources were used to generate the list of applicable remedial technologies and associated process options identified for each general response action presented in Table 1 (soil) and Table 2 (groundwater), MACTEC 2006. General response actions were developed for soil (surface and subsurface) and shallow aquifer groundwater. Remedial actions for soil and groundwater were developed to meet the RAOs identified in Section 4.0.

5.2 TECHNOLOGY SCREENING

Consistent with section 4.3 of the Guide, the technology screening process reduced the number of potentially applicable technologies and process options by evaluating factors that may influence process-option effectiveness and implementability. Effectiveness and implementability are incorporated into two screening criteria: waste- and Site-limiting characteristics. Waste-limiting characteristics considered the suitability of a technology based on contaminant types, individual compound properties (e. g., volatility, solubility, specific gravity, adsorption potential, and biodegradability), and interactions that may occur between mixtures of compounds. Site-limiting characteristics consider the effect of Site-specific physical features on the implementability of a technology, such as Site topography and geology, the location of buildings and underground utilities, available space, and proximity to sensitive operations.

Tables 1 and 2 (MACTEC 2006) present the technology-screening process for soil and groundwater, respectively. Technologies and process options judged ineffective or not implementable based on the planned Site redevelopment and other factors were eliminated from further consideration. The technologies retained following screening represent an inventory of technologies considered most suitable for remediation of soil and groundwater, respectively, at the Site and may be used alone or integrated with other technologies to develop remedial alternatives.

As shown on MACTEC Tables 1 and 2, remedial alternatives retained for evaluation were:

SOIL

- No Action
- Access Restrictions (Land Use Restrictions, Fencing)
- Containment (Cover System)

- Removal (Mechanical Excavation, Off—Site Disposal)

GROUNDWATER

- No Action
- Institutional Controls (Land Use Restrictions)
- Containment (Cover System, Slurry Wall/Sheet Piling)
- Collection (Extraction Wells w/Monitoring)
- In—Situ Treatment (Enhanced Biodegradation, Oxidation/Reduction)
- On—Site Ex-Situ Treatment (Granular Activated Carbon)
- Off-Site Treatment or Disposal (Discharge to POTW)

6 DEVELOPMENT AND SCREENING OF ALTERNATIVES

The retained technologies identified in MACTEC Tables 1 and 2 were considered (i) consistent with section 4.3 of the Guide; and (ii) technically feasible and applicable to the waste types and physical conditions at the Site. These medium-specific technologies were assembled into potential remedial alternatives capable of achieving the RAOs. Each of the Site-specific remedial alternatives developed have incorporated technologies which address the media requiring remediation at the Site. Surface soil and subsurface soil were addressed in one set of alternatives, referred to as soil alternatives, and are described in Subsection 6.1.

Shallow aquifer impacts are addressed in a second set of alternatives that are described in Subsection 6.2. Due to the limited number of alternatives developed in this Section, all developed alternatives were retained for detailed analysis in Section 7.0. Furthermore, it should be noted that all evaluated remedial alternatives include use of institutional and engineering controls, which will be specified in a Site Management Plan, consistent with the NY BCP Track 4 approach.

6.1 SOIL ALTERNATIVES IDENTIFICATION

The retained technologies were assembled into two soil alternatives that address surface soil and subsurface soil as follows:

- Alternative S-l: No Action
- Alternative S-2: Cover System

All other actions applicable to surface (as it existed in 2006) and subsurface soils were completed.

The alternatives are described in the following subsections.

6.1.1 ALTERNATIVE S-l: NO ACTION

No actions would be conducted as part of this alternative. The adoption of this alternative would retain the engineering and institutional controls as they exist today, but would result in a soil cover of only 1 foot in areas accessible to residents of the building. Alternative S-1 was developed as a baseline against which to compare other remedial alternatives.

6.1.2 ALTERNATIVE S-2 COVER SYSTEM

Alternative S-2 includes the use of soil, pavement and/or existing/new structures (with appropriate soil vapor mitigation measures) as cover to provide protection from direct contact exposure to contaminated surface soils at areas not presently covered by pavement or buildings that exceed the Commercial SCOs. The improved cover, with proper grading, would also further reduce infiltration of precipitation through contaminated soil into groundwater and promote surface drainage. Using the Residential SCOs as cleanup objectives as shown on Figure AAR-003, approximately 3 acres of soil presently covered with one foot of soil that exceeds the Commercial SCOs would be improved to 2 feet (minimum) thickness. Consistent with the redevelopment of the Site, the cover system would be consistent with the presumptive capping remedy as identified in 6 NYCRR Part 375.

To the extent retained, existing paved surfaces and building floor slabs which will be utilized as part of the cover system will be cleaned when necessary, repaired and sealed where soils exceed the cleanup objectives. Within the structure, portions of the slab in contact with soil will be removed, in part, to allow placement of a passive soil vapor mitigation system.

6.2 GROUNDWATER ALTERNATIVES IDENTIFICATION

Groundwater remediation alternatives were developed for Area C. The alternatives were identified based upon the characteristics of the groundwater contamination as described below:

In the northwestern corner of Area C (at well RFI-20, and extending downgradient toward well RFI-31), up to 7.7 mg/L (7,700ug/L) of chlorobenzene had been identified in the shallow aquifer. The samples collected since the in-situ treatment remedial action was completed in 2010[2] included the following concentrations:

Well	Chlorobenzene Concentration Maximum (ug/L)	Chlorobenzene Concentration Minimum (ug/L)	Chlorobenzene Concentration Range 2017 (ug/L)	Chlorobenzene Concentration Q1 2017 2018 (ug/L)
MW-C01	16	<1	<1 (All)	<1
MW-C04	500	<1	140 to 230	180[3]
PS-04A	330	<1	<1 (All)	<1
PS-05A	1,200	92J	110 to 550	180
PS-06	1.6	<1	<1 to <5	<1
RFI-20A	9,600	7	12 to 25	15
RFI-31A	1,100	<10	<10 to 150	2.1

As demonstrated by these results, the in-situ treatment was effective and has reduced the concentrations buy more than one order of magnitude.

On this basis, the following alternatives have been developed for shallow groundwater at Area C:

- Alternative GW-C-1: No Action
- Alternative GW-C-2: Enhanced Bioremediation and Groundwater Monitoring

6.2.3 AREA C ALTERNATIVES

6.2.3.1 Alternative GW-C-1: No Additional Action

No additional actions would be conducted as part of this alternative. Alternative GW-C-1 was developed as a baseline against which to compare other remedial alternatives for Area C. Under this analysis, No Additional Action would assume that the groundwater monitoring has demonstrated that the treatment was successful and no additional monitoring was required.

6.2.3.*2* Alternative GW—C-2: Enhanced Bioremediation and Groundwater Monitoring

Alternative GW-C-2 includes institutional controls in the form of environmental easements and land-use restrictions would continue to be implemented to restrict future Site use, thereby limiting the potential for exposure to Site contaminants. Institutional controls would continue to be implemented to prohibit groundwater use at the Site, and require vapor mitigation measures for structures. The controls have been written, implemented, and enforced in cooperation with the SBD, state, and local governments, Operation and maintenance activities will continue include record and field surveys, if necessary, to verify groundwater is not being used.

[2] A second application of Oxygen Release Compound (ORC) in-situ treatment was completed at RFI-20A in 2014.
[3] No February 2018 sample, this is the Q4 2017 value.

Alternative GW-C-2 is a long-term alternative with a monitored natural attenuation component to it. Therefore, a long-term ground water sampling and analysis program is required. Results of long-term monitoring and evaluation of natural attenuation processes shall continue to be incorporated into Annual Reports prepared for the Site.

The enhanced biodegradation is ongoing, but the rate appears to be diminishing in the groundwater being monitored near three of the wells. To increase dissolved oxygen and increase the rate of degradation, Oxygen Release Compound (ORC) could be introduced in a portion of the base of the detention pond excavation and in four of the monitoring wells. The intent would be a polishing stage to increase dissolved oxygen in areas that are approaching anaerobic conditions. Groundwater monitoring in those wells in which ORC is introduced, no less than four rounds of sampling will be completed after removal of the ORC socks.

7 DETAILED ANALYSIS OF ALTERNATIVES

This section presents the detailed analyses of remedial action alternatives for the proposed commercial/restricted residential redevelopment of the Site. The detailed analysis is intended to provide NYSDEC with the relevant information with which to aid in selection and evaluation of an enhancement to the Site remedy in the context of reasonably anticipated future Site land use that now includes limited restricted residential occupancy. The detailed description of technologies or processes used for each alternative includes, where appropriate, a discussion of limitations, assumptions, and uncertainties for each component. The descriptions provide a conceptual design of each alternative and are intended to support the comparison of alternatives presented in Section 8.0.

The detailed analysis of each alternative includes evaluation using the evaluation criteria outlined in the Guide as well as relevant portions of DER-10 (NYSDEC, 2002). The Remedy Evaluation Criteria set forth in Section 4.7 of the Guide are identified in the following paragraphs.

- Compliance with New York State Standards, Criteria, and Guidance (SCGs). This evaluation explores how the alternative could comply with applicable or relevant and appropriate federal regulations and New York State standards, criteria and guidance (SCGs). The SCGs selected for this projects constituent of concern are referred as chemical-specific SCGs. SCGs which are specific to the location of the Site are referred to as location-specific SCGs, and those specific to the proposed remedial actions are referred to as action-specific SCGs.
- Overall Protection of Public Health and the Environment. This evaluation explores how the alternative protects public health and the environment. This evaluation was based on a composite of factors assessed under other evaluation criteria, especially long- and short-term effectiveness and compliance with SCGs.
- Short-term Impacts and Effectiveness. This is an evaluation of potential impacts on the community, workers, and environment during the construction phase of each alternative until RAOs are met. The evaluation includes consideration of the time required to complete the remedial action.
- Long-term Effectiveness and Permanence. This evaluation is how permanent and potentially reversible each of the alternatives are in protecting public health and the environment after RAOs are met. This includes an evaluation of the permanence of the alternative, the magnitude of residual risk, any risk the remedial alternative could be reversed, and the adequacy and reliability of controls required to manage residuals remaining at the site.
- Reduction of Toxicity, Mobility, and Volume with Treatment. Reduction in toxicity, mobility, or volume of hazardous material through treatment is desirable. The irreversibility of the treatment process and the type and quantity of residuals remaining after treatment are critical to this evaluation.
- Implementability. This addresses the technical and administrative feasibility of implementing the alternative and the availability of required services and materials.
- Cost Effectiveness. Cost effectiveness has been addressed on a qualitative basis, and numerical costs are not presented in this supplemental AAR. The limited number of options available renders all alternatives cost effective.
- Community Acceptance. As noted in Section 1.1, the concepts for the Site described herein include beneficial uses for the public, and it is anticipated that all stakeholders will have opportunity to have input in the final decisions on how best to use the property. The likelihood of community acceptance is high as this is one more step in the renaissance of this area of South Buffalo.
- Land Use. Each remedial alternative was evaluated based on compatibility with the land use under the proposed redevelopment scenario.

7.1 DETAILED EVALUATION OF SOIL ALTERNATIVES

The following soil remedial alternatives were retained in Subsection 6.1:

- Alternative S-l: No Action
- Alternative S-2: Cover System

7.1.1 ALTERNATIVE S-1: NO ACTION

No additional actions would be conducted as part of this alternative. Alternative S-l was developed as a baseline against which to compare other remedial alternatives.

The following paragraphs present an assessment of Alternative S-l based upon the criteria identified previously.

- Compliance with New York State SCGs. The No Action alternative does not include any actions to reduce contaminant concentrations in Site soil to residential criteria and, therefore, would not be in compliance with chemical-specific SCGs for the intended use. Because no action would be implemented this alternative would not trigger location- or action-specific SCGs.
- Overall Protection of Public Health and the Environment. SCGs for protection of public health and the environment were developed for contaminated soil. Alternative S-l would not provide any additional protection of public health and the environment compared to present conditions and would not be suitable for the proposed restricted residential use.
- Short-term Impacts and Effectiveness. No construction activities would be implemented for the No Action Alternative; therefore, no short-term impacts or effects on the community, workers, or the environment would occur.
- Long-term Impacts and Effectiveness. The RAOs would not be met if the No Action Alternative were implemented at the Site. This alternative would not provide long-term effectiveness for the proposed restricted residential use.
- Reduction of Toxicity, Mobility, and Volume. Because no processes would be used to treat waste or contaminated media at the Site, no reduction of toxicity, mobility, or volume of site contaminants would be achieved through treatment. Induced (due to the in-situ treatment) and natural attenuation processes would be expected to continue result in the reduction of the toxicity, mobility, and volume of site contaminants over time.
- Implementability. Although no services or materials would be required to implement the No Action Alternative, obtaining regulatory agency approval for restricted residential use under the No Action Alternative is highly unlikely.
- Cost Effectiveness. There is no additional cost associated with the No Action alternative. Therefore, the cost category is “Low”.
- Community Acceptance. The community has accepted the current remedial action at the Site and likely would not object to the site staying in its current or proposed state.
- Land Use. The No Action alternative is not compatible with the proposed land use because it would not protect residents from inadvertent exposure to contaminants present in Site soil.

7.1.2 ALTERNATIVE S-2 COVER SYSTEM

The major components of Alternative S-2 are the following:

- Site preparation/mobilization;
- Construction of a thicker cover system;
- Institutional controls; and
- Long-term cover inspection and maintenance.

Pre-Design Investigations. Pre-design investigations would be conducted to provide Site-specific data for final design of the remedial action. The pre-design investigations would focus on the ability to increase the thickness of the soil cover without impairing the stormwater management and continuity of cover systems (pavement to soil) at the Site.

Site Preparation and Mobilization. Site preparation and mobilization would include activities required to prepare the site for construction such as delivery and setup of site trailers, temporary utilities, and grading and relocation of on-Site soil consistent with the proposed redevelopment of the Site. Layout of the current cover system would be surveyed during this period.

Construction of an Enhanced Cover System. Alternative S-2 includes a minimum two-foot thick cover system, designed in accordance with sound engineering design practices, over specific areas that would be integrated with the redevelopment of the Site. The primary objective of the cover system is to provide protection from direct contact exposure to contaminated soils. The cover would also promote surface drainage and reduce infiltration of precipitation through contaminated soil into groundwater. The estimated extent of area that would require placement of additional cover to achieve the RAOs is approximately 4 acres under a Restricted Residential Scenario (Figure AAR-003 and Appendix D).

The cover system would be composed of a minimum of two feet of clean soil (with an existing demarcation layer), buildings and structures, the lining in the dry detention basin, and/or pavement, as required under 6 NYCRR Part 375 and the Guide. The construction of the cover would include removal of the existing topsoil, placement of an additional foot of unclassified fill, and replacement and revegetation of the topsoil. Limited excavation of underlying potentially impacted soils may be required along areas that border existing pavement and sidewalks, and for utilities. Significant excavation of potentially impacted soils will be required for the detention basin cavity and liner.

Specifications for pavement design would be based on Site-specific redevelopment plans and would depend on surface loading and traffic rating. Existing and new structures would include soil vapor mitigation measures. The soil vapor mitigation may require removal of some slab systems in the existing structures, placement of collection media, placement of low-permeability materials (liners or coatings) and venting to the exterior of the buildings.

Additional storm water drainage structures and piping are required to control stormwater runoff; these would be incorporated into the final redevelopment plans selected for the Site (Appendix D, Sheet C-300).

Institutional Controls. Because soil contaminants above Commercial SCOs would remain on-Site, institutional controls will continue to be implemented to prevent exposure. Land-use restrictions prohibit or control subsurface activity in the area of contamination and require compliance with the Site Management Plan. Land-use restrictions have been implemented through legal instruments including as deed restrictions and environmental easements (which will be amended to address the restricted residential uses).

Long-Term Inspection and Maintenance. Long-term inspection and maintenance of the cover system, including areas of new cover (Figure AAR-003) and areas of existing pavement and building floor slabs, will continue to be conducted to identify and correct any degradation of the cover over time that may reduce its effectiveness.

The following paragraphs present an assessment of Alternative S-2 based upon the criteria identified previously.

- Compliance with New York State SCGs. Alternative S-2 includes additional removal of soil potentially with contaminant concentrations that exceed SCOs as required to allow a two-foot cover along transitions (e.g. existing pavement), utility construction, and construction of the dry stormwater detention basin. Alternative S-2 complies with the relevant portions of Part 375 and the Guide and includes access and land-use restrictions to minimize exposure to contaminants at the Site, and a cover system to restrict direct exposure and reduce the leaching to groundwater of soil contaminants. Actions associated with the construction of the cover system would comply with Fugitive Dust Suppression and Particulate Monitoring Program at Inactive Hazardous Waste Sites (NYSDEC, 1989) and/or New York State Department of Health Generic Community Air Monitoring Plan - December 2009 (CAMP) (NYSDOH, 2009), as applicable. All fill materials imported for use at the Site would be “clean certified” in accordance with 6 NYCRR Part 375. Implementation of this remedial alternative would utilize erosion and sediment control measures in accordance with applicable regulations.
- Overall Protection of Public Health and the Environment. This alternative provides protection of public health and the environment through restricting direct exposure by establishing a cover system over areas of soil exceeding the Commercial SCOs. Furthermore, the cover system would enhance surface runoff and reduce the amount of water infiltrating through soil contamination, thereby reducing leaching of the soil contaminants to groundwater in the shallow aquifer. An existing demarcation layer between the soil cover and Site soils allows assessment of cover integrity. Institutional controls prevent unauthorized disturbance of the cover system and establish procedures for management of Site soils that may be disturbed in the future. To ensure continued protection of public health and the environment, inspection and maintenance of the cover system will continue.
- Short-term Impacts and Effectiveness. Remedial construction activities are not likely to adversely affect the local community. A majority of the activity would be related/coordinated with Site redevelopment activity. An increase in truck traffic near the Site would be expected during hauling of materials for cover system construction. Truck beds would be covered to minimize the possibility of material loss onto roadways and generation of dust. Initial grading of the site may produce nuisance dust. Ambient air monitoring for respirable dust would be conducted during remedial construction and engineering controls for dust suppression can be easily implemented if action levels are exceeded.
- Significant temporary impacts to the environment are not expected. A remedial Health and Safety Plan (HASP) would be developed and followed to minimize risks to workers during remedial construction.
- Although most of the work should not require levels of protection greater than Level D, the HASP would outline situations when an upgrade of personal protective equipment would be necessary.
- Hazards associated with heavy equipment use can be minimized by following Occupational Safety and Health Administration (OSHA) guidelines. These risks would be minimized by use of proper Site security. The remedy will not rely on fencing to prevent exposure to site related constituents.

- Long-term Impacts and Effectiveness. Covering is considered a control and isolation technology in the hierarchy of technologies described in the TAGM 4030 "Selection of Remedial Actions at Inactive Hazardous Waste Sites" (NYSDEC, 1990). The cover system, which would include a minimum of two feet of clean soil, pavement, and/or new structures integrated with the areas of existing pavement and building floor slabs, would provide long-term effectiveness when properly maintained.
- The cover system would enhance runoff and reduce the amount of infiltration. The stormwater management system will include a dry detention basin (Appendix D, Sheet C-300). The dry detention basin will be lined with a geotextile, a low permeability geosynthetic liner, and a 24-inch (min) surface cover of soil or rip rap. Institutional controls would prevent disturbance of the cover system.
- Reduction of Toxicity, Mobility, and Volume. This alternative would include actions to reduce the mobility of contaminants by reducing the potential for migration of contaminants via leaching, airborne dust, etc. This alternative does not include actions to reduce the toxicity or volume of contaminated soils through treatment.
- Implementability. The construction and long-term use of a cover system (coordinated with Site redevelopment) is a well-developed technology for Site closure. Construction and maintenance techniques would not be difficult to implement. Delays due to technical problems would be unlikely or minimal. Contractors and equipment to perform the services required for this alternative are available locally.
- Cost Effectiveness. The cost associated with Alternative S-2 is categorized as "Moderate".
- Community Acceptance. If used in conjunction with other alternatives, it is likely that use of a cover system as part of the final remedy will be acceptable to the community.
- Land Use. Use of a cover system will be compatible with the proposed land use; SBD's redevelopment plans incorporate the use of new and existing pavement and building floor slabs, along with soil cover where appropriate.

7.2 DETAILED ANALYSIS OF GROUNDWATER ALTERNATIVES

All remedial alternatives developed in Subsection 6.2 were retained for detailed analysis. The remedial alternatives include:

- Alternative GW-C-1: No Additional Action
- Alternative GW-C-2: Enhanced Bioremediation and Groundwater Monitoring

7.2.3 AREAS C ALTERNATIVES

7.2.3.1 Alternative GW-C-1: No Action

No additional actions would be conducted as part of this alternative. Alternative GW-C-1 was developed as a baseline against which to compare other remedial alternatives for Area C. The following paragraphs present an assessment of Alternative GW-C-1 based upon the criteria identified previously.

- Compliance with New York State SCGs. Alternative GW-C-1 would rely upon the existing induced and natural attenuation to comply with Chemical-specific SCGs. No location- or action-specific SCGs would be triggered as no additional actions would be taken.
- Overall Protection of Public Health and the Environment. Alternative GW-C-1 would achieve no additional protection of public health and the environment.

- Short-term Impacts and Effectiveness. No construction activities would be implemented for Alternative GW-C-l; therefore, no short-term impacts or effects on the community, workers, or the environment would occur.
- Long-term Effectiveness and Permanence. The RAOs may be met if Alternative GW-C-1 were implemented at the Site. Suspending the groundwater monitoring program would presume the ongoing processes continued to compliance. This alternative would not provide a demonstration of long-term effectiveness.
- Reduction of Toxicity, Mobility, and Volume. Because no additional processes would be used to treat waste or contaminated media at the Site, no additional acceleration of the reduction of toxicity, mobility, or volume of Site contaminants would be stimulated. The existing induced and natural attenuation processes would be expected to continue to result in the reduction of the toxicity, mobility, and volume of organic groundwater contaminants over time, but no measure of the progress would be produced.
- Implementability. Although no services or materials would be required to implement the No Additional Action alternative, obtaining approval from NYSDEC and NYSDOH for Alternative GW-C-1 at the Site may be difficult as it involves suspending monitoring of groundwater.
- Cost Effectiveness. There is no cost associated with the No Additional Action alternative. Therefore, the cost category is "Low".
- Community Acceptance. Because this alternative will not result in protection of public health or the environment, the No Additional Action alternative could be unacceptable to the community.
- Land Use. The No Additional Action alternative is not compatible with the proposed land use because it would not provide data to ensure no potential sources of VOCs to soil vapor.

7.2.3.2 Alternative GW-C-2: Enhanced Bioremediation and Groundwater Monitoring

This action would consist of the following components:

- institutional controls;
- environmental monitoring to ensure that plume reduction is being achieved and no off-Site migration of the plume has occurred.

Institutional Controls. Institutional controls in the form of deed and land-use restrictions would be amended, or replaced, and maintained to restrict future site use, thereby limiting the potential for exposure to Site contaminants.

Institutional controls would be maintained to prohibit groundwater use within and around the Site as well as require soil vapor mitigation measures for on-Site structures. The controls have been written, implemented, and enforced in cooperation with SBD, state, and local governments. Operation and maintenance activities include record and field surveys, as necessary.

Environmental Monitoring. Alternative GW-C-2 is a long-term alternative with monitored induced and natural attenuation components. Continuation of the long-term ground water sampling and analysis program would provide quantitative data to measure the progress of the attenuation of constituents in groundwater. The frequency and scope of the monitoring will continue in accordance with the OM&M Plan. As more data is obtained, adjustments to the monitoring program would be proposed. Results of long-term monitoring will continue to be incorporated into Annual Reports for the Site.

Further introduction of ORC is proposed as a polishing step in the four wells producing samples which do not currently meet SCGs, and along a portion of the detention basin excavation.

The following paragraphs present an assessment of Alternative GW-C-2 based upon the criteria identified above.

- Compliance with New York State SCGs. Alternative GW-C-2 would meet chemical-specific SCGs by continuing to monitor the success of the in-situ enhanced biodegradation that continues to reduce contaminant concentrations. This alternative includes maintaining access restrictions, land-use restrictions and groundwater use restrictions and soil vapor mitigation measures to minimize exposure to contaminants in the shallow aquifer.
- Overall Protection of Public Health and the Environment. Alternative GW-C-2 provides protection of public health and the environment through monitoring the groundwater treatment progress, restricting use of groundwater and requiring soil vapor mitigation measures for on-Site structures. Implementation of enhanced biodegradation has resulted in the dramatic decrease of VOC and SVOC contaminant concentrations at an increased rate over natural attenuation (see table below). The time period required to reduce risks to acceptable concentrations is not known, hence the proposed monitoring. Continuation of the protection of public health and the environment would also be contingent upon enforcing land-use restrictions and environmental monitoring
- Short-term Impacts and Effectiveness. Little to no impact to the community would be expected during the monitoring of the enhanced bioremediation at the Site with land-use restrictions.
- Long-term Effectiveness and Permanence. This alternative would meet the RAOs for groundwater through institutional controls to prevent any use of Site groundwater and require soil vapor mitigation measures and monitoring of the in-situ enhanced biodegradation that is effectively reducing groundwater contaminant concentrations.
- Reduction of Toxicity, Mobility, and Volume. The enhanced biodegradation processes have been effectively reducing of the toxicity, mobility, and volume of Site contaminants, as shown below:

Well	Chlorobenzene Concentration Maximum (since 2010) (ug/L)	Chlorobenzene Concentration Q4 2017 (ug/L)	Reduction (%)
MW-C01	16	<1	94%
MW-C04	500	180	64%
PS-04A	330	<1	99%
PS-05A	1,200	140	88%
PS-06	1.6	<1	68%
RFI-20A	9,600	12	99%
RFI-31A	1,100	150	86%

- Implementability. Services and materials required to continue to implement this alternative are readily available. This alternative would not interfere with other potential remedial actions at the Site.
- Cost Effectiveness. The cost associated with Alternative GW-C-2 is categorized as “Moderate”. The actual cost will depend on the length and scope of groundwater monitoring.
- Community Acceptance. This alternative will verify that human health and the environment is protected. Thus, it is likely that this alternative would be acceptable to the community
- Land Use. Alternative GW-C-2 is compatible with the proposed land use under the SBD’s redevelopment scenario.

8 COMPARATIVE ANALYSIS OF ALTERNATIVES

The comparative analysis evaluates the relative performance of each alternative using the same criteria by which the detailed analysis of each alternative was conducted. The purpose of a comparative analysis is to identify the advantages and disadvantages of each alternative relative to one another to aid in selecting a remedy for the Site. Because the Site has been effectively remediated to a commercial/industrial condition, the analysis is simply to increase the level of protection of human health and the environment to allow limited restricted residential use. As such there is no real alternative except the implementation of:

- Alternative S-2 – Cover System
- Alternative GW-C-2 – Enhanced Bioremediation and Groundwater Monitoring

9 REMEDIAL WORK PLAN

The goal of the remedy selection process in the BCP is to select a remedy for a site that is fully protective of public health and the environment, taking into account the current, intended and reasonably anticipated future land use of the site.

This section presents the preferred remedy which has been selected as the final remedy for the Site. The preferred remedy is driven by and consistent with the BCP and SBD's proposed redevelopment approach (as described in Subsection 1.1) in that it is:

- Fully protective of human health and the environment;
- Allows for the maintain of significant green space and public access; and
- Meshes well with SBD's and other stakeholders' schedules for accelerated redevelopment of the Site.

9.1 PLANT DEMOLITION

Prior to renovation of the structure for restricted residential use, SBD will complete limited demolition of the existing Buffalo Color facility. The work will be completed in accordance with applicable laws and regulations and will be performed as follows:

- Preparation and implementation of a demolition health and safety plan, to include requirements for employee training and medical monitoring, list of designated personnel, respiratory protection program, PPE, fire protection, site and community air monitoring programs, and emergency procedures;
- Implementation of a decontamination program;
- Implementation of a hazard communication program;
- Obtaining all required licenses, demolition permits and other permits, and approvals;
- Meeting with the appropriate City departments to discuss the re-use of foundations and slabs (SBD acknowledges that a demolition permit is required from the City);
- Mobilization of equipment and site preparation;
- Capping/plugging of drains and sewer lines exposed during demolition;
- Demolition/removal of building floor slabs as required to install the vapor mitigation system(s);
- Backfilling to subgrade grade after removal of any exposed piping and excess soil;
- Placement of the vapor collection media (gravel, grid, and piping);
- Placement of a membrane or other low permeability barrier;
- Installation to piping to vent above the roof of the structure;
- Placement of permanent slab;
- Site restoration; and
- Preparation of reports and submittals, as necessary, to document the completion of demolition activities.

9.2 DESCRIPTION OF PREFERRED REMEDY

The Preferred Remedy for the Site consists of the following components:

- Alternative S-2 - Cover Enhancements – Increasing thickness of soil cover;
- Alternative GW-C-2 - Groundwater – enhanced bioremediation and groundwater monitoring
- Use of institutional/engineering controls and environmental easements

The following subsections provide descriptions of the specific components of the preferred remedy.

9.2.1 Soil

Alternative S-2 (Cover System Area C) has been selected as the preferred alternative for the Site soil. This alternative includes increasing the thickness of the soil cover or replacement of soil cover with pavement[4] in Area C (Figure AAR-003).

The cover system to be utilized as part of the remedy, consistent with the redevelopment of the Site, will involve use of a combination of clean soil, pavement, geo synthetic liner, or building structures to provide protection from direct contact exposure to contaminated surface soils. As identified in Figure AAR-003, areas that must be enhanced to increase the thickness of the cover to eliminate the direct contact pathway under a restricted residential use scenario exist throughout the Site. Although certain portions of the Site surface soil may in fact meet the Residential SCOs, it would be difficult to properly delineate and manage these areas during future redevelopment. Thus, the cover system will extend across the entire northern portion of the Site. The cover system will reduce infiltration of precipitation through impacted soil into groundwater and promote surface drainage.

The cover system will consist of a minimum of two feet of soil, asphalt or concrete pavement (with appropriate granular subbase), or building structures, consistent with the presumptive remedy as identified in 6 NYCRR Part 375. The dry detention basin will include a layer of geotextile, a geosynthetic liner, and 24-inches (minimum) of soil and riprap.

Existing paved surfaces, asphalt parking lots, and access drives which SBD chooses to use as part of the cover system will be rehabilitated and maintained as necessary. Selected sections of proposed occupied building floor slabs in contact with soil will be removed and replaced or cleaned, repaired and coated.

A demarcation layer has been placed between existing surface soils and the existing soil cover materials so the boundary between clean fill and existing Site soils can be identified in the future. Best Management Practices will be implemented to manage stormwater runoff from paved surfaces, as appropriate.

9.2.2 Groundwater

The long-term goal of groundwater remediation is restoration of groundwater to its classified use. The short-term goal of plume stabilization has been achieved. In addition to the remedy components described below, the implementation of an enhanced Site-wide cover system will serve to reduce surface water infiltration and minimize the soil-to-groundwater migration pathway.

9.2.2.3 Area C Shallow Groundwater

Alternative GW-C-2 (Enhanced Bioremediation and Groundwater Monitoring) has been selected as the preferred alternative for the Area C shallow groundwater. As noted in previous Sections, the monitoring will continue in accordance with the Site Management Plan. The quarterly program has demonstrated the effectiveness of the induced and natural attenuation processes operating in groundwater at the Site. The enhanced bioremediation at the site will be stimulated in a polishing phase by introducing ORC in four monitoring wells and in a portion of the detention basin excavation. The data will continue to be reported on an annual basis.

9.3 GENERAL REQUIREMENTS

The following subsections describe the additional requirements, including institutional/engineering controls and environmental easements, which have been implemented as part of the preferred remedy for the Site.

[4] New pavement will be designed and installed in accordance with the requirements of the City of Buffalo.

9.3.1 Future Use of Site

Environmental easements/deed notices will be amended to ensure that the Site can be used only for commercial or restricted residential purposes (as the terms are defined in 6 NYCRR Part 375-1). The environmental easements and deed notices will be described in detail as part of the Institutional and Engineering Control Plan (which will be part of the Site Management Plan as noted below in Section 9.3.4)

9.3.2 Groundwater Use

The potable or consumptive use of groundwater (which is prohibited by City of Buffalo ordinance) will be prohibited at the Site through implementation of an environmental easement/deed notice.

9.3.3 Vapor Intrusion

An environmental easement will be implemented to ensure that occupied structures associated with future development at the Site are constructed such that the vapor intrusion (VI) pathway is eliminated. This can be accomplished through construction methods, such as installation of vapor barriers and/or subgrade vapor collection systems (active), or through additional characterization (conducted in accordance with NYSDEC and NYSDOH VI guidance) to ensure that the area over which the structure will reside does not present a potential VI concern. Sub-slab or surface coating barriers and active vapor collection is the only option being considered.

9.3.4 Site Management Plan

A Site Management Plan has been prepared for the Site, consistent with 6 NYCRR Part 375 and the Guide.

The plan includes the following components:

- Introduction, background, and summary of RI results;
- An Institutional and Engineering Control Plan (amended to reflect restricted residential use);
- A Soil Fill Management Plan that specifies requirements for excavation/grading activities, stockpiling and soil staging areas, waste characterization sampling, onsite reuse criteria, soil loading and transportation, and requirements for offsite disposal;
- Health and Safety for construction personnel, including requirements for Site and community air monitoring;
- A Quality Assurance/Quality Control Plan;
- An Operations, Maintenance and Monitoring Plan;
- Notification and reporting requirements; and
- Tables, figures and appendixes, as necessary

The Site Management Plan (MACTEC 2010) shall be updated to reflect the enhancements installed to allow restricted residential use.

An environmental easement has been implemented, and will be amended or replaced, and shall require that any excavation or other disturbance of Site soil meets the requirements of the Site Management Plan.

10 PROJECT SCHEDULE

Consistent with the schedule submitted by SBD as part of the BCP Applications, the following summarizes the anticipated project schedule for demolition and remedy implementation:

- Start of Timeline - The later of the date that the change of use and this AAR are approved.
- Months 1 through 3 - Planning/Preparation
- Month 1 – Update the SMP and file amended environmental easement
- Month 1 - Prepare detailed Project Schedule
- Month 1 and 2 - Prepare required demolition permit application and erosion and sediment control plans
- Month 2 – Complete round of groundwater monitoring and introduce ORC in four monitoring wells
- Month 4 and 5 – Install vapor mitigation system
- Month 4 to 7 – Install enhanced cover system
- Month 7 – Revegetate Site
- Month 8 - Remove ORC from monitoring wells
- Month 9 – Resume groundwater monitoring
- Month 9 = Submit Final Engineering Report (FER)

In addition to the above, OM&M activities, including groundwater monitoring and maintenance of the remedial system components, will be completed in accordance with the Site Management Plan and will continue as necessary into the future.

11 REFERENCES

The following is a list of significant references used by MACTEC and JBlack Consulting in preparation of this report. Other documents, including project correspondence documents and records maintained in Buffalo Color Corporation files, were used to supplement the information obtained from the references listed below.

- 6NYCRR Part 375 Regulations, December 2006
- Benchmark Environmental Engineering & Science, PLLC, June 2017, "Soil Vapor Intrusion Investigation Report", Former Buffalo Color Corporation Site – Area C, 140 Lee Street, Buffalo, New York.
- Golder Associates, November 1997, "Final Report on RCRA Facility Investigation, Buffalo Color Corporation, Buffalo, New York."
- Golder Associates, December 1998, "Addendum to Final Report on RCRA Facility Investigation, Buffalo Color Corporation, Buffalo, New York."
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- MACTEC Engineering and Consulting, March 2006, "Final Operations, Maintenance & Monitoring Plan, Interim Corrective Measure, Buffalo Color Area ABCE, Buffalo, New York."
- MACTEC Engineering and Consulting, February 2009, "Alternatives Analysis Report, Former Buffalo Color Corporation Site, Buffalo, New York."
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- New York State Department of Environmental Conservation (NYSDEC), 1990. Technical and Administrative Guidance Memorandum HWR 90— 4030: Selection of Remedial Actions at Inactive Hazardous Waste Sites. May 1990.
- New York State Department of Environmental Conservation, May 15, 1991, letter to G. Bolles (Buffalo Color Corp.) from Paul Counterman NYSDEC Bureau of Hazardous Waste and Facility Management, regarding Preliminary Draft Part 373 Permit.
- New York State Department of Environmental Conservation (NYSDEC), 1999. New York Codes, Rules, and Regulations, Title 6, Part 703 Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations. Amended August 1999.
- New York State Department of Health (NYSDOH), 2009. Generic Community Air Monitoring Plan. December 2009.
- New York State Department of Environmental Conservation, May 2010, "Final DER-10 Technical Guidance for Site Investigation and Remediation."
- New York State Department of Health, Center for Environmental Health, Bureau of Environmental Exposure Investigation, May 2017, "Guidance for Evaluating Soil Vapor Intrusion in the State of New York, Public Comment Draft."

FIGURES



JBlack CONSULTING LLC

REVISION

No.	Description	Date

SITE PLAN

140 LEE STREET
BUFFALO, NEW YORK

FIGURE TITLE:

CLIENT NAME:

SOUTH BUFFALO DEVELOPMENT, LLC
333 GANSON STREET
BUFFALO, NEW YORK

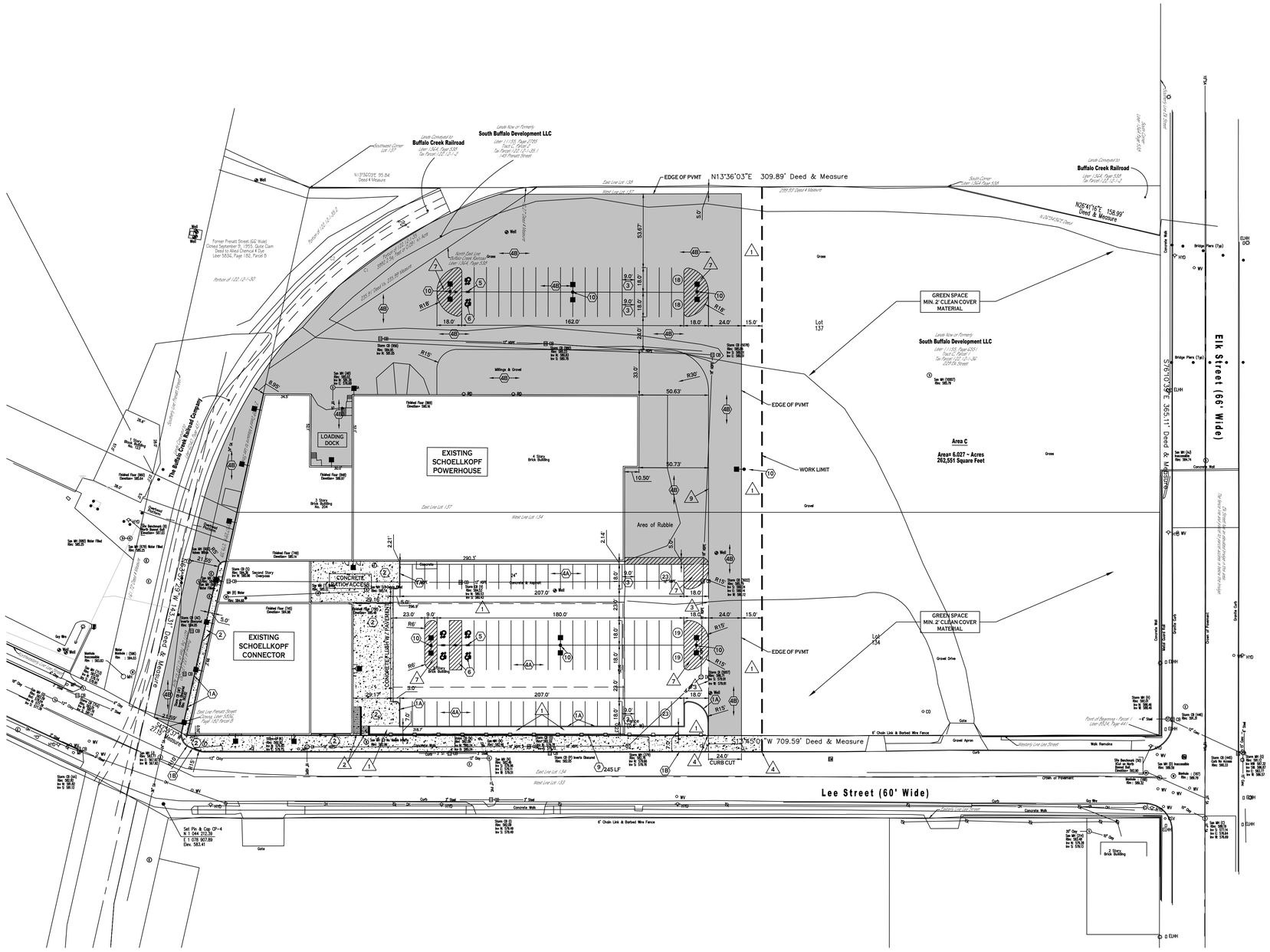
PROJECT NAME:

ALTERNATIVE ANALYSIS REPORT

FIGURE No.

AAR-002

SHEET No. 1 of 12


Lands Conveyed to
Buffalo Creek Railroad
Liber 1304, Page 538
Tax Parcel 122.13-1-2
Lands Now or Formerly
South Buffalo Development LLC
Liber 11155, Page 2255
Tract C, Parcel 4
Tax Parcel 122.13-1-35.1
1425 Fillmore Street
Southwest Corner Lot 137
N13°36'03"E 35.84' Deed & Measure
EDGE OF PVMT
N13°36'03"E 309.89' Deed & Measure
East Line Lot 138
West Line Lot 137
309.83' Deed & Measure
South Corner Liber 1304 Page 538
N26°41'16"E 158.99' Deed & Measure
N13°36'03"E Deed
Former Prenatt Street (66' Wide) Closed September 7, 1955, Quiet Claim Deed to Road Chemical & Dye Liber 5834, Page 150, Parcel B
Portion of 122.13-1-30
Parcel of 122.13-1-35.2
Lands Conveyed to Buffalo Creek Railroad Liber 1304, Page 538
Lands Now or Formerly South Buffalo Development LLC Liber 11155, Page 2251 Tract C, Parcel 1 Tax Parcel 122.13-1-36 229 Elk Street
Lands Conveyed to Buffalo Creek Railroad Liber 1304, Page 538 Tax Parcel 122.13-1-2
Elk Street (66' Wide)
S76°10'39"E 365.11' Deed & Measure
Bridge Piers (Typ)
HYD
WV
ELEH
Concrete Wall
Concrete Walk
Curb
Grass
Gravel
Lot 137
Lot 134
GREEN SPACE MIN. 2' CLEAN COVER MATERIAL
Area C
Area= 6.027 ± Acres
262,551 Square Feet
EXISTING SCHOELLKOPF POWERHOUSE
4 Story Brick Building
LOADING DOCK
EXISTING SCHOELLKOPF CONNECTOR
WORK LIMIT
Area of Rubble
CONCRETE RUBBLE FOUNDATIONS
CONCRETE SEATING ACCESS
Concrete & Asphalt
Millings & Gravel
Gravel Drive
Gate
Guy Wire
Utility Pole
Overhead Wires
The Buffalo Creek Railroad Company
Abutment over Water Course
Abutment over Road
Retaining Wall
Top of Bank
Edge of Water
Edge of Water (Typ)
Approximate Limit of Water
Approximate Limit of Water (Typ)
Approximate Limit of Water (Typ) Elevation= 568.0
Approximate Limit of Water Elevation= 568.0
Approximate Limit of Water Elevation= 568.2
Approximate Limit of Water Elevation= 568.3
Approximate Limit of Water Elevation= 568.4
Approximate Limit of Water Elevation= 568.5
Approximate Limit of Water Elevation= 568.6
Approximate Limit of Water Elevation= 568.7
Approximate Limit of Water Elevation=

APPENDICIES

Appendix A

MACTEC AAR Figures

DRAWN BY: WJW 6/24/2016 APPROVED BY: ELR

LEGEND

PS-04 (581.54) Monitoring Well Location with Groundwater Elevation (FT-MSL)

RFI-21D
583
RFI-20
(582.64)
PS-05
(584.02)
V13
234
583
PS-06
(582.70)
203
582
207
204
208
RFI-31
(580.19)
MW-C01
(580.50)
205
220
223
222
221
MW-C04
(582.28)
PS-04
(580.79)
584
582
584
314
LS2
312
123
LEE STREET
310
310A

100 0 100
SCALE: 1"=100'

SOUTH BUFFALO DEVELOPMENT
BUFFALO, NEW YORK

Project No.: 3410110843

Environment & Infrastructure - Pittsburgh
800 North Bell Avenue
Carnegie, Pennsylvania 15106

amec foster wheeler

FIRST QUARTER 2015
GROUNDWATER
MONITORING EVENT
GROUNDWATER ELEV CONTOURS
BUFFALO COLOR AREA - C
Figure: 1

1

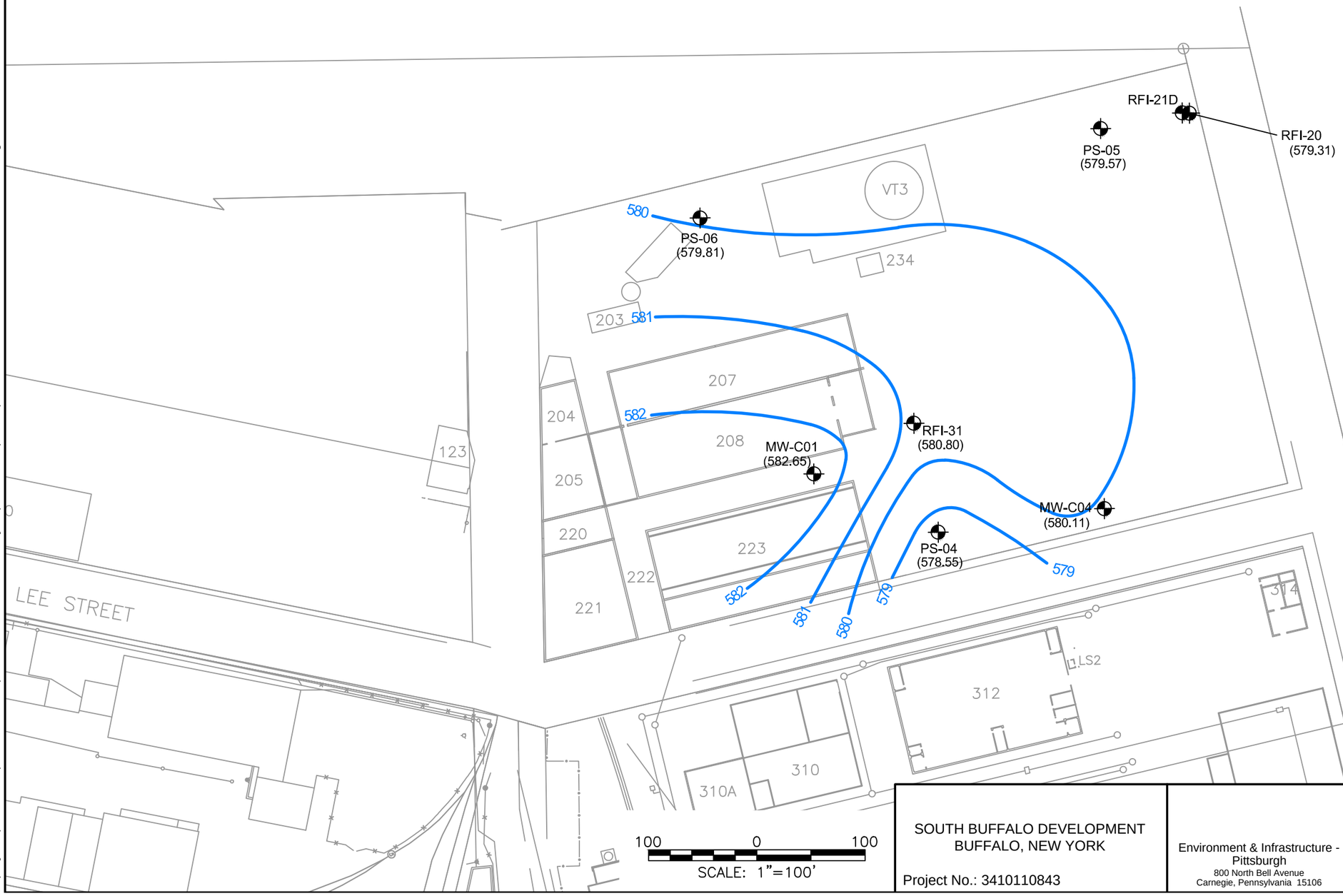
Z:\Projects\HONEYWELL\BUFFALO COLOR\SBD AREA B C & E Quarterly Reports VOC'S\Sheets\09 FIGURE 1 - C FIRST QUARTER CONTOUR.dwg Mon, 27 Jun 2016 - 7:32am william.whitten

DRAWN BY: WJW 7/05/2016 APPROVED BY: ELR

LEGEND

PS-04 (583.24) Monitoring Well Location with Groundwater Elevation (FT-MSL)

RFI-21D NOT SAMPLED OR MEASURED AS PART OF OM&M



SOUTH BUFFALO DEVELOPMENT
BUFFALO, NEW YORK

Project No.: 3410110843

Environment & Infrastructure - Pittsburgh
800 North Bell Avenue
Carnegie, Pennsylvania 15106
amec foster wheeler

SECOND QUARTER 2015
GROUNDWATER
MONITORING EVENT
GROUNDWATER ELEV CONTOURS
BUFFALO COLOR AREA - C
Figure: 1

1

Z:\Projects\HONEYWELL\BUFFALO COLOR\SBD AREA B C & E Quarterly Reports VOC'S\Sheets\10 FIGURE 1 - C SECOND QUARTER CONTOUR.dwg Tue, 05 Jul 2016 - 8:00am william.whitten

DRAWN BY: WJW 6/24/2016 APPROVED BY: ELR

LEGEND

PS-04 (580.66) Monitoring Well Location with Groundwater Elevation (FT-MSL)

RFI-21D NOT SAMPLED OR MEASURED AS PART OF OM&M

RFI-21D

RFI-20 (578.95)

PS-05 (579.01)

PS-06 (579.33)

RFI-31 (581.02)

MW-C01 (582.16)

MW-C04 (579.91)

PS-04 (577.85)

579 580 581 582 578

VT3 234 203 207 204 208 205 220 222 221 123 LEE STREET 314 LS2 312 310 310A

100 0 100

SCALE: 1"=100'

SOUTH BUFFALO DEVELOPMENT
BUFFALO, NEW YORK

Project No.: 3410110843

Environment & Infrastructure - Pittsburgh
800 North Bell Avenue
Carnegie, Pennsylvania 15106

amec foster wheeler

THIRD QUARTER 2015
GROUNDWATER
MONITORING EVENT
GROUNDWATER ELEV CONTOURS
BUFFALO COLOR AREA - C
Figure: 1

1

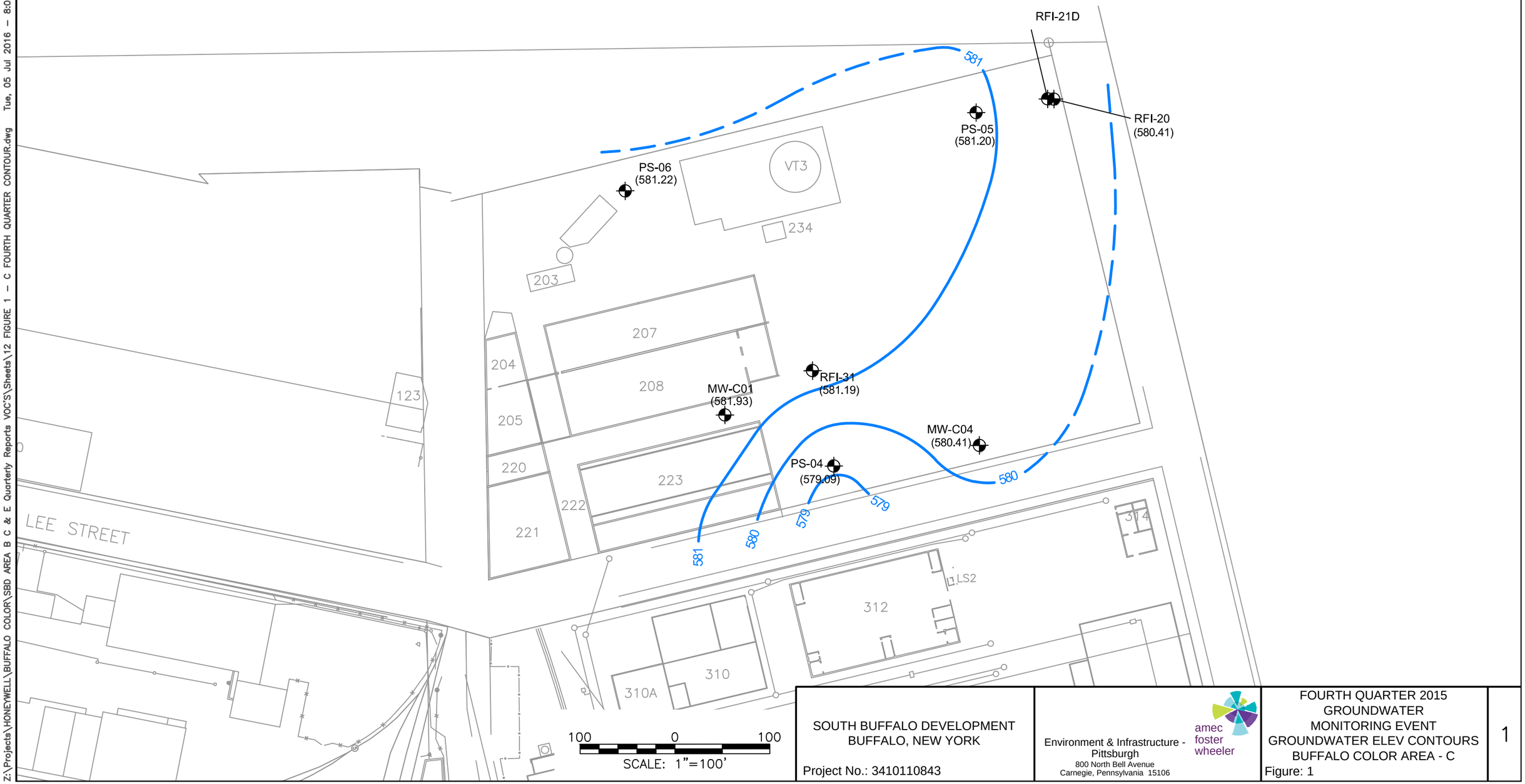
Z:\Projects\HONEYWELL\BUFFALO COLOR\SBD AREA B C & E Quarterly Reports VOC'S\Sheets\11 FIGURE 1 - C THIRD QUARTER CONTOUR.dwg Mon, 27 Jun 2016 - 7:37am william.whitten

DRAWN BY: WJW 7/05/2016 APPROVED BY: ELR

LEGEND

PS-04 (581.74) Monitoring Well Location with Groundwater Elevation (FT-MSL)

RFI-21D NOT SAMPLED OR MEASURED AS PART OF OM&M



SOUTH BUFFALO DEVELOPMENT BUFFALO, NEW YORK Project No.: 3410110843	Environment & Infrastructure - Pittsburgh 800 North Bell Avenue Carnegie, Pennsylvania 15106 amec foster wheeler	FOURTH QUARTER 2015 GROUNDWATER MONITORING EVENT GROUNDWATER ELEV CONTOURS BUFFALO COLOR AREA - C Figure: 1	1

Z:\Projects\HONEYWELL\BUFFALO COLOR\SBD AREA B C & E Quarterly Reports VOC'S\Sheets\12 FIGURE 1 - C FOURTH QUARTER CONTOUR.dwg Tue, 05 Jul 2016 - 8:02am william.whitten

DRAWN BY: WJW 6/24/2016 APPROVED BY: ELR

LEGEND

PS-04 (0.0) Monitoring Well Location with Total VOC Concentration ug/L

Total VOC Concentrations > 0 to < 10 ug/L (Dashed where inferred)

Total VOC Concentrations > 10 to < 500 ug/L (Dashed where inferred)

Total VOC Concentrations > 500 ug/L (Dashed where inferred)

RFI-21D NOT SAMPLED OR MEASURED AS PART OF OM&M

RFI-21D

RFI-20 (62.5)

PS-05 (333.6)

PS-06 (0.0)

(84.0) RFI-31

MW-C01 (2.1)

MW-C04 (285.5)

PS-04 (0.0)

VT3

234

203

207

204

208

205

220

223

222

221

123

LEE STREET

314

LS2

312

310

310A

100 0 100

SCALE: 1"=100'

SOUTH BUFFALO DEVELOPMENT
BUFFALO, NEW YORK

Project No.: 3410110843

Environment & Infrastructure - Pittsburgh
800 North Bell Avenue
Carnegie, Pennsylvania 15106

amec foster wheeler

FIRST QUARTER 2015
GROUNDWATER
MONITORING EVENT
TOTAL VOC CONCENTRATIONS
BUFFALO COLOR AREA - C
Figure: 2

2

Z:\Projects\HONEYWELL\BUFFALO COLOR\SBD AREA B C & E Quarterly Reports VOC'S\Sheets\13 FIGURE 2 - C FIRST QUARTER VOC.dwg Wed, 03 Aug 2016 - 11:46am john.french

DRAWN BY: WJW 6/24/2016 APPROVED BY: ELR

LEGEND

PS-04 (0.0) Monitoring Well Location with Total VOC Concentration ug/L

Total VOC Concentrations > 0 to < 10 ug/L (Dashed where inferred)

Total VOC Concentrations > 10 to < 500 ug/L (Dashed where inferred)

Total VOC Concentrations > 500 ug/L (Dashed where inferred)

RFI-21D NOT SAMPLED OR MEASURED AS PART OF OM&M



SOUTH BUFFALO DEVELOPMENT
BUFFALO, NEW YORK

Project No.: 3410110843

Environment & Infrastructure - Pittsburgh
800 North Bell Avenue
Carnegie, Pennsylvania 15106

amec foster wheeler

SECOND QUARTER 2015
GROUNDWATER
MONITORING EVENT
TOTAL VOC CONCENTRATIONS
BUFFALO COLOR AREA - C
Figure: 2

2

Z:\Projects\HONEYWELL\BUFFALO COLOR\SBD AREA B C & E Quarterly Reports VOC'S\Sheets\14 FIGURE 2 – C SECOND QUARTER VOC.dwg Wed, 03 Aug 2016 – 11:48am john.french

DRAWN BY: WJW 6/13/2016 APPROVED BY: ELR

LEGEND

PS-06 (0.0) Monitoring Well Location with Total VOC Concentration ug/L

Total VOC Concentrations > 0 to < 10 ug/L (Dashed where inferred)

Total VOC Concentrations > 10 to < 500 ug/L (Dashed where inferred)

Total VOC Concentrations > 500 ug/L (Dashed where inferred)

NS Not Sampled

RFI-21D NOT SAMPLED OR MEASURED AS PART OF OM&M



SOUTH BUFFALO DEVELOPMENT
BUFFALO, NEW YORK

Project No.: 3410110843

Environment & Infrastructure - Pittsburgh
800 North Bell Avenue
Carnegie, Pennsylvania 15106

amec foster wheeler

THIRD QUARTER 2015
GROUNDWATER
MONITORING EVENT
TOTAL VOC CONCENTRATIONS
BUFFALO COLOR AREA - C

Figure: 2

2

Z:\Projects\HONEYWELL\BUFFALO COLOR\SBD AREA B C & E Quarterly Reports VOC'S\Sheets\15 FIGURE 2 – C THIRD QUARTER VOC.dwg Mon, 27 Jun 2016 – 7:41am william.whitten

DRAWN BY: WJW 6/13/2016 APPROVED BY: ELR

LEGEND

PS-04 (0.7) Monitoring Well Location with Total VOC Concentration ug/L

Total VOC Concentrations > 0 to < 10 ug/L (Dashed where inferred)

Total VOC Concentrations > 10 to < 500 ug/L (Dashed where inferred)

Total VOC Concentrations > 500 ug/L (Dashed where inferred)

NS Not Sampled

RFI-21D NOT SAMPLED OR MEASURED AS PART OF OM&M



SOUTH BUFFALO DEVELOPMENT BUFFALO, NEW YORK Project No.: 3410110843	Environment & Infrastructure - Pittsburgh 800 North Bell Avenue Carnegie, Pennsylvania 15106 amec foster wheeler	FOURTH QUARTER 2015 GROUNDWATER MONITORING EVENT TOTAL VOC CONCENTRATIONS BUFFALO COLOR AREA - C Figure: 2	2

Z:\Projects\HONEYWELL\BUFFALO COLOR\SBD AREA B C & E Quarterly Reports VOC'S\Sheets\16 FIGURE 2 – C FOURTH QUARTER VOC.dwg Wed, 03 Aug 2016 – 11:50am john.french

Appendix B

Post-remediation Groundwater Data

		1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,3-Dicholorbenzene	1,4-Dicholorbenzene	Benzene	Chlorobenzene	Total TCL VOCs	2,4-Dichlorophenol	2,4-Dimethylphenol	Aniline	Benzo(a)pyrene	Phenol	Total TCL SVOCs			
Class GA Standard**		5	3	3	3	1	5	--	1	1	5	0	1	--			
MW-C01	11/18/2009	24	<5	6.8	2.8 J	<5	<5	33.6	<5	<5	<10	<5	<5	0			
	10/10 - 11/10	ORC-A Application															
	3/24/2011	No Sample Collected															
	6/29/2011	6.2	1.2	5.7	1.2	<1	18	32.3	<5.6	<5.6	<11	2.3 J	<5.6	2.3	18		18
	9/30/2011	<4	<4	<4	<4	<4	<4	0	<5.9	<5.9	<12	0.63 J	<5.9	0.63			
	11/25/2011	<4	<4	<4	<4	<4	<4	0	<4.8	<4.8	<9.7	3.2 J	<4.8	3.2			
	3/28/2012	3.1	2.2	29	8.3	<1	21	63.6	<4.7	<4.7	<9.4	1.1 J	<4.7	1.1			
	6/22/2012	1.2	0.82 J	7.2	1	<1	2.8	13.02	<4.7	<4.7	<9.4	<4.7	<4.7	0			
	9/17/2012	0.55 J	<1	2.1 J	<1	<1	<1	2.65	<4.7	<4.7	<9.4	<4.7	<4.7	0			
	12/3/2012	0.5 J	<1	1.7	<1	<1	<1	2.2	<4.8	<4.8	<9.7	<4.8	<4.8	0			
	3/27/2013	2.9	1.5	13	1.5	<1	3	21.9	<4.8	<4.8	<9.6	<4.8	<4.8	0			
	6/1/2013	3.7	1.5	12	1.3	<1	3.8	22.3	<4.7	<4.7	<9.4	<4.7	<4.7	0.43			
	9/5/2013	1	<1	2.9	<1	<1	0.88	4.78	<4.7	<4.7	<9.4	<4.7	<4.7	0			
	12/2/2013	<4	<4	3.6	<4	<4	<4	3.6	<5	<5	<10	<5	<5	0			
	3/21/2014	<1	<1	<1	<1	<1	1.7	1.7	<5	<5	<10	<5	<5	0			
	6/19/2014	16	2.6	18	2.9	<1	4.2	43.7	<1.9	<9.4	<9.4	0.31 J	<1.9	3.46			
	9/3/2014	1.8 J	<4	5.1	<4	<4	<4	6.9	<5	<5	<10	<5	<5	0			
	11/24/2014	2.2	<1	5.7	<1	<1	1.4	9.3	<4.7	<4.7	<9.5	<4.7	<4.7	4.33			
	4/2/2015	2.1 J	<4	<4	<4	<4	<4	2.1	<4.6	<4.6	<9.2	<4.6	<4.6	1.92			
	6/17/2015	1.8 J	<4	<4	<4	<4	<4	1.8	<4.7	<4.7	<9.4	<4.7	<4.7	1.73			
	9/2/2015	1.9	<1	4	<1	<1	1	6.9	<4.7	<4.7	<9.5	<4.7	<4.7	0			
	11/5/2015	<1	<1	0.79 J	<1	<1	<1	0.79	<4.6	<4.6	<9.3	<4.6	<4.6	0			
	3/30/2016	<1	<1	<1	<1	<1	<1	0	<4.7	<4.7	1.1 J	<4.7	<4.7	1.66			
	5/23/2016	<1	<1	<1	<1	<1	<1	0	<4.7	<4.7	0.74 J	<4.7	<4.7	0.74			
	9/7/2016	<1	<1	<1	<1	<1	<1	0	<4.6	<4.6	<9.3	0.48 J	<4.6	2.47			
	11/3/2016	<1	<1	<1	<1	<1	<1	0	<4.6	<4.6	<9.2	<4.6	<4.6	0			
	2/28/2017	<1	<1	<1	<1	<1	<1	0	<4.7	<4.7	<9.4	<4.7	<4.7	0			
	6/13/2017	<1	<1	<1	<1	<1	<1	0	<5	<5	<10	<5	<5	0.75			
	8/17/2017	<1	<1	<1	<1	<1	<1	3.1	<5	<5	<10	1 J	<5	12.36			
	11/21/2017	<1	<1	<1	<1	<1	<1	0	<5	<5	<10	1.3 J	<5	19.22	<1	97%	0.5
MW-C04		No Sample Collected															
	10/10 - 11/10	ORC-A Application															
	3/24/2011	<8	<8	17	29	<8	390	436	<4.7	<4.7	<9.4	<4.7	<4.7	0	390		390
	6/29/2011	<1	5.7	17	30	<1	390	442.7	<4.7	<4.7	<9.4	<4.7	<4.7	0			
	9/30/2011	<1	5.7	21	36	<1	500	562.7	<4.8	<4.8	<9.5	<4.8	<4.8	0			
	11/25/2011	<4	4.2	16	29	<4	390	439.2	<4.7	<4.7	<9.4	<4.7	<4.7	0			
	3/27/2012	2.6 J	4.4	18	29	<1	330	384	<4.7	<4.7	<9.4	<4.7	<4.7	0			
	6/21/2012	<1	4.6	16	29	<1	310	359.6	1.1 J	<4.7	0.61 J	<4.7	<4.7	1.71			
	9/14/2012	<5	<5	9.4	17	<5	370 J	396.4	<4.8	<4.8	<9.6	<4.8	<4.8	0.92			
	12/3/2012	<5	<5	15	27	<5	340	382	<4.9	<4.9	<9.8	<4.9	<4.9	2.41			
	3/27/2013	<5	5.3	16	27	<5	290	338.3	<5	<5	<10	<5	<5	1.86			
	5/31/2013	<5	5.7	16	28	<5	290	343.9	<4.8	<4.8	<9.5	<4.8	<4.8	1.53			
	9/5/2013	<5	5.8	17	28	<5	330	380.8	0.72	<4.9	<9.7	<4.9	<4.9	3.03			
	12/3/2013	<5	6.9	24	39	<5	360	429.9	<5	<5	<10	<5	<5	1.71			
	3/20/2014	<5	5.4	19	30	<5	260	314.4	<5	<5	<10	<5	<5	1.51			
	6/19/2014	<4	7.3	23	37	<4	300	369.4	0.48 J	<9.6	<9.6	<1.9	<1.9	0.48			
	9/3/2014	<5	4.7 J	16	28	<5	260	308.7	<5	<5	<10	<5	<5	2.2			
	11/24/2014	<5	6	22	36	<5	320	384	0.52 J	<5	<10	<5	<5	6.29			
	4/2/2015	<5	4.5 J	20	31	<5	230	285.5	<4.7	<4.7	<9.4	<4.7	<4.7	0			
	6/17/2015	<5	5.2	23	36	<5	280	358.2	<4.7	<4.7	<9.4	<4.7	<4.7	2.26			
	9/2/2015	<1	<1	<1	<1	<1	<1	0	<5.2	<5.2	<10	<5.2	<5.2	0			
	11/5/2015	<10	5	24	40	<10	370	439	0.72 J	<4.7	<9.4	<4.7	<4.7	8.25			
	3/30/2016	<10	<10	21	34	<10	260	315	<4.7	<4.7	0.62 J	<4.7	<4.7	3.86			
	5/23/2016	<10	<10	24	38	<10	340	402	<4.8	<4.8	<9.7	<4.8	<4.8	1.82			
	9/7/2016	<10	<10	16	26	<10	230	272	<4.6	<4.6	<9.3	<4.6	<4.6	1.32			
	11/3/2016	<10	<10	17	29	<10	320	366	<4.6	<4.6	<9.3	<4.6	<4.6	2.21			
	2/28/2017	<10	<10	14	22	<10	150	198	<4.8	<4.8	<9.5	<4.8	<4.8	0			
	6/13/2017	<10	<10	14	25	<10	230	269	<5	<5	<10	<5	<5	4.16			
	8/17/2017	<10	<10	10	17	<10	140	167	<5	<5	<10	<5	<5	0			
	11/21/2017	<1	2.8	16	30	<1	180	228.8	0.98 J	<5	<10	<5	<5	1.75	180	54%	180

		1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,3-Dicholorbenzene	1,4-Dicholorbenzene	Benzene	Chlorobenzene	Total TCL VOCs	2,4-Dichlorophenol	2,4-Dimethylphenol	Aniline	Benzo(a)pyrene	Phenol	Total TCL SVOCs				
Class GA Standard**		5	3	3	3	1	5	--	1	1	5	0	1	--				
PS-04A	11/19/2009	<1	<1	<1	<1	<1	0.81 J	0.81	<6.2	<6.2	<12	<6.2	<6.2	0	0.81		0.81	
	10/10 - 11/10	ORC-A Application																
	3/24/2011	<1	<1	<1	<1	<1	<1	0	<4.7	<4.7	<9.4	<4.7	<4.7	0				
	6/29/2011	No Sample Collected																
	9/30/2011	<1	<1	<1	<1	<1	<1	0	<4.7	<4.7	<9.4	<4.7	<4.7	0				
	11/25/2011	<1	<1	<1	<1	<1	<1	0	<4.7	<4.7	<9.4	<4.7	<4.7	0				
	3/27/2012	<1	<1	<1	<1	<1	<1	0	<26	<26	<52	<26	<26	0				
	6/22/2012	2.2	<1	<1	<1	<1	<1	2.2	No Sample Collected									
	9/14/2012	<1	<1	<1	<1	<1	<1	3.2	No Sample Collected									
	12/3/2012	<1	<1	<1	<1	<1	<1	0	<4.9	<4.9	<9.7	<4.9	<4.9	0				
	3/27/2013	0.73	<1	<1	<1	<1	<1	0.73	<4.9	<4.9	<9.8	<4.9	<4.9	0				
	5/31/2013	<1	<1	<1	<1	<1	1.2	1.2	<5.1	<5.1	<10	<5.1	<5.1	0				
	12/2/2013	<1	<1	<1	<1	<1	<1	0	<5	<5	<10	<5	<5	0				
	3/20/2014	<1	<1	<1	<1	<1	<1	0	<5	<5	<10	<5	<5	0				
	6/19/2014	<1	<1	<1	<1	<1	<1	0	<1.9	<9.7	<9.7	<1.9	<1.9	0				
	11/24/2014	0.74 J	<1	<1	<1	<1	<1	0.74	<4.9	<4.9	<9.7	<4.9	<4.9	3.3				
	4/2/2015	<1	<1	<1	<1	<1	<1	0	<4.7	<4.7	<9.5	<4.7	<4.7	0				
	6/17/2015	0.58 J	<1	<1	<1	<1	<1	0.58	<4.7	<4.7	<9.3	<4.7	<4.7	0.3				
	9/2/2015	<1	5.2	23	36	<1	330	399.8	0.7 J	<4.9	<9.8	<4.9	<4.9	4.84				
	11/5/2015	<1	<1	<1	<1	<1	<1	0	<4.7	<4.7	<9.4	<4.7	<4.7	0				
	3/30/2016	<1	<1	<1	<1	<1	<1	0	<4.7	<4.7	<9.4	<4.7	<4.7	0				
	5/23/2016	<1	<1	<1	<1	<1	<1	0	<4.8	<4.8	<9.5	<4.8	<4.8	0				
	11/3/2016	<1	<1	<1	<1	<1	<1	0	<4.6	<4.6	<9.3	<4.6	<4.6	0				
	2/28/2017	<1	<1	<1	<1	<1	<1	0	<4.7	<4.7	<9.3	<4.7	<4.7	0				
	6/13/2017	<1	<1	<1	<1	<1	<1	0	<5	<5	<10	<5	<5	0				
	8/17/2017	<1	<1	<1	<1	<1	<1	0	<5	<5	<10	<5	<5	1.39				
	11/21/2017	<1	<1	<1	<1	<1	<1	0	<5	<5	<10	<5	<5	1.5	<1	38%		0.5
PS-05A	11/17/2009*	<1	5	<1	0.76 J	0.97 J	700	706.73	<4.9	<4.9	<9.8	<4.9	<4.9	0	700		700	
	10/10 - 11/10	ORC-A Application																
	3/24/2011	No Sample Collected																
	6/29/2011	No Sample Collected																
	9/30/2011	<4	41	<4	<4	<4	1200	1241	<5.3	<5.3	<11	<5.3	<5.3	0				
	11/25/2011	<4	11	<4	<4	<4	580	591	<4.7	<4.7	<9.4	<4.7	<4.7	0				
	3/27/2012	<1.4	13	<1	0.96 J	9.5	560	583.46	<4.7	<4.7	<9.4	<4.7	<4.7	0				
	6/21/2012	<5	58	<5	<5	<5	870	928	<4.7	<4.7	<9.4	<4.7	<4.7	0				
	9/17/2012	<4	<4	<4	<4	23 J	210	233	<9.8	<9.8	<20	<9.8	<9.8	2.3				
	12/4/2012	<4	8.1	<4	<4	<4	490	498.1	<4.8	<4.8	<9.7	<4.8	<4.8	3.4				
	3/26/2013	<8	<8	<8	<8	<8	330	337.5	<5	<5	<9.9	<5	<5	4.45				
	5/31/2013	<8	8	<8	<8	<8	470	484.5	<4.8	<4.8	<9.6	<4.8	<4.8	8.1				
	9/5/2013	<4	4.5	<4	<4	<4	310	329.2	<4.9	<4.9	<9.8	<4.9	<4.9	3.6				
	12/2/2013	<4	4.1	<4	<4	<4	210	214.1	<5	<5	<10	<5	<5	1.7				
	3/20/2014	<4	<4	<4	<4	16	330	346	<5	<5	<10	<5	0.64	3.44				
	6/19/2014	<4	7.8	<4	<4	<4	330	337.8	<1.9	<9.5	<9.5	<1.9	<1.9	99.9				
	9/3/2014	<4	<4	<4	<4	<4	220	220	<5	<5	<10	<5	0.67 J	55.37				
	11/24/2014	<4	4.6	<4	<4	<4	270	274.6	<5	<5	<10	<5	<5	6.1				
	4/2/2015	<4	3.6 J	<4	<4	10	320	333.6	<4.8	<4.8	<9.5	<4.8	<4.8	3.6				
	6/17/2015	<4	9.6	<4	<4	<4	390	399.6	<4.7	<4.7	<9.4	<4.7	<4.7	2.9				
	9/2/2015	<4	<4	<4	<4	<4	170	170	<5	<5	<10	<5	<5	1.7				
	11/5/2015	<5	4.3 J	<5	<5	<5	280	284.3	<4.6	<4.6	<9.3	<4.6	<4.6	2.16				
	3/30/2016	<5	<5	<5	<5	<5	180	180	<4.7	<4.7	<9.4	<4.7	<4.7	3				
	5/23/2016	<5	4.1 J	<5	<5	<5	250	254.1	<5	<5	<10	<5	<5	1.1				
	9/7/2016	<2	<2	<2	<2	<2	92 J	102.9	<5	<5	<9.9	<5	<5	0.53				
	11/3/2016	<5	3.7	<5	<5	<5	250	277.7	<4.7	<4.7	<9.4	<4.7	<4.7	1.17				
	2/27/2017	<5	<5	<5	<5	<5	110	131	<4.9	<4.9	<9.8	<4.9	<4.9	2.04				
	6/13/2017	<5	<5	<5	<5	<5	260	260	<5	<5	<10	<5	<5	2.9				
	8/17/2017	<5	14	<5	<5	<5	550	564	<5	<5	<10	<5	<5	5.4				
	11/21/2017	<1	3.6	<1	0.38 J	<1	140	146.98	<5	<5	<10	<5	<5	2.5	140	80%		140
PS-06	11/17/2009	<1	<1	<1	<1	0.61 J	<1	0.61	<25	<25	<50	<25	<25	0				
	10/10 - 11/10	ORC-A Application																
	3/24/2011	<10	<10	<10	<10	<10	<10	0	<5.2	1.8 J	45	<5.2	1.9 J	48.7				
	6/29/2011	<1	<1	<1	<1	2.7	<1	2.7	<4.7	1.3 J	36	<4.7	<4.7	37.3				
	9/30/2011	<5	<5	<5	<5	<5	<5	0	<26	<26	8.9 J	<26	<26	8.9				
	11/25/2011	<4	<4	<4	<4	<4	<4	0	<4.7	1.3 J	11	<4.7	<4.7	12.3				
	3/28/2012	<4	<4	<4	<4	<4	<4	0	<4.7	<4.7	2.9 J	<4.7	<4.7	2.9				
	6/21/2012	<4	<4	<4	<4	<4	<4	0	<4.7	0.75 J	3.5 J	<4.7	<4.7	4.25				
	9/14/2012	No Sample Collected																
	12/4/2012	<5	<5	<5	<5	<5	<5	0	<4.9	<4.9	<9.7	<4.9	<4.9	0				
	3/27/2013	<5	<5	<5	<5	<5	<5	4.6	<25	<25	<49	<25	<25	0				
	5/31/2013	<5	<5	<5	<5	<5	<5	3.1	<4.9	<4.9	0.63	<4.9	<4.9	0.98				
	9/5/2013	<5	<5	<5	<5	<5	<5	0	<4.8	<4.8	0.74	<4.8	<4.8	0.74				
	12/2/2013	<5	<5	<5	<5	<5	<5	0	<5	<5	<10	<5	<5	0.47				
	3/21/2014	<5	<5	<5	<5	<5	<5	0	<5	<5	<10	<5	<5	1.3				
	6/19/2014	<1	<1	<1	<1	<1	<1	1.2	<1.9	<9.5	<9.5	<1.9	<1.9	1.68				
	9/3/2014	<5	<5	<5	<5	<5	<5	0	<5	<5	<10	<5	<5	0				
	11/24/2014	<5	<5	<5	<5	<5	<5	0	<4.9	<4.9	<9.7	<4.9	<4.9	3.1				
	4/2/2015	<5	<5	<5	<5	<5	<5	0	<4.7	<4.7	0.59 J	<4.7	<4.7	0.59				
	6/17/2015	<5	<5	<5	<5	<5	<5	0	<4.7	<4.7	<9.3	<4.7	<4.7	0				
	9/1/2015	<5	<5	<5	<5	<5	<5	13	<4.8	<4.8	<9.6	<4.8	<4.8	0				
	11/4/2015	<5	<5	<5	<5	<5	<5	0	<23	<23	<47	<23	<23	0				
	3/29/2016	<5	<5	<5	<5	<5	<5	2.3	<4.7	<4.7	<9.5	<4.7	<4.7	0.31				
	5/23/2016	<1	<1	1.1	<1	<1	1.6	7.9	<5.1	<5.1	0.67 J	<5.1	<5.1	1.53				
	9/7/2016	<5	<5	<5	<5	<5	<5	0	<4.9	<4.9	<9.7	<4.9	<4.9	0				
	11/3/2016	<5	<5	<5	<5	<5	<5	0	<4.6	<4.6	<9.3	<4.6	<4.6	0				
	2/27/2017	<1	<1	<1	<1	<1	<1	3.6	<4.8	<4.8	<9.7	<4.8	<4.8	0				
	6/13/2017	<2	<2	<2	<2	<2	<2	1.2	<5	<5	<10	<5	<5	0				
	8/17/2017	<5	<5	<5	<5	<5	<5	0	<25	<25	<50	<25	<25	0				
	11/21/2017	<1	<1	<1	<1	<1	<1	1.1	<25	<25	<50	<25	<25	0				

		1,2,4-Trichlorobenzene	1,2-Dichlorobenzene	1,3-Dicholorbenzene	1,4-Dicholorbenzene	Benzene	Chlorobenzene	Total TCL VOCs	2,4-Dichlorophenol	2,4-Dimethylphenol	Aniline	Benzo(a)pyrene	Phenol	Total TCL SVOCs				
Class GA Standard**		5	3	3	3	1	5	--	1	1	5	0	1	--				
	11/19/2009	130	11	<1	2	7.6	5900	6050.6	<5	<5	<9.9	<5	<5	0	5900		5900	
	10/10 - 11/10	ORC-A Application																
	3/24/2011	180	16	<5	<5	120	3000	3316	<24	<24	<47	<24	<24	0				
	6/29/2011	130	<50	<50	<50	25 J	5900	6055	<4.7	<4.7	<9.4	<4.7	<4.7	0				
	9/30/2011	34	3.8	<1	2.3	4.8	1100	1144.9	0.75 J	<5.3	<11	<5.3	<5.3	0.75				
	11/25/2011	280	24	<4	<4	4	2100	2408	<4.7	<4.7	<9.4	<4.7	<4.7	0				
	3/27/2012	74 J	5	<1	1.8 J	11 J	6600	6691.8	<4.7	<4.7	<9.4	<4.7	<4.7	0				
	6/21/2012	<80	<80	<80	<80	<80	6700	6700	<4.7	<4.7	<9.4	<4.7	<4.7	0				
	9/14/2012	270	<100	<100	<100	<100	8700	8727	<4.8	<4.8	<9.6	<4.8	<4.8	8.7				
	12/3/2012	<100	<100	<100	<100	<100	4600	4600	<4.9	<4.9	<9.8	<4.9	<4.9	2.1				
	3/26/2013	21	2.1	<1.4	1	280	6500	6804.1	<5	<5	<9.9	<5	<5	2.2				
	5/31/2013	<100	<100	<100	<100	410	6400	6863	<4.8	<4.8	<9.6	<4.8	0.66	8.16				
	9/5/2013	<100	<100	<100	<100	51	6900	6951	<4.8	<4.8	<9.7	<4.8	<4.8	1.3				
	12/2/2013	<100	<100	<100	<100	61	8200	8261	<5	<5	<10	<5	<5	0				
	3/20/2014	<100	<100	<100	<100	370	9400	9770	<5	<5	<10	<5	0.39	4.99				
RFI-20A	6/18/2014	ORC Application																
	6/19/2014	<100	<100	<100	<100	<100	9600	9600	<1.9	<9.6	<9.6	<1.9	<1.9	12				
	9/3/2014	7.3	<5	<5	<5	<5	61	68.3	0.86 J	<5	<10	<5	<5	2.96				
	11/24/2014	3.4	<1	<1	<1	<1	28	31.4	<5	<5	<10	<5	<5	3.3				
	4/2/2015	0.55 J	<1	<1	<1	1	57	62.45	<4.7	<4.7	<9.5	<4.7	<4.7	0				
	6/17/2015	<5	<5	<5	<5	<5	41	41	<4.7	<4.7	<9.4	<4.7	<4.7	0				
	9/1/2015	<5	<5	<5	<5	<5	32	52	<4.7	<4.7	<9.4	<4.7	<4.7	0				
	11/4/2015	<1	<1	<1	<1	<1	41	41	<4.7	<4.7	<9.4	<4.7	<4.7	4.7				
	3/30/2016	<1	<1	<1	<1	0.43 J	35	35.43	<4.6	<4.6	<9.3	<4.6	<4.6	0				
	5/23/2016	<1	<1	<1	<1	<1	24	27	<4.9	<4.9	<9.8	<4.9	<4.9	0				
	9/7/2016	2.7	<1	<1	<1	<1	24	29.98	<4.8	<4.8	<9.6	<4.8	<4.8	0				
	11/3/2016	<1	<1	<1	<1	<1	7	7	<4.6	<4.6	<9.2	<4.6	<4.6	0				
	2/27/2017	<1	<1	<1	<1	<1	13	13	<4.8	<4.8	<9.6	<4.8	<4.8	0				
	6/13/2017	<1	<1	<1	<1	<1	22	22	<5	<5	<10	<5	<5	0				
	8/17/2017	<1	<1	<1	<1	<1	25	25	<5	<5	<10	<5	<5	0				
	11/21/2017	<1	<1	<1	<1	<1	12	12	<5	<5	<10	<5	<5	4.18	12	99.8%		12
	11/19/2009	1200	8.6 J	1600	110	9.6 J	830	3758.2	7.9	<5.5	<11	<5.5	0.47 J	8.37	830		830	
	10/10 - 11/10	ORC-A Application																
	3/24/2011	1100	7.1	1000	69	9.5	680	2865.6	3.8 J	<25	<50	<25	<25	3.8				
	6/29/2011	330	2	200	15	2.8	180	729.8	0.57 J	<4.8	<9.6	<4.8	<4.8	0.57				
	9/30/2011	2000	8.6	340	34	17	1100	3499.6	25 J	<5.4	<11	<5.4	<5.4	25				
	11/25/2011	410	<4	180	15	<4	320	925	<4.7	<4.7	<9.4	<4.7	<4.7	0				
	3/28/2012	1900	10	960	69	9.7	740	3688.7	0.81	<4.8	2.5 J	<4.8	<4.8	3.31				
	6/22/2012	820	4.2	250	22	7.5	470	1573.7	0.87 J	<4.7	2 J	<4.7	<4.7	2.87				
	9/17/2012	230	<4	160	11	3 J	180	584	<4.8	<4.8	1.5 J	<4.8	<4.8	6.9				
	12/4/2012	250	<4	280	18	<4	120	668	<4.9	<4.9	<9.8	<4.9	<4.9	1.2				
	3/27/2013	400	<4	780	22	<4	37	1239	4.5	<4.9	1.4	<4.9	<4.9	8.76				
	6/1/2013	400	<10	610	22	<10	200	1239.5	4.1	<4.7	1.4	<4.7	<4.7	7.9				
	9/5/2013	610	<10	1300	66	10	610	2596	14	<4.8	1.6	<4.8	<4.8	25.3				
	12/3/2013	350	<10	730	32	<10	120	1232	1.3	<5	<10	<5	<5	3.24				
	3/21/2014	450	<10	1700	86	6.7	540	2782.7	<5	<5	1.7	<5	0.45	11.22				
RFI-31A	6/19/2014	130	<5	390	19	<5	120	664	<2	<9.8	<9.8	<2	<2	0				
	9/3/2014	1100	27	<25	<25	<25	97	1224	<5	<5	<10	<5	1.3 J	7.06				
	11/24/2014	310	13	5.9	49	2.3 J	65	445.2	1.9 J	<5	<10	<5	<5	8.44				
	4/2/2015	84	<25	<25	<25	<25	<25	84	<4.6	<4.6	<9.3	<4.6	<4.6	0				
	6/17/2015	670	21 J	<25	24 J	<25	84	799	<4.7	<4.7	<9.4	<4.7	<4.7	0				
	9/2/2015	420	15	15	18	<10	91	559	0.61 J	<4.8	<9.6	<4.8	<4.8	0.61				
	11/5/2015	1000	35	82	43	<20	140	1300	0.92 J	<4.7	<9.4	<4.7	<4.7	2.32				
	3/30/2016	100	4.4	120	14	<2	4.5	244.8	1.4 J	<4.7	0.63 J	<4.7	<4.7	2.03				
	5/23/2016	260	10	170	20	<5	20	480	0.93 J	<4.7	<9.4	<4.7	<4.7	0.93				
	9/7/2016	710	31	550	55	<25	120	1466	2 J	<4.6	0.64 J	<4.6	<4.6	2.64				
	11/3/2016	580	34	700	66	<25	150	1530	2.1 J	<4.6	<9.2	<4.6	<4.6	3.17				
	2/28/2017	29	<10	78	<10	<10	<10	126	0.61 J	<4.7	<9.4	<4.7	<4.7	0.61				
	6/13/2017	140 J	9.9	220 J	18	<8	55	442.9	0.9 J	<5	<10	<5	<5	0.9				
	8/17/2017	110	5	120	10	<10	46	291	1.1 J	<5	<10	<5	<5	1.1				
	11/21/2017	450	33	420	55	1.8	150	1110.1	1.2 J	<5	<10	<5	<5	3.21	150	82%		150
																	1306.468	80.5
																		94%

Notes:

* - Sample collected from well PS-05 which was replaced by PS-05A after it was destroyed.

** - Results compared to NYDEC Class GA water quality standards

J - Result is estimated

Results are shown in ug/L.

Blue cells indicate groundwater monitoring events completed prior to the remediation activities.

Appendix C

VI Report

June 8, 2017

Mr. John Yensan
South Buffalo Development LLC
333 Ganson Street
Buffalo, New York 14203

Re: Soil Vapor Intrusion Investigation Report
Former Buffalo Color Corporation Site – Area C
NYSDEC BCP Site No. C915231
140 Lee Street, Buffalo, NY

Dear Mr. Yensan:

In accordance with our April 26, 2017 Work Plan, Benchmark Environmental Engineering & Science, PLLC in association with TurnKey Environmental Restoration, LLC (Benchmark TurnKey) performed a Soil Vapor Intrusion (SVI) Investigation to evaluate potential soil vapor intrusion risks in existing on-site buildings planned for reuse and to complete a qualitative on-site exposure assessment via the vapor pathway at the above referenced Site (Figures 1 and 2). Field activities were conducted May 15-16, 2017. A description of our field-modified approach to the work, sampling activities, analytical results, and conclusions are presented in the sections below. Representative project photographs are presented in Attachment 1.

WORK PLAN MODIFICATIONS

Due to the presence of a debris pile (Building #204) and water/debris-filled basements (Buildings #207/208) at various locations within on-site buildings and to ensure that representative samples were collected, the number of subslab vapor (SSV) samples was reduced from 12 to 10 in the field to avoid these areas. Observable details regarding building conditions at the time of sample collection are presented on Figure 3. No other modifications to our April 2017 Work Plan were required.

SAMPLING ACTIVITIES

Prior to sample collection, Benchmark TurnKey personnel completed a building inventory questionnaire for each structure sampled making note of any chemical usage (see Attachment 2). The SVI sampling program consisted of collecting and analyzing ten (10) SSV, five (5) indoor air (IA), and two (2) outdoor air (OA) samples over a two day period at the locations shown on Figure 3. Field forms completed for each sample location are presented in Attachment 3.

At each SSV sampling location, Benchmark TurnKey personnel used a hand-held hammer drill to advance a ¾-inch diameter hole through the approximate 8-inch thick concrete floor slabs. Following advancement through the concrete, the following procedure was implemented at each SSV location: approximately 10 inches of sub-slab soil/fill was removed from each hole; a ¼-inch hollow plastic tube was immediately inserted into the concrete core hole; modeling clay was used to seal the tubing against the floor and prevent short-circuiting of surface air; SSV seal integrity was field tested using a temporary shroud, helium tracer gas, and helium detector; and, a 1-liter evacuated Summa canister fitted with a 4-hour regulator was attached to the line. Concurrent with SSV sampling, IA samples were collected proximate to the subslab samples. The outdoor upwind sample locations were also collected concurrently based on the wind direction observed each day. In general, Summa canister valves for co-located samples (SSVs and IAs) remained closed until each SSV setup was complete and each canister in their respective positions. The valves were then opened for the required 4-hour collection period.

Following sample collection, Benchmark TurnKey personnel closed and capped each canister valve. Concrete openings were repaired with a cement patch. The air samples were then shipped, under chain-of-custody command, to Centek Laboratories, LLC located in Syracuse, New York for analysis of Target Compound List (TCL) volatile organic compounds (VOCs) (Method TO-15).

ANALYTICAL RESULTS

The analytical data summary report is presented in Attachment 4. SVI laboratory data are tabulated and summarized in Table 1. The data were then screened against decision matrices contained in the NYSDOH *Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006 and June 2007)* (Attachment 5), with the resultant recommended action presented on Table 2. To facilitate data review, Table 2 presents the results in micrograms per cubic meter (ug/m^3) in lieu of parts per billion by volume (ppbv) relative to the seven chlorinated-VOCs (cVOCs) currently addressed under NYSDOH Guidance. To evaluate the potential risk posed by VOCs detected in indoor air, each reported concentration was compared to the following criteria in Table 3:

1. NYSDOH guidance criteria - 90th percentile concentrations identified in the *Summary of Indoor and Outdoor Levels of Volatile Organic Compounds from Fuel Oil Heated Homes in NYS, 1997 – 2003*, revised date November 14, 2005.
2. NYSDEC DAR-1, *Guidelines for the Evaluation and Control of ambient Air Contaminants Under Part 212*, August 10, 2016. Specifically the Annual Guideline Concentrations (AGC) for toxic air contaminants from process emission sources in New York State. DAR-1 Guidelines establish an AGC to quantitatively assess a contaminant's potential to impact public health and the environment.
3. American Conference of Governmental Industrial Hygienists (ACGIH), 2017 Threshold Limit Values (TLVs). The TLV of a chemical substance is a level to which

it is believed a worker can be exposed day after day for a working lifetime without adverse effects.

4. Occupational Safety and Health Administration (OSHA) Permissible Exposure Limit (PEL). The PEL is a legal limit in the United States for exposure of an employee to a chemical substance or physical agent.

The outdoor ambient air sample results (OA-1 and OA-2) are also included in Table 3 to provide background data.

INVESTIGATION FINDINGS

Based on a review of the analytical results and comparisons to the presented criteria, the following observations are apparent:

- **Table 1:** Of the seven NYSDOH cVOCs, the following were detected:
  - 1,1,1-Trichloroethene (1,1,1-TCE) at SSV-4, -5, -6, and -10;
  - Carbon tetrachloride at SSV-6, IA-1, -2, -3, -4, -5, and OA-1, and -2;
  - Tetrachloroethene (PCE) at SSV-4, -5, -6, -7, and -10; and,
  - Trichloroethene (TCE) at OA-1.

- **Table 1:** Additional petroleum-based constituents were detected at low concentrations in subslab, indoor, and/or outdoor air.

- **Table 1:** Freon 11 and Freon 12 were detected a low concentrations in each subslab, indoor air, and outdoor air sample.

- **Table 2:** Although four of the seven NYSDOH cVOCs were detected, a comparison using the respective NYSDOH Matrices (1 or 2, as presented in Attachment 5) of each co-located subslab, indoor air, and outdoor air sample indicate these detections are each characterized as requiring ***No Further Action*** **(NFA)**.

- **Table 3:** VOC concentrations for each indoor air sample were below the NYSDOH guidance criteria for all analyzed compounds except chlorobenzene, which was detected in indoor air sample IA-1 at a concentration slightly above the guidance criteria (0.74 vs. <0.25 ug/m^3, respectively). Even though chlorobenzene was also detected in the co-located subslab vapor samples associated with indoor air sample IA-1 (SSV-1, SSV-2, and SSV-3), the detected concentration was well below the DAR-1 AGC, ACGIH TLV, and OSHA PEL values. Chlorobenzene was not detected in any other subslab vapor nor indoor air sample.

CONCLUSIONS/RECOMMENDATIONS

Based on the results of the SVI investigation at the Site, Benchmark TurnKey offers the following conclusions/recommendations:

- The building inventory did not identify any observable chemicals being stored, however one large steam driven ammonia pump was identified. The status and/or presence of petroleum- and/or refrigerant-based fluids remaining within this pump is not known.

- Numerous VOCs were detected in subslab, indoor air, and outdoor air samples collected for this assessment.

- Several petroleum-based VOCs, typical of urban industrial sites, were detected at low concentrations and may be associated with historic site operations.

- Freon 11 and Freon 12, commonly used refrigerant-based VOCs prior to 1996, were detected at low concentrations in each sample collected; possible remnants of historic refrigeration activities performed in the Icehouse Building (#223). According to the researched literature, if Freon compounds are spilled onto soil, only a portion will evaporate while the remainder will potentially leach downward into groundwater due to its inability to adsorb onto soil. Fully halogenated hydrocarbons such as Freons 11 and 12 are very resistant to chemical and biological degradation and are likely to be persistent contaminants if they reach groundwater.

- A comparison of the SVI data to the NYSDOH Matrices indicate NFA for the seven regulated cVOCs.

- Chlorobenzene at indoor air location IA-1 was the only compound reported at a concentration slightly above the NYSDOH guidance criteria. Although chlorobenzene was also detected in the subslab samples associated with this indoor air location, it was reported at a concentration well below the DAR-1 ACG, ACGIH TLV, and OSHA PEL values.

- Water observed within historic basement areas should be removed and these voids completely filled-in to prevent an obvious potential physical hazard as well as a possible soil vapor pathway (i.e., groundwater to soil vapor).

It is TurnKey's opinion that based on this assessment, no air quality concerns related to the seven NYSDOH-regulated cVOCs were identified within the Site buildings tested that would require additional action. However, petroleum- and refrigerant-based VOCs were detected in subslab vapor, indoor air, and outdoor air samples at concentrations that are considered remnants of the industrial past of the Site. Consequently and at a minimum, installation of a vapor barrier and passive subslab depressurization system beneath ground-level flooring is recommended.

DECLARATION/LIMITATIONS

Benchmark personnel monitored the field activities performed during the SVI Investigation at the 140 Lee Street Site according to generally accepted practices and the scope of work provided to South Buffalo Development, LLC by Benchmark TurnKey.

This report has been prepared for the exclusive use of South Buffalo Development, LLC. The contents of this report are limited to information available at the time of the site investigation activities and to data referenced herein, and assume all referenced information sources to be true and accurate. The reported findings and conclusions may be relied upon only at the discretion of South Buffalo Development, LLC. Use of or reliance upon this report or its findings by any other person or entity is prohibited without written permission of Benchmark Environmental Engineering & Science, PLLC and TurnKey Environmental Restoration, LLC.

Please contact us if you have any questions or require additional information.

Sincerely,
Benchmark Environmental Engineering & Science, PLLC
TurnKey Environmental Restoration, LLC

Bryan C. Hann
Senior Project Manager

ec: J. Black (SBD)
T. Forbes (Benchmark)
M. Lesakowski (TurnKey)

File: 0378-017-004

TABLES

TABLE 1

SUMMARY OF SOIL VAPOR ANALYTICAL RESULTS

Soil Vapor Investigation Report
140 Lee Street Site (C915231)
Buffalo, New York

Parameter	Sample Location & Sample Date																
	SSV-1 05/15/2017	SSV-2 05/15/2017	SSV-3 05/15/2017	SSV-4 05/15/2017	SSV-5 05/15/2017	SSV-6 05/15/2017	SSV-7 05/16/2017	SSV-8 05/16/2017	SSV-9 05/16/2017	SSV-10 05/16/2017	IA-1 (INDOOR) 05/15/2017	IA-2 (INDOOR) 05/15/2017	IA-3 (INDOOR) 05/16/2017	IA-4 (INDOOR) 05/16/2017	IA-5 (INDOOR) 05/16/2017	OA-1 (OUTDOOR) 05/15/2017	OA-2 (OUTDOOR) 05/16/2017
TO-15 Volatile Organic Compounds (VOCs) - ug/m ^{3}																	
1,1,1-Trichloroethane	ND	ND	ND	1.8	4.5	31	ND	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichlorotrifluoroethane (Freon 113)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	1.8	1.1	1.2	ND	1.3	1.2	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorotetrafluoroethane (Freon 114)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.54 J	ND	ND	0.59 J	0.64	0.49	0.64 J	0.88	ND	ND	0.59	ND	ND	ND	ND	ND	ND
1,3-butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dioxane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2,4-trimethylpentane	1	0.61 J	0.65 J	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND
4-ethyltoluene	ND	ND	ND	ND	ND	ND	0.98	ND	ND	ND	0.54	ND	ND	ND	ND	ND	ND
Acetone	20	19	18	55	57	80	92	220	38	370	22	23	25	26	35	27	43
Allyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	3.9	1.9	2	11	8.9	2.1	14	38	1.3	190	3.6	ND	ND	ND	ND	ND	ND
Benzyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	ND	ND	ND	13	30	28	2.6	1.2	1.4	21	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	2.4	ND	ND	ND	ND	0.57	0.57	0.63	0.57	0.63	0.57	0.5
Chlorobenzene	17	3.4	1.2	ND	ND	ND	ND	ND	ND	ND	0.74	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	1.1	15	1.4	ND	0.59	2	ND	ND	ND	ND	ND	ND	ND
Chloromethane	1.4	1.5	1.6	0.41	0.37	ND	0.58	1.1	ND	ND	1.8	2.3	1.5	1.5	2.7	2	1.4
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	0.89	0.76	0.86	29	27	85	150	59	3.8	450	0.69	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane (Freon 12)	2.8	2.8	2.8	2.9	2.7	2.6	2.6	2.7	2.7	2.6	2.7	2.8	2.9	3.1	2.9	2.7	2.8
Ethyl acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.86	ND	ND	ND	ND	ND	ND
Ethylbenzene	1.3	0.87	0.82	2.2	2.1	2.5	4.7	12	2.3	13	1.3	ND	ND	ND	ND	ND	ND
Heptane	1.5	1.1	0.82	53	24	23	220	420	7.1	490	0.9	ND	ND	ND	ND	ND	ND
Hexachloro-1,3-butadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexane	2.1	1	1.2	71	50	42	93	81	4.4	960	1.8	ND	ND	ND	ND	ND	ND
Isopropyl alcohol	2.5	1.2	2.2	4.8	3.2	2.1	ND	4.3	4.3	ND	1.9	3.4	1.6	2.5	2.2	3.2	2.3
m&p-Xylene	5.2	3.3	3.2	7.5	6.6	8.3	15	36	7.5	36	5.6	ND	ND	ND	0.52 J	ND	ND
Methyl Butyl Ketone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl Ethyl Ketone	1.1	0.88	1	5	9.1	4	11	18	5.6	36	0.83	0.56 J	0.65 J	0.71 J	0.65 J	0.74	0.86 J
Methyl Isobutyl Ketone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	1.1	1.1	1.3	2	1.9	2.7	1.8	2.3	1.5	1.4	0.45	0.63	0.56	0.45 J	0.8	0.52	0.56
o-Xylene	2	1.5	1.3	4	3.6	4.6	7.9	15	3.7	16	2	ND	ND	ND	ND	ND	ND
Propylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.47	ND	ND	ND	ND	ND	ND
Tetrachloroethene (PCE)	ND	ND	ND	3.5	2	1.6	2.6	ND	ND	1.6	ND	ND	ND	ND	ND	ND	ND
Tetrahydrofuran	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	7.5	4.6	4.7	18	13	11	78	2000	13	220	14	0.57	0.57	0.98	0.83	0.64	0.68
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

TABLE 1

SUMMARY OF SOIL VAPOR ANALYTICAL RESULTS

Soil Vapor Investigation Report
140 Lee Street Site (C915231)
Buffalo, New York

Parameter	Sample Location & Sample Date																
	SSV-1 05/15/2017	SSV-2 05/15/2017	SSV-3 05/15/2017	SSV-4 05/15/2017	SSV-5 05/15/2017	SSV-6 05/15/2017	SSV-7 05/16/2017	SSV-8 05/16/2017	SSV-9 05/16/2017	SSV-10 05/16/2017	IA-1 (INDOOR) 05/15/2017	IA-2 (INDOOR) 05/15/2017	IA-3 (INDOOR) 05/16/2017	IA-4 (INDOOR) 05/16/2017	IA-5 (INDOOR) 05/16/2017	OA-1 (OUTDOOR) 05/15/2017	OA-2 (OUTDOOR) 05/16/2017
TO-15 Volatile Organic Compounds (VOCs) - ug/m ^{3}																	
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene (TCE)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.59	ND
Trichlorofluoromethane (Freon 11)	1.7	1.7	1.7	1.9	1.8	1.7	2	2.1	1.9	7.6	1.7	1.7	1.9	1.9	1.9	1.7	1.9
Vinyl acetate	ND	ND	ND	ND	38	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Bromide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride (VC)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
1. ND = compound concentration below reporting limit.
2. J = The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.

Color Code:
= one of seven compounds regulated by the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006 / June 2007).

TABLE 2

COMPARISON OF AIR SAMPLNG RESULTS TO NYSDOH SVI GUIDANCE MATRICES

Soil Vapor Investigation Report
140 Lee Street Site (C915231)
Buffalo, New York

Sample Location	Carbon Tetrachloride		Trichloroethene (TCE)		Vinyl Chloride		Tetrachloroethene (PCE)		1,1,1 -Trichloroethane		cis-1,2-Dichloroethene		1,1-Dichloroethene	
	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 1	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 1	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 1	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 2	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 2	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 2	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 2
FORMER ICEHOUSE FREEZING TANK (#223) & FORMER COOLING AREAS														
SSV-1	ND	NFA	ND	NFA	ND	NFA	ND	NFA	ND	NFA	ND	NFA	ND	NFA
SSV-2	ND	NFA	ND	NFA	ND	NFA	ND	NFA	ND	NFA	ND	NFA	ND	NFA
SSV-3	ND	NFA	ND	NFA	ND	NFA	ND	NFA	ND	NFA	ND	NFA	ND	NFA
SSV-4	ND	NFA	ND	NFA	ND	NFA	3.5	NFA	1.8	NFA	ND	NFA	ND	NFA
IA-1	0.57		ND		ND		ND		ND		ND		ND	
OA-1	0.57	Background	0.59	Background	ND	Background	ND	Background	ND	Background	ND	Background	ND	Background

Sample Location	Carbon Tetrachloride		Trichloroethene (TCE)		Vinyl Chloride		Tetrachloroethene (PCE)		1,1,1 -Trichloroethane		cis-1,2-Dichloroethene		1,1-Dichloroethene	
	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 1	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 1	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 1	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 2	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 2	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 2	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 2
FORMER OUTDOOR DELIVERIES (#222) & FORMER ICEHOUSE SOUTHEAST STORAGE (#221) AREAS														
SSV-5	ND	NFA	ND	NFA	ND	NFA	2.0	NFA	4.5	NFA	ND	NFA	ND	NFA
SSV-6	2.4	NFA	ND	NFA	ND	NFA	1.6	NFA	31	NFA	ND	NFA	ND	NFA
IA-2	0.57		ND		ND		ND		ND		ND		ND	
OA-1	0.57	Background	0.59	Background	ND	Background	ND	Background	ND	Background	ND	Background	ND	Background

Sample Location	Carbon Tetrachloride		Trichloroethene (TCE)		Vinyl Chloride		Tetrachloroethene (PCE)		1,1,1 -Trichloroethane		cis-1,2-Dichloroethene		1,1-Dichloroethene	
	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 1	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 1	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 1	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 2	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 2	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 2	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 2
FORMER POWERHOUSE BOILER BAY (#207)														
SSV-7	ND	NFA	ND	NFA	ND	NFA	2.6	NFA	ND	NFA	ND	NFA	ND	NFA
IA-3	0.63		ND		ND		ND		ND		ND		ND	
OA-2	0.5	Background	ND	Background	ND	Background	ND	Background	ND	Background	ND	Background	ND	Background

TABLE 2

COMPARISON OF AIR SAMPLNG RESULTS TO NYSDOH SVI GUIDANCE MATRICES

Soil Vapor Investigation Report
140 Lee Street Site (C915231)
Buffalo, New York

Sample Location	Carbon Tetrachloride		Trichloroethene (TCE)		Vinyl Chloride		Tetrachloroethene (PCE)		1,1,1 -Trichloroethane		cis-1,2-Dichloroethene		1,1-Dichloroethene	
	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 1	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 1	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 1	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 2	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 2	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 2	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 2
FORMER POWERHOUSE CRANE BAY (#208) & FORMER BOILER DOCK AREA														
SSV-8	ND	NFA	ND	NFA	ND	NFA	ND	NFA	ND	NFA	ND	NFA	ND	NFA
IA-5	0.63		ND		ND		ND		ND		ND		ND	
OA-2	0.5	Background	ND	Background	ND	Background	ND	Background	ND	Background	ND	Background	ND	Background

Sample Location	Carbon Tetrachloride		Trichloroethene (TCE)		Vinyl Chloride		Tetrachloroethene (PCE)		1,1,1 -Trichloroethane		cis-1,2-Dichloroethene		1,1-Dichloroethene	
	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 1	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 1	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 1	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 2	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 2	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 2	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 2
FORMER TRANSFER AREA (#205)														
SSV-9	ND	NFA	ND	NFA	ND	NFA	ND	NFA	ND	NFA	ND	NFA	ND	NFA
SSV-10	ND	NFA	ND	NFA	ND	NFA	1.6	NFA	ND	NFA	ND	NFA	ND	NFA
IA-4	0.57		ND		ND		ND		ND		ND		ND	
OA-2	0.5	Background	ND	Background	ND	Background	ND	Background	ND	Background	ND	Background	ND	Background

Notes:
1. ND = compound concentration below reporting limit.
2. NFA = No Further Action

Color Code:
= NYSDOH Matrix 1 Compounds
= NYSDOH Matrix 2 Compounds

TABLE 3

SUMMARY OF INDOOR AIR SAMPLING RESULTS VS NYSDOH INDOOR & OUTDOOR AIR CRITERIA

Soil Vapor Investigation Report
140 Lee Street Site (C915231)
Buffalo, New York

Parameter [1]	NYSDOH Indoor 90th Percentile Comparison [2]	DAR-1 AGC [3]	ACGIH 2017 TLV [4]	OSHA PEL [5]	Sample Location & Sample Date						
					IA-1 (INDOOR) 05/15/2017	IA-2 (INDOOR) 05/15/2017	IA-3 (INDOOR) 05/16/2017	IA-4 (INDOOR) 05/16/2017	IA-5 (INDOOR) 05/16/2017	OA-1 (OUTDOOR) [6] 05/15/2017	OA-2 (OUTDOOR) [6] 05/16/2017
TO-15 Volatile Organic Compounds (VOCs) - ug/m [3]											
1,2,4-Trimethylbenzene	9.5	6	NV	NV	2.2	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	3.6	6	NV	NV	0.59	ND	ND	ND	ND	ND	ND
2,2,4-trimethylpentane (Isooctane)	NV	3,300	NV	NV	1.2	ND	ND	ND	ND	ND	ND
4-ethyltoluene	NV	NV	NV	NV	0.54	ND	ND	ND	ND	ND	ND
Acetone	110	30,000	593,865	2,400,000	22	23	25	26	35	27	43
Benzene	15	0.13	1,597	31,947	3.6	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	0.81	0.17	31,460	62,920	0.57	0.57	0.63	0.57	0.63	0.57	0.5
Chlorobenzene	<0.25	60	10,000	350,000	**0.74**	ND	ND	ND	ND	ND	ND
Chloromethane	3.3	90	103,252	206,503	1.8	2.3	1.5	1.5	2.7	2	1.4
Cyclohexane	8.1	6,000	344,213	1,050,000	0.69	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane (Freon 12)	15	12,000	1,000,000	4,950,000	2.7	2.8	2.9	3.1	2.9	2.7	2.8
Ethyl Acetate	NV	3,400	400,000	1,400,000	0.86	ND	ND	ND	ND	ND	ND
Ethylbenzene	7.4	1,000	86,838	435,000	1.3	ND	ND	ND	ND	ND	ND
Heptane	19	3,900	1,639,264	2,000,000	0.9	ND	ND	ND	ND	ND	ND
Hexane	18	700	176,217	1,800,000	1.8	ND	ND	ND	ND	ND	ND
Isopropyl alcohol	NV	7,000	491,000	980,000	1.9	3.4	1.6	2.5	2.2	3.2	2.3
m&p-Xylene	12	100	434,233	435,000	5.6	ND	ND	ND	0.52 J	ND	ND
Methyl Ethyl Ketone	16	5,000	589,775	590,000	0.83	0.56 J	0.65 J	0.71 J	0.65 J	0.74	0.86 J
Methylene chloride	22	60	173,701	86,851	0.45	0.63	0.56	0.45 J	0.8	0.52	0.56
o-Xylene	7.6	100	434,233	435,000	2	ND	ND	ND	ND	ND	ND
Styrene	1.3	1,000	85,186	425,930	0.47	ND	ND	ND	ND	ND	ND
Toluene	58	5,000	75,362	753,620	14	0.57	0.57	0.98	0.83	0.64	0.68
Trichloroethene	0.48	0.2	10,000	25,000	ND	ND	ND	ND	ND	0.59	ND
Trichlorofluoromethane (Freon 11)	17	5,000	5,618,814	5,600,000	1.7	1.7	1.9	1.9	1.9	1.7	1.9

Notes:

1. Only those parameters detected above the method detection limit, at a minimum of one location, are presented in this table.
2. NYSDOH Guidance Criteria - Indoor Air 90th percentile concentrations presented in "Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes" published by the NYSDOH and revised November 14, 2005.
3. NYSDEC Division of Air Resources (DAR) Annual Guideline Concentrations (AGC) for toxic air contaminants emitted from process emission sources in NYS.
4. American Conference of Governmental Industrial Hygienists, 2017 Threshold Limit Values.
5. Occupational Safety and Health Administration (OSHA) Permissible Exposure Limit (PEL).
6. Outdoor Ambient sample results included on this table to provide background data.

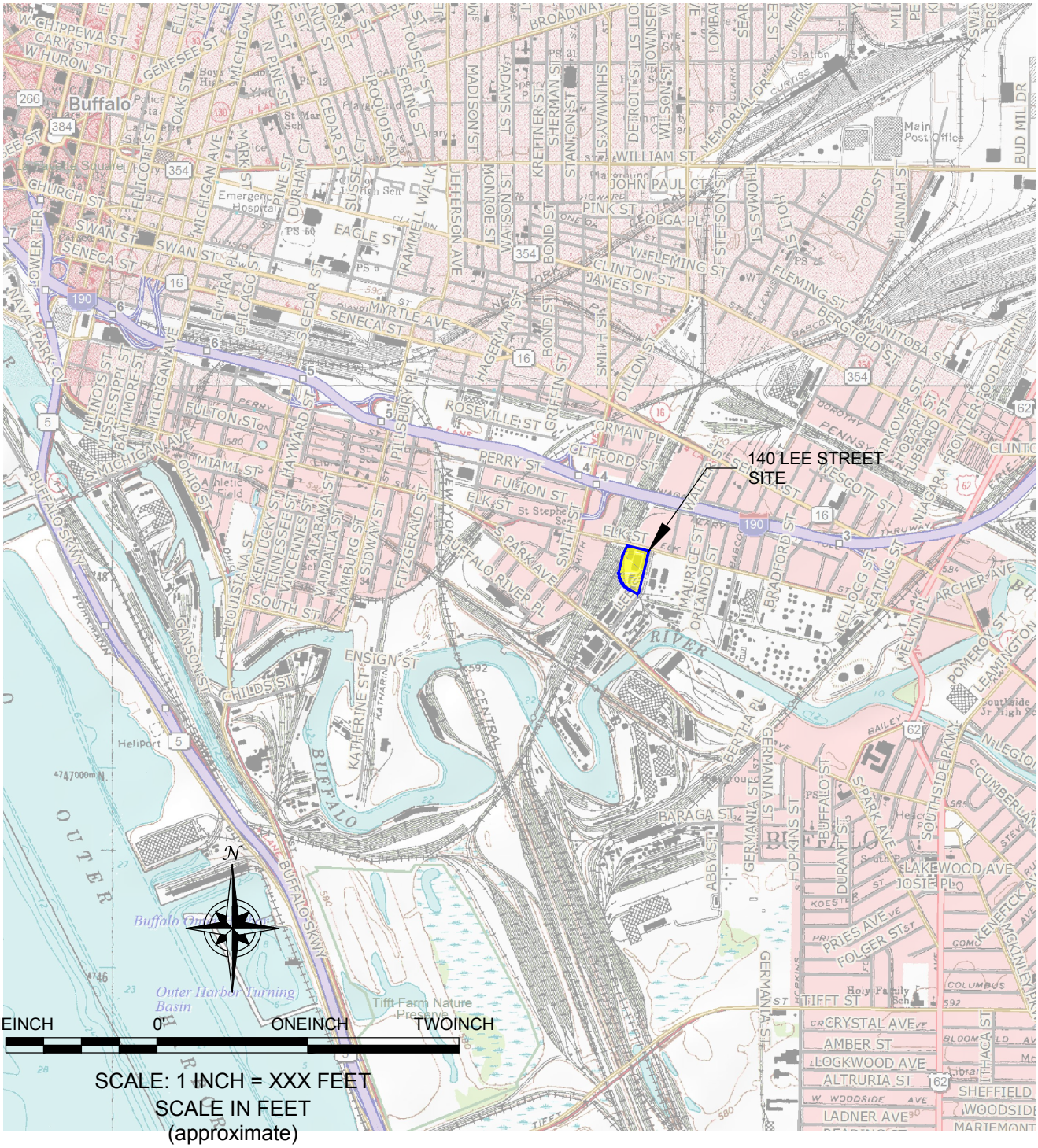
Definitions:

J = The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
NA = not applicable, therefore not provided.
ND = compound concentration below reporting limit.
NV = no value

Color Code:

= concentration exceeds the NYSDOH Summary of Indoor Levels of VOC for Fuel Oil Heated Homes - 90th percentile (2005).

FIGURES



BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
TURNKEY ENVIRONMENTAL RESTORATION, LLC
2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

PROJECT NO.: 0368-017-007

DATE: MAY 2017

DRAFTED BY: BCH

SOIL VAPOR INTRUSION INVESTIGATION REPORT

140 LEET STREET SITE
BUFFALO, NEW YORK

PREPARED FOR

SOUTH BUFFALO DEVELOPMENT, LLC

DISCLAIMER: ***PROPERTY OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC. & TURNKEY ENVIRONMENTAL RESTORATION, LLC*** *IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC & TURNKEY ENVIRONMENTAL RESTORATION, LLC.*

LEGEND:

- AREA C PROPERTY BOUNDARY
- EXISTING BUILDING
- ROAD
- RAILROAD
- COVER SYSTEM - ASPHALT OR CONCRETE
- COVER SYSTEM - GRAVEL
- COVER SYSTEM - SOIL / GRASS



N

100' 0' 100' 200'

SCALE: 1 INCH = 100 FEET
SCALE IN FEET
(approximate)

DATE: MAY 2017
DRAFTED BY: BCH

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
TURNKEY ENVIRONMENTAL RESTORATION, LLC

2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

JOB NO.: 0378-017-007

SITE PLAN

SOIL VAPOR INTRUSION INVESTIGATION REPORT

140 LEE STREET SITE
BUFFALO, NEW YORK

PREPARED FOR

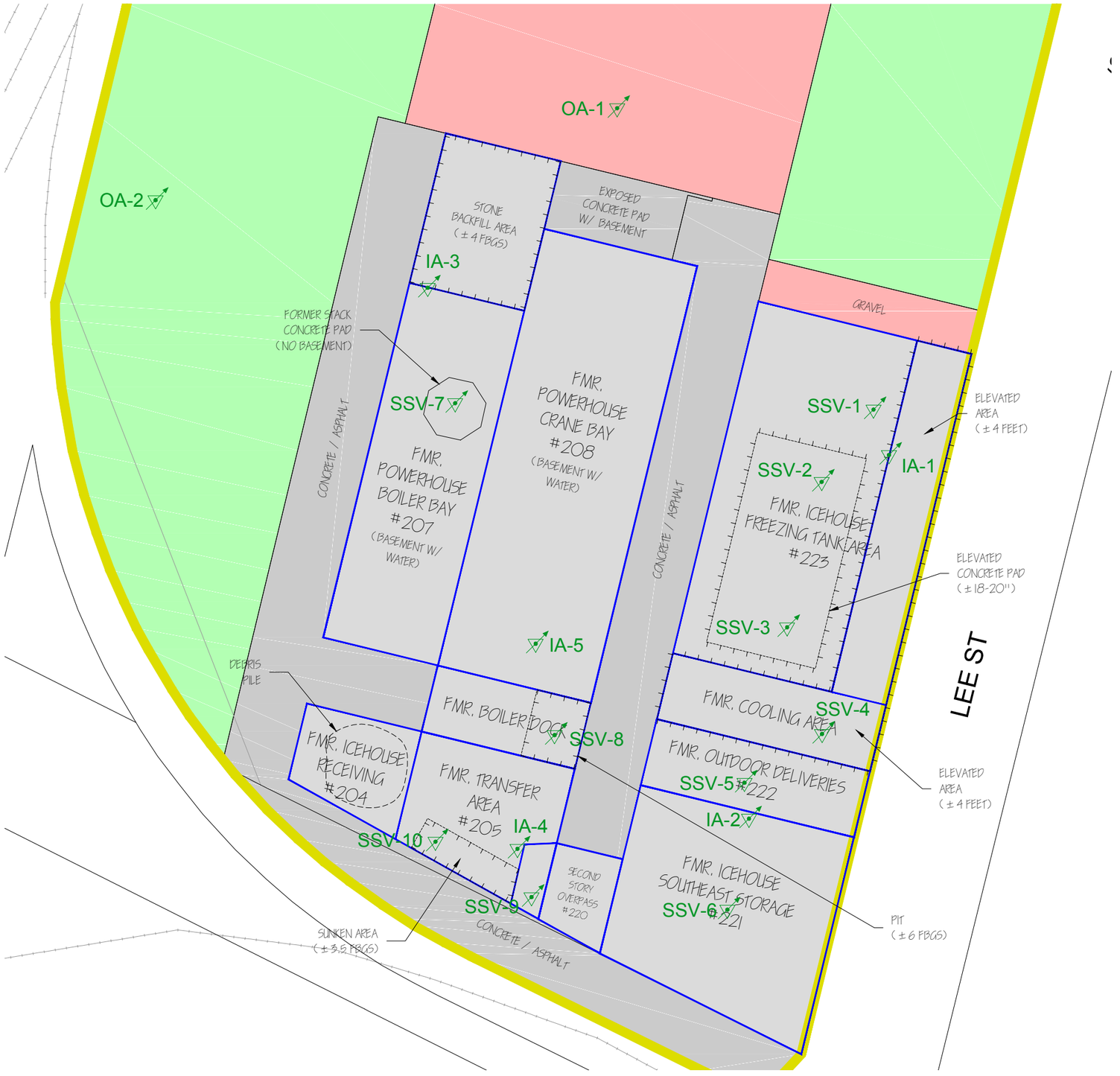
SOUTH BUFFALO DEVELOPMENT LLC

FIGURE 2

DISCLAIMER: PROPERTY OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC. & TURNKEY ENVIRONMENTAL RESTORATION, LLC *IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC & TURNKEY ENVIRONMENTAL RESTORATION, LLC.*

LEGEND:

- AREA C PROPERTY BOUNDARY
- EXISTING BUILDING
- ROAD
- RAILROAD
- COVER SYSTEM - ASPHALT OR CONCRETE
- COVER SYSTEM - GRAVEL
- COVER SYSTEM - SOIL / GRASS
- SSV-1 SUBSLAB VAPOR LOCATION (10)
- IA-1 INDOOR AIR LOCATION (5)
- OA OUTDOOR AIR LOCATION (2, ONE PER DAY)



SCALE: 1 INCH = 50 FEET
SCALE IN FEET
(approximate)

DATE: MAY 2017
DRAFTED BY: BCH

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

JOB NO.: 0378-017-007

SOIL VAPOR SAMPLE LOCATIONS

SOIL VAPOR INTRUSION INVESTIGATION REPORT

140 LEE STREET SITE
BUFFALO, NEW YORK

PREPARED FOR

SOUTH BUFFALO DEVELOPMENT LLC

FIGURE 3

DISCLAIMER: PROPERTY OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC. & TURNKEY ENVIRONMENTAL RESTORATION, LLC IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC & TURNKEY ENVIRONMENTAL RESTORATION, LLC.

ATTACHMENT 1

REPRESENTATIVE PROJECT PHOTOGRAPHS

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.:
South Buffalo Development LLC	140 Lee Street	0378-017-004

Photo No.	Date
1	05/15/17

Direction Photo Taken:
South.

Description:
Advancement of SSV-3.

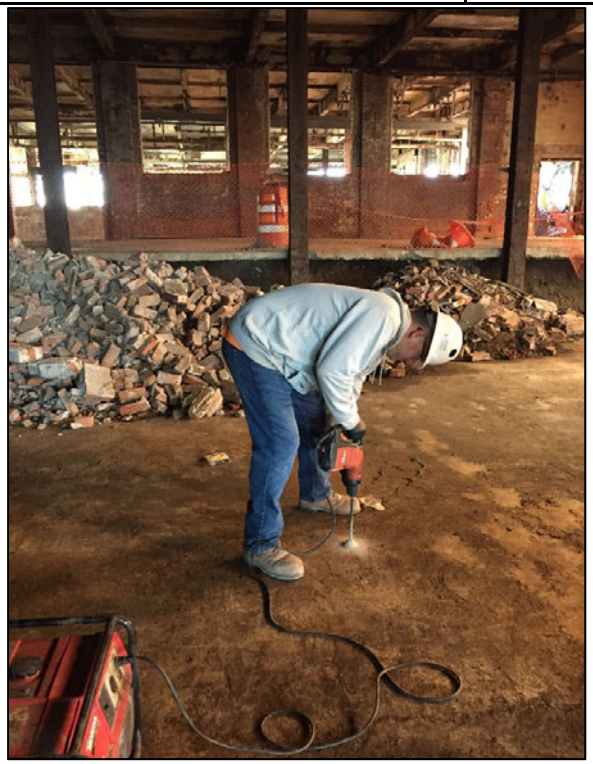


Photo No.	Date
2	05/15/17

Direction Photo Taken:
North.

Description:
Interior of former Icehouse building. Approximate to SSV-4 sampling location.



Prepared By: TAB

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.:
South Buffalo Development LLC	140 Lee Street	0378-017-004

Photo No.	Date
3	05/15/17

Direction Photo Taken:
West

Description:
Ambient outdoor air sample location Day 1.



Photo No.	Date
4	05/15/17

Direction Photo Taken:
East.

Description:
Steam driven ammonia pump.



Prepared By: TAB

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.:
South Buffalo Development LLC	140 Lee Street	0378-017-004

Photo No.	Date
5	05/15/17

Direction Photo Taken:
West.

Description:
SSV-3 sample location.



Photo No.	Date
6	05/15/17

Direction Photo Taken:
South.

Description:
SSV-5 monitoring location (foreground on floor) and IA-2 (background on window sill).



Prepared By: TAB

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.:
South Buffalo Development LLC	140 Lee Street	0378-017-004

Photo No.	Date
7	05/15/17

Direction Photo Taken:
North.

Description:
Former boiler house building No. 207. South end of building, filled with crushed stone.



Photo No.	Date
8	05/15/17

Direction Photo Taken:
South.

Description:
Former Boiler house building No. 207. Elevated floor portion of building.



Prepared By: TAB

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.:
South Buffalo Development LLC	140 Lee Street	0378-017-004

Photo No.	Date
9	05/15/17

Direction Photo Taken:
South.

Description:
Advancement of SSV-7 in former boiler house No. 207. Located on former smoke stack pad.

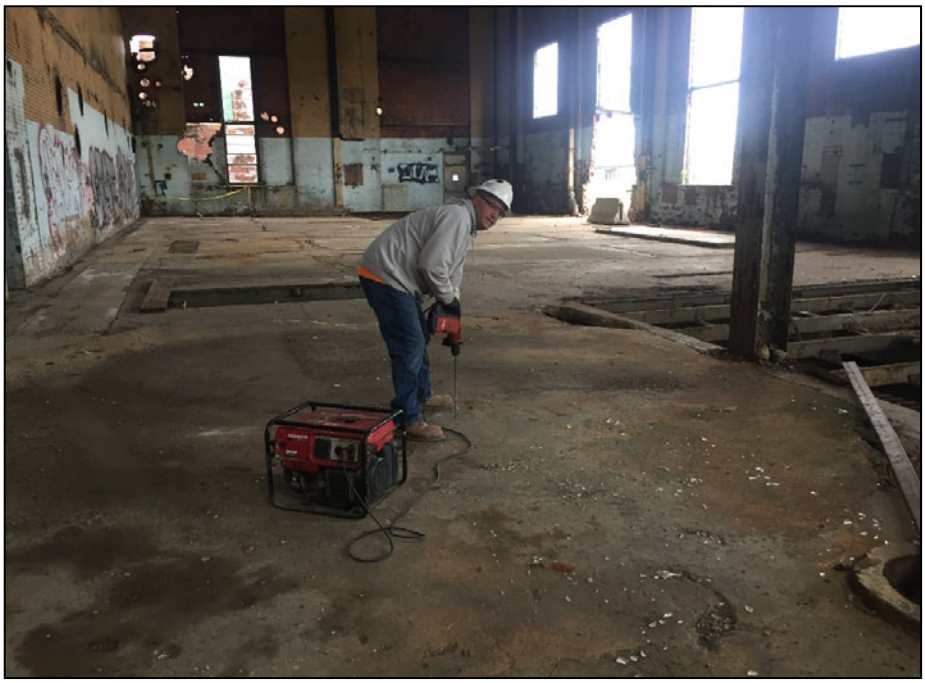


Photo No.	Date
10	05/15/17

Direction Photo Taken:
East.

Description:
Building No. 209. Advancement of SSV-10 in former secondary containment.



Prepared By: TAB

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.:
South Buffalo Development LLC	140 Lee Street	0378-017-004

Photo No.	Date
9	05/15/17

Direction Photo Taken:
East.

Description:
Break down of SSV-7. Former smoke stack outline visible to the south of location.



Photo No.	Date
10	05/15/17

Direction Photo Taken:
North

Description:
South and east wall of former Boiler House building No. 207.



Prepared By: TAB

ATTACHMENT 2

BUILDING INVENTORY QUESTIONNAIRE

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

INDOOR AIR QUALITY QUESTIONNAIRE & BUILDING INVENTORY

Project Name: SVI Investigation | Project No. 0378-017-004

Project Location: 140 Lee St, Buffalo NY | Client: South Buffalo Development, llc

Preparer's Name: Tom Behrendt | Date/Time: 5/15/17

Preparer's Affiliation: Benchmark/Turnkey | Phone No: (716) 856-0599

Purpose of Investigation: Soil Vapor Intrusion

1. OCCUPANT:

Interviewed: yes (no)

Last Name: | First Name:

Address:

County:

Home Phone: | Office Phone:

Number of Occupants/persons at this location: | Age of Occupants:

2. OWNER OR LANDLORD: (check if same as occupant_____)

Interviewed: yes (no)

Last Name: | First Name:

Address:

County:

Home Phone: | Office Phone:

3. BUILDING CHARACTERISTICS

Type of Building: check appropriate response)

☐ Residential	☐ School	☐ Commercial/Multi-use
☒ Industrial	☐ Church	☐ Other:

If the property is residential, type? (check appropriate response)

☐ Ranch	☐ 2-Family	☐ 3-Family
☐ Raised Ranch	☐ Split Level	☐ Colonial
☐ Cape Cod	☐ Contemporary	☐ Mobile Home
☐ Duplex	☐ Apartment House	☐ Townhouse/Condo
☐ Modular	☐ Log Home	☒ Other: Factory

If multiple units, how many?

If the property is commercial, type?

Business Type(s):

Does it include residences (i.e., multi-use)? yes (no) If yes, how many?

Other Characteristics:

Number of floors 2 to 4 | Building age 100 years

Is the building insulated? yes (no) | How air tight? tight average (not tight)

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

INDOOR AIR QUALITY QUESTIONNAIRE & BUILDING INVENTORY

4. AIR FLOW

Use air current tubes or tracer smoke to evaluate air flow patterns and qualitatively describe:

Air current Tubes/tracers smoke not neccessary No doors/windows

Airflow between floors: yes

Airflow near source: yes

Outdoor air infiltration: yes

Infiltration into air ducts: ~~yes~~ N/A

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (check all that apply)

a. Above grade construction:	☐ wood frame	☒ concrete	☐ stone
b. Basement type:	☒ full	☐ crawlspace	☐ slab
c. Basement floor:	☒ concrete	☐ dirt	☐ stone
d. Basement floor:	☐ uncovered	☐ covered	☒ covered with water
e. Concreter floor:	☒ unsealed	☐ sealed	☐ sealed with
f. Foundation walls:	☐ poured	☐ block	☒ stone
g. Foundation walls:	☒ unsealed	☐ sealed	☐ sealed with
h. The basement is:	☒ wet	☐ damp	☐ dry
i. The basement is:	☐ finished	☒ unfinished	☐ partially finished
j. Sump present?	☐ yes	☒ no	
k. Water in Sump?	☐ yes	☐ no	☒ not applicable

Basement/Lowest level depth below grade: ~10 ft

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

Concrete Floor Is Cracked In multiple places.

6. HEATING, VENTING, and AIR CONDITIONING (check all that apply)

Type of heating system(s) used in this building: (check all that apply - note primary)

- ☐ Hot air circulation
- ☐ Heat pump
- ☐ Hot water baseboard
- ☐ Space Heaters
- ☐ Steam radiation
- ☐ Radiant floor
- ☐ Electric baseboard
- ☐ Wood stove
- ☐ Outdoor wood boiler
- ☒ Other NONE

The primary type of fuel used is:

- ☐ Natural Gas
- ☐ Fuel oil
- ☐ Kerosene
- ☐ Electric
- ☐ Propane
- ☐ Solar
- ☐ Wood
- ☐ Coal
- ☒ Other NONE

Domestic hot water tank fueled by: NA

Boiler/furnace located in:

- ☐ Basement
- ☐ Outdoors
- ☐ Main Floor
- ☒ Other NONE

Air Conditioning:

- ☐ Central Air
- ☐ Window units
- ☐ Open Windows
- ☒ None NONE

Are there air distribution ducts present? ☐ yes ☒ no

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

N/A

7. OCCUPANCY

Is basement/lowest level occupied? ☐ Full-time ☐ Occaisionally ☐ Seldom ☒ Almost Never

Level	General Use of Each Floor (e.g., family room, bedroom, laundry, workshop, storage)
Basement	Empty
First Floor	Empty
Second Floor	Empty
Third Floor	Empty
Fourth Floor	Empty

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

INDOOR AIR QUALITY QUESTIONNAIRE & BUILDING INVENTORY

8. FACTORS THAT MAY influence INDOOR AIR QUALITY

a. Is there an attached garage? ☐ yes ☒ no

b. Does the garage have a separate heating unit? ☐ yes ☐ no ☒ NA

c. Are petroleum-powered machines or vehicles stored in the garage? ☒ yes ☐ no ☐ NA
(e.g., lawnmower, atv, car) If yes, please specify: Steam Driven Ammonia pump

d. Has the building ever had a fire? ☐ yes ☒ no
If yes, when? _____

e. Is a kerosene or unvented gas space heater present? ☐ yes ☒ no
If yes, where? _____

f. Is there a workshop or hobby/craft area? ☐ yes ☒ no
If yes, where and type? _____

g. Is there smoking in the building? ☐ yes ☒ no
If yes, how frequently? _____

h. Have cleaning products been used recently? ☐ yes ☒ no
If yes, when & type? _____

i. Have cosmetic products been used recently? ☐ yes ☒ no
If yes, when & type? _____

j. Has painting/staining been done in the last 6 months? ☐ yes ☒ no
If yes, where & when? _____

k. Is there new carpet, drapes, or other textiles? ☐ yes ☒ no
If yes, where & when? _____

l. Have air fresheners been used recently? ☐ yes ☒ no
If yes, when & type? _____

m. Is there a kitchen exhaust fan? ☐ yes ☒ no
If yes, where vented? _____

n. Is there a bathroom exhaust fan? ☐ yes ☒ no
If yes, where vented? _____

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

INDOOR AIR QUALITY QUESTIONNAIRE & BUILDING INVENTORY

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY (continued)

o. Is there a clothes dryer? ☐ yes ☒ no

If yes, is it vented outside? yes no

p. Has there been a pesticide application? ☐ yes ☒ no

If yes, when & type?

q. Are there odors in the building? ☐ yes ☒ no

If yes, please describe?

r. Do any of the building occupants use solvents at work? ☐ yes ☒ no

(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist)

If yes, what types of solvents are used?

If yes, are their clothes washed at work? ☐ yes ☐ no

s. Do any of the building occupants regularly use or work at a dry-cleaning service?

(check appropriate response)

☐ yes, use dry-cleaning regularly (weekly) ☒ no

☐ yes, use dry-cleaning infrequently (monthly or less) ☐ unknown

☐ yes, work at a dry-cleaning service

t. Is there a radon mitigation system for the building/structure? ☐ yes ☒ no

If yes, date of installation?

Is the system active or passive?

9. WATER AND SEWAGE

Water Supply: ☐ Public Water ☐ Drilled Well ☐ Driven Well ☐ Dug Well

☒ Other: None (cut at street)

Sewage Disposal: ☐ Public Sewer ☐ Septic Tank ☐ Leach Field ☐ Dry Well

☒ Other: None (cut at street)

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: NA

b. Residents choose to: ☐ remain in home ☐ relocate to friends/family ☐ relocate to hotel/motel

c. Responsibility for costs associated with reimbursement explained? ☐ yes ☐ no

d. Relocation package provided and explained to residents? ☐ yes ☐ no

11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:

See Fig 3 In Final Report

First Floor:

See Fig 3 In Final Report

12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s), and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and spetic system, if applicable, and a qualifying statement to help locate the site on a topographic map.

See Fig 3 In Final Report

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

INDOOR AIR QUALITY QUESTIONNAIRE & BUILDING INVENTORY

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: No olfactory / none used

List specific products found in the structure that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition [1]	Chemical Ingredients	Field Instrument Reading (units)	Photo (Y/N)
NONE	Observed					

Notes:

1. Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D).**
2. Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

ATTACHMENT 3

FIELD FORMS

BENCHMARK
ENVIRONMENTAL
ENGINEERING &
SCIENCE, PLLC

AIR CANISTER FIELD RECORD

PROJECT INFORMATION:

Project:	144 Lee Street
Job No:	0378-017-007
Location:	Buffalo, NY
Field Staff:	RLD/ ~~NAS~~ TNS
Client:	OSC, Inc

SAMPLE I.D.: SSV-1

WEATHER CONDITIONS:

Ambient Air Temp. - A.M.:	
Ambient Air Temp. - P.M.:	
Wind Direction:	
Wind Speed:	
Precipitation:	

Size of Canister:	
Canister Serial No.:	324
Flow Controller No.:	1166
Sample Date(s):	3/15/17
Shipping Date:	
Sample Type: ☐ Indoor Air ☐ Outdoor Air	
☑ Subslab, complete section below ☐ Soil Gas	
Soil Gas Probe Depth:	

FIELD SAMPLING INFORMATION:

READING	TIME	VACUUM (inches Hg) or PRESSURE (psig)	DATE	INITIALS
Lab Vacuum (on tag)				
Field Vacuum Check [1]				
Initial Field Vacuum [2]	0935	-30	3/15/17	
Final Field Vacuum [3]	1352	-5	3/15/17	
Duration of Sample Collection				

LABORATORY CANISTER PRESSURIZATION:

Initial Vacuum (inches Hg and psia)		
Final Pressure (psia)		
Pressurization Gas		

SUBSLAB SHROUD:

Shroud Helium Concentration:

Calculated tubing volume: x 3 =

Purged Tubing Volume Concentration:

Is the purged volume concentration less than or equal to 10% in shroud?

☐ YES, continue sampling

☐ NO, improve surface seal and retest

COMPOSITE TIME (hours)	FLOW RATE RANGE (ml/min)
15 Min.	316 - 333
0.5 Hours	158 - 166.7
1	79.2 - 83.3
2	39.6 - 41.7
4	19.8 - 20.8
6	13.2 - 13.9
8	9.9 - 10.4
10	7.92 - 8.3
12	6.6 - 6.9
24	3.5 - 4.0

NOTES:

1 Vacuum measured using portable vacuum gauge (provided by Lab)

2 Vacuum measured by canister gauge upon opening valve

3 Vacuum measured by canister gauge prior to closing valve

Signed:

BENCHMARK
ENVIRONMENTAL
ENGINEERING &
SCIENCE, PLLC

AIR CANISTER FIELD RECORD

PROJECT INFORMATION:

Project:	144 Lee Street
Job No:	0378-017-007
Location:	Buffalo, NY
Field Staff:	RLD/ ~~NAS~~ TAB
Client:	OSC, Inc

SAMPLE I.D.: SSV-2

WEATHER CONDITIONS:

Ambient Air Temp. - A.M.:	55°F
Ambient Air Temp. - P.M.:	56 °F
Wind Direction:	NW
Wind Speed:	10-15
Precipitation:	

Size of Canister:	
Canister Serial No.:	243
Flow Controller No.:	1165
Sample Date(s):	5/15/17
Shipping Date:	

Sample Type: ☐ Indoor Air ☐ Outdoor Air
☒ Subslab, complete section below ☐ Soil Gas

Soil Gas Probe Depth:

FIELD SAMPLING INFORMATION:

READING	TIME	VACUUM (inches Hg) or PRESSURE (psig)	DATE	INITIALS
Lab Vacuum (on tag)				
Field Vacuum Check [1]				
Initial Field Vacuum [2]	0917	-30	5/15/17	
Final Field Vacuum [3]	1349	-5	" "	
Duration of Sample Collection				

LABORATORY CANISTER PRESSURIZATION:

Initial Vacuum (inches Hg and psia)		
Final Pressure (psia)		
Pressurization Gas		

SUBSLAB SHROUD:

Shroud Helium Concentration:

Calculated tubing volume: x 3 =

Purged Tubing Volume Concentration:

Is the purged volume concentration less than or equal to 10% in shroud?

☐ YES, continue sampling

☐ NO, improve surface seal and retest

COMPOSITE TIME (hours)	FLOW RATE RANGE (ml/min)
15 Min.	316 - 333
0.5 Hours	158 - 166.7
1	79.2 - 83.3
2	39.6 - 41.7
4	19.8 - 20.8
6	13.2 - 13.9
8	9.9 - 10.4
10	7.92 - 8.3
12	6.6 - 6.9
24	3.5 - 4.0

NOTES:

1 Vacuum measured using portable vacuum gauge (provided by Lab)

2 Vacuum measured by canister gauge upon opening valve

3 Vacuum measured by canister gauge prior to closing valve

Signed:

BENCHMARK
ENVIRONMENTAL
ENGINEERING &
SCIENCE, PLLC

AIR CANISTER FIELD RECORD

PROJECT INFORMATION:

Project:	144 Lee Street
Job No:	0378-017-007
Location:	Buffalo, NY
Field Staff:	RLD/ ~~NAS~~ JAB
Client:	OSC, Inc

SAMPLE I.D.: SSV-3

WEATHER CONDITIONS:

Ambient Air Temp. - A.M.:	55° F
Ambient Air Temp. - P.M.:	58° F
Wind Direction:	NW
Wind Speed:	10-15
Precipitation:	

Size of Canister:	
Canister Serial No.:	225
Flow Controller No.:	388
Sample Date(s):	5/15/17
Shipping Date:	

Sample Type: ☐ Indoor Air ☐ Outdoor Air
☒ Subslab, complete section below ☐ Soil Gas
Soil Gas Probe Depth:

FIELD SAMPLING INFORMATION:

READING	TIME	VACUUM (inches Hg) or PRESSURE (psig)	DATE	INITIALS
Lab Vacuum (on tag)				
Field Vacuum Check [1]				
Initial Field Vacuum [2]	0917	-30	5/15/17	RLD
Final Field Vacuum [3]	1251	-2		
Duration of Sample Collection				

LABORATORY CANISTER PRESSURIZATION:

Initial Vacuum (inches Hg and psia)		
Final Pressure (psia)		
Pressurization Gas		

SUBSLAB SHROUD:

Shroud Helium Concentration:

Calculated tubing volume: x 3 =

Purged Tubing Volume Concentration:

Is the purged volume concentration less than or equal to 10% in shroud?

☐ YES, continue sampling

☐ NO, improve surface seal and retest

COMPOSITE TIME (hours)	FLOW RATE RANGE (ml/min)
15 Min.	316 - 333
0.5 Hours	158 - 166.7
1	79.2 - 83.3
2	39.6 - 41.7
4	19.8 - 20.8
6	13.2 - 13.9
8	9.9 - 10.4
10	7.92 - 8.3
12	6.6 - 6.9
24	3.5 - 4.0

NOTES:

1 Vacuum measured using portable vacuum gauge (provided by Lab)

2 Vacuum measured by canister gauge upon opening valve

3 Vacuum measured by canister gauge prior to closing valve

Signed:

BENCHMARK
ENVIRONMENTAL
ENGINEERING &
SCIENCE, PLLC

AIR CANISTER FIELD RECORD

PROJECT INFORMATION:

Project:	144 Lee Street
Job No:	0378-017-007
Location:	Buffalo, NY
Field Staff:	RLD/ ~~NAS~~ JAB
Client:	OSC, Inc

SAMPLE I.D.: SSV-4

WEATHER CONDITIONS:

Ambient Air Temp. - A.M.:	55 °F
Ambient Air Temp. - P.M.:	56 °F
Wind Direction:	NW
Wind Speed:	10-15
Precipitation:	

Size of Canister:	
Canister Serial No.:	130
Flow Controller No.:	308
Sample Date(s):	
Shipping Date:	5/15/17
Sample Type: ☐ Indoor Air ☐ Outdoor Air	
☑ Subslab, complete section below ☐ Soil Gas	
Soil Gas Probe Depth:	

FIELD SAMPLING INFORMATION:

READING	TIME	VACUUM (inches Hg) or PRESSURE (psig)	DATE	INITIALS
Lab Vacuum (on tag)				
Field Vacuum Check [1]				
Initial Field Vacuum [2]	0955	-30	5/15/17	
Final Field Vacuum [3]	1357	-4	" "	
Duration of Sample Collection				

LABORATORY CANISTER PRESSURIZATION:

Initial Vacuum (inches Hg and psia)		
Final Pressure (psia)		
Pressurization Gas		

SUBSLAB SHROUD:

Shroud Helium Concentration:

Calculated tubing volume: x 3 =

Purged Tubing Volume Concentration:

Is the purged volume concentration less than or equal to 10% in shroud?

☐ YES, continue sampling

☐ NO, improve surface seal and retest

COMPOSITE TIME (hours)	FLOW RATE RANGE (ml/min)
15 Min.	316 - 333
0.5 Hours	158 - 166.7
1	79.2 - 83.3
2	39.6 - 41.7
4	19.8 - 20.8
6	13.2 - 13.9
8	9.9 - 10.4
10	7.92 - 8.3
12	6.6 - 6.9
24	3.5 - 4.0

NOTES:

1 Vacuum measured using portable vacuum gauge (provided by Lab)

2 Vacuum measured by canister gauge upon opening valve

3 Vacuum measured by canister gauge prior to closing valve

Signed:

BENCHMARK
ENVIRONMENTAL
ENGINEERING &
SCIENCE, PLLC

AIR CANISTER FIELD RECORD

PROJECT INFORMATION:

Project:	144 Lee Street
Job No:	0378-017-007
Location:	Buffalo, NY
Field Staff:	RLD/ ~~NAS~~ TAB
Client:	OSC, Inc

SAMPLE I.D.: SSV-5

WEATHER CONDITIONS:

Ambient Air Temp. - A.M.:	55°F
Ambient Air Temp. - P.M.:	58°F
Wind Direction:	~~West~~ NW
Wind Speed:	10-15
Precipitation:	

Size of Canister:	
Canister Serial No.:	1184
Flow Controller No.:	25
Sample Date(s):	5/15/19
Shipping Date:	

Sample Type: ☐ Indoor Air ☐ Outdoor Air
☑ Subslab, complete section below ☐ Soil Gas
Soil Gas Probe Depth:

FIELD SAMPLING INFORMATION:

READING	TIME	VACUUM (inches Hg) or PRESSURE (psig)	DATE	INITIALS
Lab Vacuum (on tag)				
Field Vacuum Check [1]				
Initial Field Vacuum [2]	0915	-30	5/15/19	
Final Field Vacuum [3]	1334	-5	" "	
Duration of Sample Collection				

LABORATORY CANISTER PRESSURIZATION:

Initial Vacuum (inches Hg and psia)		
Final Pressure (psia)		
Pressurization Gas		

SUBSLAB SHROUD:

Shroud Helium Concentration:

Calculated tubing volume: x 3 =

Purged Tubing Volume Concentration:

Is the purged volume concentration less than or equal to 10% in shroud?

☐ YES, continue sampling

☐ NO, improve surface seal and retest

COMPOSITE TIME (hours)	FLOW RATE RANGE (ml/min)
15 Min.	316 - 333
0.5 Hours	158 - 166.7
1	79.2 - 83.3
2	39.6 - 41.7
4	19.8 - 20.8
6	13.2 - 13.9
8	9.9 - 10.4
10	7.92 - 8.3
12	6.6 - 6.9
24	3.5 - 4.0

NOTES:

1 Vacuum measured using portable vacuum gauge (provided by Lab)

2 Vacuum measured by canister gauge upon opening valve

3 Vacuum measured by canister gauge prior to closing valve

Signed:

BENCHMARK
ENVIRONMENTAL
ENGINEERING &
SCIENCE, PLLC

AIR CANISTER FIELD RECORD

PROJECT INFORMATION:

Project:	144 Lee Street
Job No:	0378-017-007
Location:	Buffalo, NY
Field Staff:	RLD/ ~~NAS~~ TAS
Client:	OSC, Inc

SAMPLE I.D.: SSV-6

WEATHER CONDITIONS:

Ambient Air Temp. - A.M.:	55°F
Ambient Air Temp. - P.M.:	58°F
Wind Direction:	NW
Wind Speed:	10-15
Precipitation:	

Size of Canister:	
Canister Serial No.:	316
Flow Controller No.:	1160
Sample Date(s):	5/15/17
Shipping Date:	

Sample Type: ☐ Indoor Air ☐ Outdoor Air
☑ Subslab, complete section below ☐ Soil Gas
Soil Gas Probe Depth:

FIELD SAMPLING INFORMATION:

READING	TIME	VACUUM (inches Hg) or PRESSURE (psig)	DATE	INITIALS
Lab Vacuum (on tag)				
Field Vacuum Check [1]				
Initial Field Vacuum [2]	0954	-29	5/15/17	
Final Field Vacuum [3]	1329	-7	5/15/17	
Duration of Sample Collection				

LABORATORY CANISTER PRESSURIZATION:

Initial Vacuum (inches Hg and psia)		
Final Pressure (psia)		
Pressurization Gas		

SUBSLAB SHROUD:

Shroud Helium Concentration:

Calculated tubing volume: x 3 =

Purged Tubing Volume Concentration:

Is the purged volume concentration less than or equal to 10% in shroud?

☐ YES, continue sampling

☐ NO, improve surface seal and retest

COMPOSITE TIME (hours)	FLOW RATE RANGE (ml/min)
15 Min.	316 - 333
0.5 Hours	158 - 166.7
1	79.2 - 83.3
2	39.6 - 41.7
4	19.8 - 20.8
6	13.2 - 13.9
8	9.9 - 10.4
10	7.92 - 8.3
12	6.6 - 6.9
24	3.5 - 4.0

NOTES:

1 Vacuum measured using portable vacuum gauge (provided by Lab)

2 Vacuum measured by canister gauge upon opening valve

3 Vacuum measured by canister gauge prior to closing valve

Signed:

BENCHMARK
ENVIRONMENTAL
ENGINEERING &
SCIENCE, PLLC

AIR CANISTER FIELD RECORD

PROJECT INFORMATION:

Project:	144 Lee Street
Job No:	0378-017-007
Location:	Buffalo, NY
Field Staff:	RLD/ ~~NAS~~ TAB
Client:	OSC, Inc

SAMPLE I.D.: SSV-7

WEATHER CONDITIONS:

Ambient Air Temp. - A.M.:	58°F
Ambient Air Temp. - P.M.:	58°F
Wind Direction:	W
Wind Speed:	<5 mph
Precipitation:	LT RAIN

Size of Canister:	
Canister Serial No.:	106
Flow Controller No.:	296
Sample Date(s):	5/16/17
Shipping Date:	

Sample Type: ☐ Indoor Air ☐ Outdoor Air ☑ Subslab, complete section below ☐ Soil Gas

Soil Gas Probe Depth:

FIELD SAMPLING INFORMATION:

READING	TIME	VACUUM (inches Hg) or PRESSURE (psig)	DATE	INITIALS
Lab Vacuum (on tag)				
Field Vacuum Check [1]				
Initial Field Vacuum [2]	0945	~30	5/16/17	
Final Field Vacuum [3]	1307	5		
Duration of Sample Collection				

LABORATORY CANISTER PRESSURIZATION:

Initial Vacuum (inches Hg and psia)		
Final Pressure (psia)		
Pressurization Gas		

SUBSLAB SHROUD:

Shroud Helium Concentration:

Calculated tubing volume: x 3 =

Purged Tubing Volume Concentration:

Is the purged volume concentration less than or equal to 10% in shroud?

☐ YES, continue sampling

☐ NO, improve surface seal and retest

COMPOSITE TIME (hours)	FLOW RATE RANGE (ml/min)
15 Min.	316 - 333
0.5 Hours	158 - 166.7
1	79.2 - 83.3
2	39.6 - 41.7
4	19.8 - 20.8
6	13.2 - 13.9
8	9.9 - 10.4
10	7.92 - 8.3
12	6.6 - 6.9
24	3.5 - 4.0

NOTES:

1 Vacuum measured using portable vacuum gauge (provided by Lab)

2 Vacuum measured by canister gauge upon opening valve

3 Vacuum measured by canister gauge prior to closing valve

Signed:

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

AIR CANISTER FIELD RECORD

PROJECT INFORMATION:

Project:	144 Lee Street
Job No:	0378-017-007
Location:	Buffalo, NY
Field Staff:	RLD/ ~~NAS~~ TAB
Client:	OSC, Inc

SAMPLE I.D.: SSV-8

WEATHER CONDITIONS:

Ambient Air Temp. - A.M.:	58°F
Ambient Air Temp. - P.M.:	72°F
Wind Direction:	W
Wind Speed:	≤5 mph
Precipitation:	LT RAIN

Size of Canister:	
Canister Serial No.:	459
Flow Controller No.:	281
Sample Date(s):	5/16/17
Shipping Date:	

Sample Type: ☐ Indoor Air ☐ Outdoor Air ☑ Subslab, complete section below ☐ Soil Gas

Soil Gas Probe Depth:

FIELD SAMPLING INFORMATION:

READING	TIME	VACUUM (inches Hg) or PRESSURE (psig)	DATE	INITIALS
Lab Vacuum (on tag)				
Field Vacuum Check [1]				
Initial Field Vacuum [2]	0944	-30	5/16/17	
Final Field Vacuum [3]	1330	-5	" "	
Duration of Sample Collection				

LABORATORY CANISTER PRESSURIZATION:

Initial Vacuum (inches Hg and psia)		
Final Pressure (psia)		
Pressurization Gas		

SUBSLAB SHROUD:

Shroud Helium Concentration:

Calculated tubing volume: x 3 =

Purged Tubing Volume Concentration:

Is the purged volume concentration less than or equal to 10% in shroud?

☐ YES, continue sampling

☐ NO, improve surface seal and retest

COMPOSITE TIME (hours)	FLOW RATE RANGE (ml/min)
15 Min.	316 - 333
0.5 Hours	158 - 166.7
1	79.2 - 83.3
2	39.6 - 41.7
4	19.8 - 20.8
6	13.2 - 13.9
8	9.9 - 10.4
10	7.92 - 8.3
12	6.6 - 6.9
24	3.5 - 4.0

NOTES:

1 Vacuum measured using portable vacuum gauge (provided by Lab)

2 Vacuum measured by canister gauge upon opening valve

3 Vacuum measured by canister gauge prior to closing valve

Signed:

BENCHMARK
ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

AIR CANISTER FIELD RECORD

PROJECT INFORMATION:

Project:	144 Lee Street
Job No:	0378-017-007
Location:	Buffalo, NY
Field Staff:	RLD/ ~~NAS~~ JAB
Client:	OSC, Inc

SAMPLE I.D.: SSV-9

WEATHER CONDITIONS:

Ambient Air Temp. - A.M.:	58°F
Ambient Air Temp. - P.M.:	58°F
Wind Direction:	W
Wind Speed:	<5 mph
Precipitation:	LT RAIN

Size of Canister:	
Canister Serial No.:	336
Flow Controller No.:	260
Sample Date(s):	5/16/17
Shipping Date:	
Sample Type:	☐ Indoor Air ☐ Outdoor Air
	☒ Subslab, complete section below ☐ Soil Gas
Soil Gas Probe Depth:	

FIELD SAMPLING INFORMATION:

READING	TIME	VACUUM (inches Hg) or PRESSURE (psig)	DATE	INITIALS
Lab Vacuum (on tag)				
Field Vacuum Check [1]				
Initial Field Vacuum [2]	0951	-30	5/16/17	
Final Field Vacuum [3]	1356	-2	5/16/17	
Duration of Sample Collection				

LABORATORY CANISTER PRESSURIZATION:

Initial Vacuum (inches Hg and psia)		
Final Pressure (psia)		
Pressurization Gas		

SUBSLAB SHROUD:

Shroud Helium Concentration:

Calculated tubing volume: x 3 =

Purged Tubing Volume Concentration:

Is the purged volume concentration less than or equal to 10% in shroud?

☐ YES, continue sampling

☐ NO, improve surface seal and retest

COMPOSITE TIME (hours)	FLOW RATE RANGE (ml/min)
15 Min.	316 - 333
0.5 Hours	158 - 166.7
1	79.2 - 83.3
2	39.6 - 41.7
4	19.8 - 20.8
6	13.2 - 13.9
8	9.9 - 10.4
10	7.92 - 8.3
12	6.6 - 6.9
24	3.5 - 4.0

NOTES:

1 Vacuum measured using portable vacuum gauge (provided by Lab)

2 Vacuum measured by canister gauge upon opening valve

3 Vacuum measured by canister gauge prior to closing valve

Signed:

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

AIR CANISTER FIELD RECORD

PROJECT INFORMATION:

Project:	144 Lee Street
Job No:	0378-017-007
Location:	Buffalo, NY
Field Staff:	RLD/ NAS
Client:	OSC, Inc

SAMPLE I.D.: SSV-10

WEATHER CONDITIONS:

Ambient Air Temp. - A.M.:	58°F
Ambient Air Temp. - P.M.:	58°F
Wind Direction:	W
Wind Speed:	<5 mph
Precipitation:	Li Rain

Size of Canister:	
Canister Serial No.:	350
Flow Controller No.:	1163
Sample Date(s):	5/16/17
Shipping Date:	

Sample Type: ☐ Indoor Air ☐ Outdoor Air

☒ Subslab, complete section below ☐ Soil Gas

Soil Gas Probe Depth:

FIELD SAMPLING INFORMATION:

READING	TIME	VACUUM (inches Hg) or PRESSURE (psig)	DATE	INITIALS
Lab Vacuum (on tag)				
Field Vacuum Check [1]				
Initial Field Vacuum [2]	0958	> -30	5/16/17	
Final Field Vacuum [3]	1109	-5	5/16/17	
Duration of Sample Collection				

LABORATORY CANISTER PRESSURIZATION:

Initial Vacuum (inches Hg and psia)		
Final Pressure (psia)		
Pressurization Gas		

SUBSLAB SHROUD:

Shroud Helium Concentration:

Calculated tubing volume: x 3 =

Purged Tubing Volume Concentration:

Is the purged volume concentration less than or equal to 10% in shroud?

☐ YES, continue sampling

☐ NO, improve surface seal and retest

COMPOSITE TIME (hours)	FLOW RATE RANGE (ml/min)
15 Min.	316 - 333
0.5 Hours	158 - 166.7
1	79.2 - 83.3
2	39.6 - 41.7
4	19.8 - 20.8
6	13.2 - 13.9
8	9.9 - 10.4
10	7.92 - 8.3
12	6.6 - 6.9
24	3.5 - 4.0

NOTES:

1 Vacuum measured using portable vacuum gauge (provided by Lab)

2 Vacuum measured by canister gauge upon opening valve

3 Vacuum measured by canister gauge prior to closing valve

Signed:

BENCHMARK
ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

AIR CANISTER FIELD RECORD

PROJECT INFORMATION:

Project:	144 Lee Street
Job No:	0378-017-007
Location:	Buffalo, NY
Field Staff:	RLD/ ~~NAS~~ TAS
Client:	OSC, Inc

SAMPLE I.D.: IA-1

WEATHER CONDITIONS:

Ambient Air Temp. - A.M.:	55°F
Ambient Air Temp. - P.M.:	58°F
Wind Direction:	NW
Wind Speed:	10-15 mph
Precipitation:	

Size of Canister:	
Canister Serial No.:	351
Flow Controller No.:	1162
Sample Date(s):	5/15/17
Shipping Date:	

Sample Type: ☒ Indoor Air ☐ Outdoor Air
☐ Subslab, complete section below ☐ Soil Gas
Soil Gas Probe Depth:

FIELD SAMPLING INFORMATION:

READING	TIME	VACUUM (inches Hg) or PRESSURE (psig)	DATE	INITIALS
Lab Vacuum (on tag)				
Field Vacuum Check [1]				
Initial Field Vacuum [2]	0918	-30	5/15/17	
Final Field Vacuum [3]	1348	-4		
Duration of Sample Collection				

LABORATORY CANISTER PRESSURIZATION:

Initial Vacuum (inches Hg and psia)		
Final Pressure (psia)		
Pressurization Gas		

SUBSLAB SHROUD:

Shroud Helium Concentration:
Calculated tubing volume: x 3 =
Purged Tubing Volume Concentration:
Is the purged volume concentration less than or equal to 10% in shroud?
☐ YES, continue sampling
☐ NO, improve surface seal and retest

COMPOSITE TIME (hours)	FLOW RATE RANGE (ml/min)
15 Min.	316 - 333
0.5 Hours	158 - 166.7
1	79.2 - 83.3
2	39.6 - 41.7
4	19.8 - 20.8
6	13.2 - 13.9
8	9.9 - 10.4
10	7.92 - 8.3
12	6.6 - 6.9
24	3.5 - 4.0

NOTES:

1 Vacuum measured using portable vacuum gauge (provided by Lab)
2 Vacuum measured by canister gauge upon opening valve
3 Vacuum measured by canister gauge prior to closing valve

Signed:

BENCHMARK
ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

AIR CANISTER FIELD RECORD

PROJECT INFORMATION:

Project:	144 Lee Street
Job No:	0378-017-007
Location:	Buffalo, NY
Field Staff:	RLD/ ~~NAS~~ TAS
Client:	OSC, Inc

SAMPLE I.D.: IA-2

WEATHER CONDITIONS:

Ambient Air Temp. - A.M.:	57°F
Ambient Air Temp. - P.M.:	58°F
Wind Direction:	NW
Wind Speed:	10-15 mph
Precipitation:	

Size of Canister:	
Canister Serial No.:	200
Flow Controller No.:	298
Sample Date(s):	
Shipping Date:	

Sample Type: ☒ Indoor Air ☐ Outdoor Air ☐ Subslab, complete section below ☐ Soil Gas

Soil Gas Probe Depth:

FIELD SAMPLING INFORMATION:

READING	TIME	VACUUM (inches Hg) or PRESSURE (psig)	DATE	INITIALS
Lab Vacuum (on tag)				
Field Vacuum Check [1]				
Initial Field Vacuum [2]	0954	-30	5/11/17	
Final Field Vacuum [3]	1354	-4	5/11/17	
Duration of Sample Collection				

LABORATORY CANISTER PRESSURIZATION:

Initial Vacuum (inches Hg and psia)		
Final Pressure (psia)		
Pressurization Gas		

SUBSLAB SHROUD:

Shroud Helium Concentration:

Calculated tubing volume: x 3 =

Purged Tubing Volume Concentration:

Is the purged volume concentration less than or equal to 10% in shroud?

☐ YES, continue sampling

☐ NO, improve surface seal and retest

COMPOSITE TIME (hours)	FLOW RATE RANGE (ml/min)
15 Min.	316 - 333
0.5 Hours	158 - 166.7
1	79.2 - 83.3
2	39.6 - 41.7
4	19.8 - 20.8
6	13.2 - 13.9
8	9.9 - 10.4
10	7.92 - 8.3
12	6.6 - 6.9
24	3.5 - 4.0

NOTES:

1 Vacuum measured using portable vacuum gauge (provided by Lab)

2 Vacuum measured by canister gauge upon opening valve

3 Vacuum measured by canister gauge prior to closing valve

Signed:

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

AIR CANISTER FIELD RECORD

PROJECT INFORMATION:

Project:	144 Lee Street
Job No:	0378-017-007
Location:	Buffalo, NY
Field Staff:	RLD/ NAS
Client:	OSC, Inc

SAMPLE I.D.: IA-3

WEATHER CONDITIONS:

Ambient Air Temp. - A.M.:	58°F
Ambient Air Temp. - P.M.:	58°F
Wind Direction:	W
Wind Speed:	<5
Precipitation:	LT RAIN

Size of Canister:	
Canister Serial No.:	460
Flow Controller No.:	277
Sample Date(s):	
Shipping Date:	

Sample Type: ☒ Indoor Air ☐ Outdoor Air

☐ Subslab, complete section below ☐ Soil Gas

Soil Gas Probe Depth:

FIELD SAMPLING INFORMATION:

READING	TIME	VACUUM (inches Hg) or PRESSURE (psig)	DATE	INITIALS
Lab Vacuum (on tag)				
Field Vacuum Check [1]				
Initial Field Vacuum [2]	0945	-29	5/10/17	
Final Field Vacuum [3]	1307	-3.5		
Duration of Sample Collection				

LABORATORY CANISTER PRESSURIZATION:

Initial Vacuum (inches Hg and psia)		
Final Pressure (psia)		
Pressurization Gas		

SUBSLAB SHROUD:

Shroud Helium Concentration:

Calculated tubing volume: x 3 =

Purged Tubing Volume Concentration:

Is the purged volume concentration less than or equal to 10% in shroud?

☐ YES, continue sampling

☐ NO, improve surface seal and retest

COMPOSITE TIME (hours)	FLOW RATE RANGE (ml/min)
15 Min.	316 - 333
0.5 Hours	158 - 166.7
1	79.2 - 83.3
2	39.6 - 41.7
4	19.8 - 20.8
6	13.2 - 13.9
8	9.9 - 10.4
10	7.92 - 8.3
12	6.6 - 6.9
24	3.5 - 4.0

NOTES:

1 Vacuum measured using portable vacuum gauge (provided by Lab)

2 Vacuum measured by canister gauge upon opening valve

3 Vacuum measured by canister gauge prior to closing valve

Signed:

BENCHMARK
ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

AIR CANISTER FIELD RECORD

PROJECT INFORMATION:

Project:	144 Lee Street
Job No:	0378-017-007
Location:	Buffalo, NY
Field Staff:	RLD/ NAS
Client:	OSC, Inc

SAMPLE I.D.: IA-4

WEATHER CONDITIONS:

Ambient Air Temp. - A.M.:	58°F
Ambient Air Temp. - P.M.:	58°F
Wind Direction:	W
Wind Speed:	~5 mph
Precipitation:	0.1 Max

Size of Canister:	
Canister Serial No.:	139
Flow Controller No.:	249
Sample Date(s):	5/16/17
Shipping Date:	

Sample Type: ☒ Indoor Air ☐ Outdoor Air ☐ Subslab, complete section below ☐ Soil Gas

Soil Gas Probe Depth:

FIELD SAMPLING INFORMATION:

READING	TIME	VACUUM (inches Hg) or PRESSURE (psig)	DATE	INITIALS
Lab Vacuum (on tag)				
Field Vacuum Check [1]				
Initial Field Vacuum [2]	0951	-30	5/16/17	
Final Field Vacuum [3]	1152	-5	5/16/17	
Duration of Sample Collection				

LABORATORY CANISTER PRESSURIZATION:

Initial Vacuum (inches Hg and psia)		
Final Pressure (psia)		
Pressurization Gas		

SUBSLAB SHROUD:

Shroud Helium Concentration:

Calculated tubing volume: x 3 =

Purged Tubing Volume Concentration:

Is the purged volume concentration less than or equal to 10% in shroud?

☐ YES, continue sampling

☐ NO, improve surface seal and retest

COMPOSITE TIME (hours)	FLOW RATE RANGE (ml/min)
15 Min.	316 - 333
0.5 Hours	158 - 166.7
1	79.2 - 83.3
2	39.6 - 41.7
4	19.8 - 20.8
6	13.2 - 13.9
8	9.9 - 10.4
10	7.92 - 8.3
12	6.6 - 6.9
24	3.5 - 4.0

NOTES:

1 Vacuum measured using portable vacuum gauge (provided by Lab)

2 Vacuum measured by canister gauge upon opening valve

3 Vacuum measured by canister gauge prior to closing valve

Signed:

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

AIR CANISTER FIELD RECORD

PROJECT INFORMATION:

Project:	144 Lee Street
Job No:	0378-017-007
Location:	Buffalo, NY
Field Staff:	RLD/ NAS
Client:	OSC, Inc

SAMPLE I.D.: IA-5

WEATHER CONDITIONS:

Ambient Air Temp. - A.M.:	58°F
Ambient Air Temp. - P.M.:	58°F
Wind Direction:	W
Wind Speed:	< 5mph
Precipitation:	0.1 Max

Size of Canister:	
Canister Serial No.:	195
Flow Controller No.:	1152
Sample Date(s):	
Shipping Date:	

Sample Type: ☒ Indoor Air ☐ Outdoor Air

☐ Subslab, complete section below ☐ Soil Gas

Soil Gas Probe Depth:

FIELD SAMPLING INFORMATION:

READING	TIME	VACUUM (inches Hg) or PRESSURE (psig)	DATE	INITIALS
Lab Vacuum (on tag)				
Field Vacuum Check [1]				
Initial Field Vacuum [2]	~~0948~~	-28	5/16/17	
Final Field Vacuum [3]	1313	-5		
Duration of Sample Collection				

LABORATORY CANISTER PRESSURIZATION:

Initial Vacuum (inches Hg and psia)		
Final Pressure (psia)		
Pressurization Gas		

SUBSLAB SHROUD:

Shroud Helium Concentration:

Calculated tubing volume: x 3 =

Purged Tubing Volume Concentration:

Is the purged volume concentration less than or equal to 10% in shroud?

☐ YES, continue sampling

☐ NO, improve surface seal and retest

COMPOSITE TIME (hours)	FLOW RATE RANGE (ml/min)
15 Min.	316 - 333
0.5 Hours	158 - 166.7
1	79.2 - 83.3
2	39.6 - 41.7
4	19.8 - 20.8
6	13.2 - 13.9
8	9.9 - 10.4
10	7.92 - 8.3
12	6.6 - 6.9
24	3.5 - 4.0

NOTES:

1 Vacuum measured using portable vacuum gauge (provided by Lab)

2 Vacuum measured by canister gauge upon opening valve

3 Vacuum measured by canister gauge prior to closing valve

Signed:

BENCHMARK
ENVIRONMENTAL
ENGINEERING &
SCIENCE, PLLC

AIR CANISTER FIELD RECORD

PROJECT INFORMATION:

Project:	144 Lee Street
Job No:	0378-017-007
Location:	Buffalo, NY
Field Staff:	RLD/ ~~NAS~~ TB
Client:	OSC, Inc

SAMPLE I.D.: OA-1

WEATHER CONDITIONS:

Ambient Air Temp. - A.M.:	55°F
Ambient Air Temp. - P.M.:	58°F
Wind Direction:	NW
Wind Speed:	10-15 mph
Precipitation:	

Size of Canister:	~~3L~~ 6L
Canister Serial No.:	318
Flow Controller No.:	278
Sample Date(s):	5/13/17
Shipping Date:	

Sample Type: ☐ Indoor Air ☒ Outdoor Air
☐ Subslab, complete section below ☐ Soil Gas
Soil Gas Probe Depth:

FIELD SAMPLING INFORMATION:

READING	TIME	VACUUM (inches Hg) or PRESSURE (psig)	DATE	INITIALS
Lab Vacuum (on tag)				
Field Vacuum Check [1]				
Initial Field Vacuum [2]	1015	-30		
Final Field Vacuum [3]	~~1424~~	-5		
Duration of Sample Collection	1424			

LABORATORY CANISTER PRESSURIZATION:

Initial Vacuum (inches Hg and psia)		
Final Pressure (psia)		
Pressurization Gas		

SUBSLAB SHROUD:

Shroud Helium Concentration:
Calculated tubing volume: x 3 =
Purged Tubing Volume Concentration:
Is the purged volume concentration less than or equal to 10% in shroud?
☐ YES, continue sampling
☐ NO, improve surface seal and retest

COMPOSITE TIME (hours)	FLOW RATE RANGE (ml/min)
15 Min.	316 - 333
0.5 Hours	158 - 166.7
1	79.2 - 83.3
2	39.6 - 41.7
4	19.8 - 20.8
6	13.2 - 13.9
8	9.9 - 10.4
10	7.92 - 8.3
12	6.6 - 6.9
24	3.5 - 4.0

NOTES:

1 Vacuum measured using portable vacuum gauge (provided by Lab)
2 Vacuum measured by canister gauge upon opening valve
3 Vacuum measured by canister gauge prior to closing valve

Signed:

BENCHMARK
ENVIRONMENTAL
ENGINEERING &
SCIENCE, PLLC

AIR CANISTER FIELD RECORD

PROJECT INFORMATION:

Project:	144 Lee Street
Job No:	0378-017-007
Location:	Buffalo, NY
Field Staff:	RLD/ NAS
Client:	OSC, Inc

SAMPLE I.D.: OA-2

WEATHER CONDITIONS:

Ambient Air Temp. - A.M.:	58°F
Ambient Air Temp. - P.M.:	58°F
Wind Direction:	W
Wind Speed:	<5 mph
Precipitation:	Min

Size of Canister:	
Canister Serial No.:	133
Flow Controller No.:	406
Sample Date(s):	5/16/17
Shipping Date:	

Sample Type: ☐ Indoor Air ☑ Outdoor Air
☐ Subslab, complete section below ☐ Soil Gas
Soil Gas Probe Depth:

FIELD SAMPLING INFORMATION:

READING	TIME	VACUUM (inches Hg) or PRESSURE (psig)	DATE	INITIALS
Lab Vacuum (on tag)				
Field Vacuum Check [1]				
Initial Field Vacuum [2]	~~10:15~~ 0943	-29	5/16/17 ~~5/15/17~~	
Final Field Vacuum [3]	~~1424~~ 1331	-3	5/16/17	
Duration of Sample Collection				

LABORATORY CANISTER PRESSURIZATION:

Initial Vacuum (inches Hg and psia)		
Final Pressure (psia)		
Pressurization Gas		

SUBSLAB SHROUD:

Shroud Helium Concentration:
Calculated tubing volume: x 3 =
Purged Tubing Volume Concentration:
Is the purged volume concentration less than or equal to 10% in shroud?
☐ YES, continue sampling
☐ NO, improve surface seal and retest

COMPOSITE TIME (hours)	FLOW RATE RANGE (ml/min)
15 Min.	316 - 333
0.5 Hours	158 - 166.7
1	79.2 - 83.3
2	39.6 - 41.7
4	19.8 - 20.8
6	13.2 - 13.9
8	9.9 - 10.4
10	7.92 - 8.3
12	6.6 - 6.9
24	3.5 - 4.0

NOTES:

1 Vacuum measured using portable vacuum gauge (provided by Lab)
2 Vacuum measured by canister gauge upon opening valve
3 Vacuum measured by canister gauge prior to closing valve

Signed:

Centek Labs - Chain of Custody

Centek Laboratories

143 Midler Park Drive
Syracuse, NY 13206
315-431-9730
www.CentekLabs.com

Vapor Intrusion & IAQ

Site Name: 144 Lee St
Project: 8
PO#: 0378-017-007
Quote # Q-
Canister Order #: SP/B06480

Detection Limit	Report Level
☐ 5ppbv	☒ Level I
☒ 1ug/M3	☐ Level II
☐ 1ug/M3 +TCE .25	☐ Cat "B" Like

TAT Turnaround Time:	Check One	Rush TAT Surcharge %	Due Date:
5 Business Days	☒	0%	
4 Business Days	☐	25%	
3 Business Days	☐	50%	
2 Business Days	☐	75%	
*Next Day by 5pm	☐	100%	
*Next Day by Noon	☐	150%	
*Same Day	☐	200%	

*For Same and Next Day TAT Please Notify Lab

Company: BENCHMARK ENV.

Report to:
Address: 2558 Hamburg Turnpike
City, State, Zip Buffalo, NY 14218
Email: bhamm@turnkeyllc.com
Phone: 716-856-0599

Company:
Check Here If Same: ☒

Invoice to:
Address:
City, State, Zip
Email:
Phone:

Sample ID	Date Sampled	Canister Number	Regulator Number	Analysis Request	Field Vacuum Start / Stop	Labs Vacuum** RecV/Analysis	Comments
SSV-1	5/15/17	324	1166	TO-15	-30 / -5	/	
SSV-2	5/15/17	243	1165	" "	-30 / -5	/	
SSV-3	5/15/17	225	388	" "	-30 / -2	/	
SSV-4	5/15/17	130	308	" "	-30 / -4	/	
SSV-5	5/15/17	1184	251	" "	-30 / -5	/	
SSV-6	5/15/17	316	1160	" "	-29 / -5	/	
IA-1	5/15/17	351	1102	" "	-30 / -4	/	
IA-2	5/15/17	210	298	" "	-30 / -4	/	
OA-1	5/15/17	318	278	" "	-30 / -5	/	
SSV-7	5/16/17	106	246	TO-15	-29 / -5	/	
SSV-8	5/16/17	454	281	" "	-30 / -5	/	
SSV-9	5/16/17	336	260	" "	-30 / -2	/	
IA-3	5/16/17	~~330~~	~~2463~~	" "	-29 / -5	/	
IA-4	5/16/17	139	249	" "	-30 / -5	/	
SSV-10	5/16/17	330	1163	" "	-30 / -3	/	
~~DUP~~ OA-2	5/16/17	135	406	" "	-29 / -3	/	
IA-5	5/16/17	195	1152	" "	-28 / -5	/	
					/	/	

Chain of Custody	Print Name	Signature	Date/Time	Courier: CIRCLE ONE
Sampled by:	Rick DuBois			FedEx UPS Pickup/Dropoff
Relinquished by:				**For LAB USE ONLY
Received at Lab by:				Work Order #

*** By signing Centek Labs Chain of Custody, you are accepting Centek Labs Terms and Conditions listed on the reverse side.

Centek Labs - Chain of Custody

Centek Laboratories
143 Midler Park Drive
Syracuse, NY 13206
315-431-9730
www.CentekLabs.com

Vapor Intrusion & IAQ

Site Name: 144 Lee St
Project: 6
PO#: 0328-017-003
Quote # Q-
Canister Order #: SP/BO 6400

Detection Limit	Report Level
☐ 5ppbv	☒ Level I
☒ 1ug/M3	☐ Level II
☐ 1ug/M3 +TCE .25	☐ Cat "B" Like

TAT Turnaround Time:	Check One	Rush TAT Surcharge %	Due Date:
5 Business Days	☒	0%	
4 Business Days	☐	25%	
3 Business Days	☐	50%	
2 Business Days	☐	75%	
*Next Day by 5pm	☐	100%	
*Next Day by Noon	☐	150%	
*Same Day	☐	200%	

*For Same and Next Day TAT Please Notify Lab

Company: BENCHMARK ENV.
Report to:
Address: 2558 Hamburg Turnpike
City, State, Zip Buffalo, NY 14218
Email: bhall@turnkeyllc.com
Phone: 716-856-0599

Company:
Check Here If Same: ☒
Invoice to:
Address:
City, State, Zip
Email:
Phone:

Sample ID	Date Sampled	Canister Number	Regulator Number	Analysis Request	Field Vacuum Start / Stop	Labs Vacuum** Rec'd/Analysis	Comments
SSV-1	5/15/17	324	1166	TO-15	-30 / -5	-3 /	
SSV-2	5/15/17	243	1165	" "	-30 / -5	-3 /	
SSV-3	5/15/17	225	388	" "	-30 / -2	-1 /	
SSV-4	5/15/17	130	308	" "	-30 / -4	-2 /	
SSV-5	5/15/17	1184	251	" "	-30 / -5	-3 /	
SSV-6	5/15/17	316	1160	" "	-29 / -3	-4 /	
IA-1	5/15/17	351	1162	" "	-30 / -4	-2 /	
IA-2	5/15/17	210	249	" "	-30 / -4	-1 /	
OA-1	5/15/17	318	238	" "	-30 / -5	-3 /	
SSV-7	5/16/17	106	296	TO-15	-30 / -5	-3 /	
SSV-8	5/16/17	459	281	" "	-30 / -5	-3 /	
SSV-9	5/16/17	336	260	" "	-30 / -2	-1 /	
IA-3	5/16/17	~~340~~	~~1163~~	" "	-29 / -5	-2 /	
IA-4	5/16/17	139	249	" "	-30 / -5	-2 /	
SSV-10	5/16/17	350	1163 / 406	" "	-30 / -5	-2 /	
~~OA-2~~ OA-2	5/16/17	133		" "	-29 / -3	-3 /	
IA-5	5/16/17	195	?1152	" "	-28 / -5	/	
					/	/	

Chain of Custody	Print Name	Signature	Date/Time	Courier: CIRCLE ONE
Sampled by:	Rick DuBois		5/18/17	FedEx UPS Pickup/Dropoff
Relinquished by:				**For LAB USE ONLY
Received at Lab by:	Jan Scala		5.18.17	Work Order # C1705056

*** By signing Centek Labs Chain of Custody, you are accepting Centek Labs Terms and Conditions listed on the reverse side.

ATTACHMENT 4

CENTEK LABORATORIES, LLC
SAMPLE DATA SUMMARY PACKAGE

BENCHMARK

CENTEK LABORATORIES, LLC

143 Midler Park Drive * Syracuse, NY 13206
Phone (315) 431-9730 * Emergency 24/7 (315) 416-2752
NYSDOH ELAP Certificate No. 11830

Analytical Report

Bryan Hann
Benchmark Environmental Engineering & Science
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218

TEL: 716-856-0599
FAX 716-856-0583

Thursday, May 25, 2017
Order No.: C1705056

RE: 144 Lee St

Dear Bryan Hann:

Centek Laboratories, LLC received 17 sample(s) on 5/18/2017 for the analyses presented in the following report.

I certify that this data package is in compliance with the terms and conditions of the Contract, both technically and for completeness. Release of the data contained in this hardcopy data package and/or in the computer readable data submitted has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Centek Laboratories performs all analyses according to EPA, NIOSH or OSHA-approved analytical methods. Centek Laboratories is dedicated to providing quality analyses and exceptional customer service. All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objective except as indicated in the case narrative. All samples were received and analyzed within the EPA recommended holding times. Test results are not Method Blank (MB) corrected for contamination.

We do our best to make our reporting format clear and understandable and hope you are thoroughly satisfied with our services. Please contact your client service representative at (315) 431-9730 or myself, if you would like any additional information regarding this report.

Thank you for using Centek Laboratories. This report can not be reproduced except in its entirety, without prior written authorization.

Sincerely,

William Dobbin
Lead Technical Director

Disclaimer: The test results and procedures utilized, and laboratory interpretations of the data obtained by Centek as contained in this report are believed by Centek to be accurate and reliable

for sample(s) tested. In accepting this report, the customer agrees that the full extent of any and all liability for actual and consequential damages of Centek for the services performed shall be equal to the fee charged to the customer for the services as liquidated damages. ELAP does not offer certification for the following parameters by this method at present time, they are: 4-ethyltoluene, ethyl acetate, propylene, tetrahydrofuran, 4-PCH, sulfur derived and silcon series compounds.

Centek Laboratories, LLC Terms and Conditions

Sample Submission

All samples sent to Centek Laboratories should be accompanied by our Request for Analysis Form or Chain of Custody Form. A Chain of Custody will be provided with each order shipped for all sampling events, or if needed, one is available at our website www.CentekLabs.com. Samples received after 3:00pm are considered to be a part of the next day's business.

Sample Media

Samples can be collected in an canister or a Tedlar bag. Depending on your analytical needs, Centek Laboratories may receive a bulk, liquid, soil or other matrix sample for headspace analysis.

Blanks

Every sample is run with a surrogate or tracer compound at a pre-established concentration. The surrogate compound run with each sample is used as a standard to measure the performance of each run of the instrument. If required, a Minican can be provided containing nitrogen to be run as a trip blank with your samples.

Sampling Equipment

Centek Laboratories will be happy to provide the canisters to carry-out your sampling event at no charge. The necessary accessories, such as regulators, tubing or personal sampling belts, are also provided to meet your sampling needs. The customer is responsible for all shipping charges to the client's destination and return shipping to the laboratory. Client assumes all responsibility for lost, stolen and any damages of equipment.

Turn Around time (TAT)

Centek Laboratories will provide results to its clients in one business-week by 6:00pm EST after receipt of samples. For example, if samples are received on a Monday they are due on the following Monday by 6:00pm EST. Results are faxed or emailed to the requested location indicated on the Chain of Custody. Non-routine analysis may require more than the one business-week turnaround time. Please confirm non-routine sample turnaround times.

Reporting

Results are emailed or faxed at no additional charge. A hard copy of the result report is mailed within 24 hours of the faxing or emailing of your results. Cat "B" like packages are within 3-4 weeks from time of analysis. Standard Electronic Disk Deliverables (EDD) is also available at no additional charge.

Payment Terms

Payment for all purchases shall be due within 30 days from date of invoice. The client agrees to pay a finance charge of 1.5% per month on the overdue balance and cost of collection, including attorney fees, if collection proceedings are necessary. You must have a completed credit

application on file to extend credit. Purchase orders or checks information must be submitted for us to release results

Rush Turnaround Samples

Expedited turn around times is available. Please confirm rush turnaround times with Client Services before submitting samples.

Applicable Surcharges for Rush Turnaround Samples:
Same day TAT = 200%
Next business day TAT by Noon = 150%
Next business day TAT by 6:00pm = 100%
Second business day TAT by 6:00pm = 75%
Third business day TAT by 6:00pm = 50%
Fourth business day TAT by 6:00pm = 35%
Fifth business day = Standard

Statement of Confidentiality

Centek Laboratories, LLC is aware of the importance of the confidentiality of results to many of our clients. Your name and data will be held in the strictest of confidence. We will not accept business that may constitute a conflict of interest. We commonly sign Confidential Nondisclosure Agreements with clients prior to beginning work. All research, results and reports will be kept strictly confidential. Secrecy Agreements and Disclosure Statements will be signed for the client if so specified. Results will be provided only to the addressee specified on the Chain of Custody Form submitted with the samples unless law requires release. Written permission is required from the addressee to release results to any other party.

Limitation on Liability

Centek Laboratories, LLC warrants the test results to be accurate to the methodology and sample type for each sample submitted to Centek Laboratories, LLC. In no event shall Centek Laboratories, LLC be liable for direct, indirect, special, punitive, incidental, exemplary or consequential damages, or any damages whatsoever, even if Centek Laboratories, LLC has been previously advised of the possibility of such damages whether in an action under contract, negligence, or any other theory, arising out of or in connection with the use, inability to use or performance of the information, services, products and materials available from the laboratory or this site. These limitations shall apply notwithstanding any failure of essential purpose of any limited remedy. Because some jurisdictions do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of liability for consequential or incidental damages, the above limitations may not apply to you. This is a comprehensive limitation of liability that applies to all damages of any kind, including (without limitation) compensatory, direct, indirect or consequential damages, loss of data, income or profit and or loss of or damage to property and claims of third parties.

CENTEK LABORATORIES, LLC

Date: *30-May-17*

CLIENT:	Benchmark Environmental Engineering & S
Project:	144 Lee St
Lab Order:	C1705056

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Centek Laboratories, LLC SOP TS-80
Compendium of Methods for the Determination of Toxic Organic Compounds, Compendium Method TO-15, January 1999

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objective except as indicated in the corrective action report(s). All samples were received and analyzed within the EPA recommended holding times. Test results are not Method Blank (MB) corrected for contamination.

NYSDEC ASP samples:
Canisters should be evacuated to a reading of less than or equal to 50 millitorr prior to shipment to sampling personnel. The vacuum in the canister will be field checked prior to sampling, and must read 28" of Hg (±2", vacuum, absolute) before a sample can be collected. After the sample has been collected, the pressure of the canister will be read and recorded again, and must be 5" of Hg (±1", vacuum, absolute) for the sample to be valid. Once received at the laboratory, the canister vacuum should be confirmed to be 5" of Hg,±1". Please record and report the pressure/vacuum of received canisters on the sample receipt paperwork. A pressure/vacuum reading should also be taken just prior to the withdrawal of sample from the canister, and recorded on the sample preparation log sheet. All regulators are calibrated to meet these requirements before they leave the laboratory. However, due to environmental conditions and use of the equipment Centek can not guarantee that this criteria can always be achieved.

Centek Labs - Chain of Custody

Centek Laboratories

143 Midler Park Drive
Syracuse, NY 13206
315-431-9730
www.CentekLabs.com

Vapor Intrusion & IAQ

Site Name: 144 Lee St
Project: 8
PO#: 0378-017-007
Quote # Q-
Canister Order #: SP/B06480

Detection Limit		Report Level	
☐	5ppbv	☒	Level I
☒	1ug/M3	☐	Level II
☐	1ug/M3 +TCE .25	☐	Cat "B" Like

TAT Turnaround Time:	Check One	Rush TAT Surcharge %	Due Date:
5 Business Days	☒	0%	
4 Business Days	☐	25%	
3 Business Days	☐	50%	
2 Business Days	☐	75%	
*Next Day by 5pm	☐	100%	
*Next Day by Noon	☐	150%	
*Same Day	☐	200%	

*For Same and Next Day TAT Please Notify Lab

Company: BENCHMARK ENV.

Report to:
Address: 2558 Hamburg Turnpike
City, State, Zip Buffalo, NY 14218
Email: bhann@turnkeyllc.com
rdubisz@turnkeyllc.com
Phone: 716-856-0599

Company:
Check Here If Same: ☒

Invoice to:
Address:
City, State, Zip
Email:
Phone:

Sample ID	Date Sampled	Canister Number	Regulator Number	Analysis Request	Field Vacuum Start / Stop	Labs Vacuum** RecV/Analysis	Comments
SSV-1	5/15/17	324	1166	TO-15	-30 / -5	-3 / -3	
SSV-2	5/15/17	243	1165	" "	-30 / -5	-3 / -3	
SSV-3	5/15/17	275	388	" "	-30 / -2	-1 / -1	
SSV-4	5/15/17	130	308	" "	-30 / -4	-2 / -2	
SSV-5	5/15/17	1184	251	" "	-30 / -5	-3 / -3	
SSV-6	5/15/17	316	1160	" "	-29 / -5	-4 / -4	
IA-1	5/15/17	351	1162	" "	-30 / -4	-2 / -2	
IA-2	5/15/17	260	298	" "	-30 / -4	-1 / -2	
OA-1	5/15/17	318	278	" "	-30 / -5	-3 / -3	
SSV-7	5/16/17	106	296	TO-15	-30 / -5	-3 / -3	
SSV-8	5/16/17	459	281	" "	-30 / -5	-3 / -3	
SSV-9	5/16/17	336	260	" "	-30 / -2	-1 / -2	
IA-3	5/16/17	~~350~~ 460	~~1163~~ 223	" "	-29 / 3.5	-2 / -2	
IA-4	5/16/17	139	249	" "	-30 / -5	-2 / -3	
SSV-10	5/16/17	350	1163	" "	-30 / -3.5	-2 / -2	
~~OA~~ OA-2	5/16/17	133	400	" "	-29 / -3	-3 / -3	
IA-5	5.16.17	195	1152		/	-3 / -3	
					/	/	

Chain of Custody	Print Name	Signature	Date/Time
Sampled by:	Rick Dubisz	[signature]	
Relinquished by:			
Received at Lab by:	Jan Scala	[signature]	5.18.17

Courier: CIRCLE ONE
FedEx UPS Pickup/Dropoff

**For LAB USE ONLY
Work Order # C1705056

*** By signing Centek Labs Chain of Custody, you are accepting Centek Labs Terms and Conditions listed on the reverse side.

Centek Labs - Chain of Custody

Centek Laboratories
143 Midler Park Drive
Syracuse, NY 13206
315-431-9730
www.CentekLabs.com
Vapor Intrusion & IAQ

Site Name: 144 Lee St
Project: 0328-017-007
PO#: Q-SA/Sc6480
Quote #:
Canister Order #:

Detection Limit	Report Level
☐ 5ppbv	☒ Level I
☒ 1ug/M3	☐ Level II
☐ 1ug/M3 +TCE 25	☐ Cal "B" Like

TAT Turnaround Time:	Check One	Rush TAT Surcharge %	Due Date:
5 Business Days	☒	0%	
4 Business Days	☐	25%	
3 Business Days	☐	50%	
2 Business Days	☐	75%	
*Next Day by 5pm	☐	100%	
*Next Day by Noon	☐	150%	
*Same Day	☐	200%	

*For Same and Next Day TAT Please Notify Lab

Company: BENCHMARK ENV.
Report to:
Address: 2558 Hamburg Turnpike
City, State, Zip Buffalo, NY 14218
Email: bfisher@benvplic.com
Phone: 716-856-0599

Company:
Check Here If Same: ☒
Invoice to:
Address:
City, State, Zip
Email:
Phone:

Sample ID	Date Sampled	Canister Number	Regulator Number	Analysis Request	Field Vacuum Start / Stop	Labs Vacuum** Rec'd/Analysis	Comments
SSV-1	5/15/17	324	1166	TO-15	-30 / -5	-3 /	
SSV-2	5/15/17	243	1165	" "	-30 / -5	-3 /	
SSV-3	5/15/17	225	388	" "	-30 / -2	-1 /	
SSV-4	5/15/17	230	308	" "	-30 / -7	-2 /	
SSV-5	5/15/17	1184	251	" "	-30 / -5	-3 /	
SSV-6	5/15/17	316	1160	" "	-29 / -5	-4 /	
IA-1	5/15/17	351	1162	" "	-30 / -7	-2 /	
IA-2	5/15/17	210	298	" "	-30 / -7	-1 /	
OA-1	5/15/17	318	278	" "	-30 / -5	-3 /	
SSV-7	5/16/17	106	296	TO-15	-30 / -5	-3 /	
SSV-8	5/16/17	459	281	" "	-30 / -5	-3 /	
SSV-9	5/16/17	336	260	" "	-30 / -2	-1 /	
IA-3	5/16/17	[illegible]	[illegible]	" "	-29 / -5	-2 /	
IA-4	5/16/17	139	249	" "	-30 / -5	-2 /	
SSV-10	5/16/17	350	1163	" "	-30 / -5	-2 /	
~~OA-2~~ OA-2	5/16/17	133	1108	" "	-29 / -3	-3 /	
IA-5	5/16/17	195	1152	" "	-28 / -5	/	
					/	/	

Chain of Custody	Print Name	Signature	Date/Time	Courier: CIRCLE ONE
Sampled by:	Nick Dubisz		5/18/17	FedEx UPS Pickup/Dropoff
Relinquished by:				**For LAB USE ONLY
Received at Lab by:	Jan Scale		5-16-17	Work Order # C1705056

*** By signing Centek Labs Chain of Custody, you are accepting Centek Labs Terms and Conditions listed on the reverse side.

CENTEK LABORATORIES, LLC

Sample Receipt Checklist

Client Name BENCHMARK | Date and Time Receive 5/18/2017

Work Order Numbe C1705056 | Received by JDS

Checklist completed by Jan Scala 5.18.17 (Signature / Date) | Reviewed by WD 5/18/17 (Initials / Date)

Matrix: | Carrier name FedEx Ground

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Presen ☐
Custody seals intact on shippping container/cooler?	Yes ☐	No ☐	Not Presen ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Presen ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☐	No ☑	
Chain of custody agrees with sample labels?	Yes ☐	No ☑	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☑	

Adjusted? _____ Checked b _____

Any No and/or NA (not applicable) response must be detailed in the comments section be

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: Per Bryan add Sample ID IA-5 to COC

Faxed COC to be signed

Corrective Action _____

CENTEK LABORATORIES, LLC

Date: *30-May-17*

CLIENT: Benchmark Environmental Engineering & S
Project: 144 Lee St
Lab Order: C1705056

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
C1705056-001A	SSV-1	324,1166	5/15/2017	5/18/2017
C1705056-002A	SSV-2	243,1165	5/15/2017	5/18/2017
C1705056-003A	SSV-3	225,388	5/15/2017	5/18/2017
C1705056-004A	SSV-4	130,308	5/15/2017	5/18/2017
C1705056-005A	SSV-5	1184,251	5/15/2017	5/18/2017
C1705056-006A	SSV-6	316,1160	5/15/2017	5/18/2017
C1705056-007A	IA-1	351,1102	5/15/2017	5/18/2017

CLIENT:	Benchmark Environmental Engineering & S
Project:	144 Lee St
Lab Order:	C1705056

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
C1705056-008A	IA-2	260,298	5/15/2017	5/18/2017
C1705056-009A	OA-1	318,278	5/15/2017	5/18/2017
C1705056-010A	SSV-7	100,296	5/16/2017	5/18/2017
C1705056-011A	SSV-8	459,281	5/16/2017	5/18/2017
C1705056-012A	SSV-9	336,260	5/16/2017	5/18/2017
C1705056-013A	IA-3	460,227	5/16/2017	5/18/2017
C1705056-014A	IA-4	139,249	5/16/2017	5/18/2017
C1705056-015A	SSV-10	350,1163	5/16/2017	5/18/2017

CLIENT:	Benchmark Environmental Engineering & S
Project:	144 Lee St
Lab Order:	C1705056

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
C1705056-016A	OA-2	133,400	5/16/2017	5/18/2017
C1705056-017A	IA-5	195,1152	5/16/2017	5/18/2017

Centek Laboratories, LLC

30-May-17

Lab Order: C1705056
Client: Benchmark Environmental Engineering & Science
Project: 144 Lee St

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
C1705056-001A	SSV-1	5/15/2017	Air	1ug/M3 by Method TO15			5/22/2017
				1ug/M3 by Method TO15			5/20/2017
C1705056-002A	SSV-2			1ug/M3 by Method TO15			5/20/2017
				1ug/M3 by Method TO15			5/22/2017
C1705056-003A	SSV-3			1ug/M3 by Method TO15			5/20/2017
				1ug/M3 by Method TO15			5/22/2017
C1705056-004A	SSV-4			1ug/M3 by Method TO15			5/20/2017
				1ug/M3 by Method TO15			5/23/2017
C1705056-005A	SSV-5			1ug/M3 by Method TO15			5/20/2017
				1ug/M3 by Method TO15			5/23/2017
C1705056-006A	SSV-6			1ug/M3 by Method TO15			5/23/2017
				1ug/M3 by Method TO15			5/20/2017
C1705056-007A	IA-1			1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			5/19/2017
				1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			5/20/2017
C1705056-008A	IA-2			1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			5/19/2017
				1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			5/20/2017
C1705056-009A	OA-1			1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			5/19/2017
				1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			5/20/2017
C1705056-010A	SSV-7	5/16/2017		1ug/M3 by Method TO15			5/23/2017
				1ug/M3 by Method TO15			5/23/2017
				1ug/M3 by Method TO15			5/20/2017
C1705056-011A	SSV-8			1ug/M3 by Method TO15			5/20/2017
				1ug/M3 by Method TO15			5/22/2017
				1ug/M3 by Method TO15			5/23/2017
C1705056-012A	SSV-9			1ug/M3 by Method TO15			5/20/2017
				1ug/M3 by Method TO15			5/23/2017
C1705056-013A	IA-3			1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			5/20/2017
				1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			5/19/2017

Centek Laboratories, LLC

30-May-17

Lab Order: C1705056
Client: Benchmark Environmental Engineering & Science
Project: 144 Lee St

DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
C1705056-014A	IA-4	5/16/2017	Air	1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			5/19/2017
				1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			5/20/2017
C1705056-015A	SSV-10			1ug/M3 by Method TO15			5/20/2017
				1ug/M3 by Method TO15			5/22/2017
				1ug/M3 by Method TO15			5/23/2017
				1ug/M3 by Method TO15			5/23/2017
C1705056-016A	OA-2			1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			5/19/2017
				1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			5/20/2017
C1705056-017A	IA-5			1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			5/20/2017
				1ug/m3 w/ 0.25ug/M3 CT-TCE-VC			5/19/2017

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-1
Lab Order:	C1705056	**Tag Number:**	324,1166
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab Vacuum In	-3			"Hg		5/18/2017
Lab Vacuum Out	-30			"Hg		5/18/2017
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
1,2,4-Trimethylbenzene	0.37	0.15		ppbV	1	5/20/2017 12:05:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
1,3,5-Trimethylbenzene	0.11	0.15	J	ppbV	1	5/20/2017 12:05:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
1,4-Dichlorobenzene	0.19	0.15		ppbV	1	5/20/2017 12:05:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	5/20/2017 12:05:00 AM
2,2,4-trimethylpentane	0.22	0.15		ppbV	1	5/20/2017 12:05:00 AM
4-ethyltoluene	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
Acetone	8.5	3.0		ppbV	10	5/22/2017 10:18:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
Benzene	1.2	0.15		ppbV	1	5/20/2017 12:05:00 AM
Benzyl chloride	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
Bromoform	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
Carbon disulfide	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
Chlorobenzene	3.6	1.5		ppbV	10	5/22/2017 10:18:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
Chloroform	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
Chloromethane	0.69	0.15		ppbV	1	5/20/2017 12:05:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
Cyclohexane	0.26	0.15		ppbV	1	5/20/2017 12:05:00 AM
Dibromochloromethane	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
Ethyl acetate	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-1
Lab Order:	C1705056	**Tag Number:**	324,1166
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Ethylbenzene	0.31	0.15		ppbV	1	5/20/2017 12:05:00 AM
Freon 11	0.31	0.15		ppbV	1	5/20/2017 12:05:00 AM
Freon 113	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
Freon 114	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
Freon 12	0.56	0.15		ppbV	1	5/20/2017 12:05:00 AM
Heptane	0.37	0.15		ppbV	1	5/20/2017 12:05:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
Hexane	0.59	0.15		ppbV	1	5/20/2017 12:05:00 AM
Isopropyl alcohol	1.0	0.15		ppbV	1	5/20/2017 12:05:00 AM
m&p-Xylene	1.2	0.30		ppbV	1	5/20/2017 12:05:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	5/20/2017 12:05:00 AM
Methyl Ethyl Ketone	0.39	0.30		ppbV	1	5/20/2017 12:05:00 AM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	5/20/2017 12:05:00 AM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
Methylene chloride	0.31	0.15		ppbV	1	5/20/2017 12:05:00 AM
o-Xylene	0.47	0.15		ppbV	1	5/20/2017 12:05:00 AM
Propylene	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
Styrene	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
Tetrachloroethylene	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
Toluene	2.0	0.15		ppbV	1	5/20/2017 12:05:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
Trichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	5/20/2017 12:05:00 AM
Surr: Bromofluorobenzene	97.0	70-130		%REC	1	5/20/2017 12:05:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-2
Lab Order:	C1705056	**Tag Number:**	243,1165
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab Vacuum In	-3			"Hg		5/18/2017
Lab Vacuum Out	-30			"Hg		5/18/2017
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
1,2,4-Trimethylbenzene	0.22	0.15		ppbV	1	5/20/2017 12:46:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	5/20/2017 12:46:00 AM
2,2,4-trimethylpentane	0.13	0.15	J	ppbV	1	5/20/2017 12:46:00 AM
4-ethyltoluene	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
Acetone	7.8	3.0		ppbV	10	5/22/2017 10:56:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
Benzene	0.59	0.15		ppbV	1	5/20/2017 12:46:00 AM
Benzyl chloride	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
Bromoform	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
Carbon disulfide	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
Chlorobenzene	0.74	0.15		ppbV	1	5/20/2017 12:46:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
Chloroform	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
Chloromethane	0.74	0.15		ppbV	1	5/20/2017 12:46:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
Cyclohexane	0.22	0.15		ppbV	1	5/20/2017 12:46:00 AM
Dibromochloromethane	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
Ethyl acetate	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-2
Lab Order:	C1705056	**Tag Number:**	243,1165
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Ethylbenzene	0.20	0.15		ppbV	1	5/20/2017 12:46:00 AM
Freon 11	0.31	0.15		ppbV	1	5/20/2017 12:46:00 AM
Freon 113	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
Freon 114	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
Freon 12	0.56	0.15		ppbV	1	5/20/2017 12:46:00 AM
Heptane	0.28	0.15		ppbV	1	5/20/2017 12:46:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
Hexane	0.29	0.15		ppbV	1	5/20/2017 12:46:00 AM
Isopropyl alcohol	0.50	0.15		ppbV	1	5/20/2017 12:46:00 AM
m&p-Xylene	0.77	0.30		ppbV	1	5/20/2017 12:46:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	5/20/2017 12:46:00 AM
Methyl Ethyl Ketone	0.30	0.30		ppbV	1	5/20/2017 12:46:00 AM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	5/20/2017 12:46:00 AM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
Methylene chloride	0.31	0.15		ppbV	1	5/20/2017 12:46:00 AM
o-Xylene	0.34	0.15		ppbV	1	5/20/2017 12:46:00 AM
Propylene	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
Styrene	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
Tetrachloroethylene	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
Toluene	1.2	0.15		ppbV	1	5/20/2017 12:46:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
Trichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	5/20/2017 12:46:00 AM
Surr: Bromofluorobenzene	100	70-130		%REC	1	5/20/2017 12:46:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-3
Lab Order:	C1705056	**Tag Number:**	225,388
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-003A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab Vacuum In	-1			"Hg		5/18/2017
Lab Vacuum Out	-30			"Hg		5/18/2017
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
1,2,4-Trimethylbenzene	0.25	0.15		ppbV	1	5/20/2017 1:26:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	5/20/2017 1:26:00 AM
2,2,4-trimethylpentane	0.14	0.15	J	ppbV	1	5/20/2017 1:26:00 AM
4-ethyltoluene	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
Acetone	7.6	3.0		ppbV	10	5/22/2017 11:34:00 PM
Allyl chloride	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
Benzene	0.64	0.15		ppbV	1	5/20/2017 1:26:00 AM
Benzyl chloride	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
Bromoform	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
Carbon disulfide	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
Chlorobenzene	0.26	0.15		ppbV	1	5/20/2017 1:26:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
Chloroform	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
Chloromethane	0.76	0.15		ppbV	1	5/20/2017 1:26:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
Cyclohexane	0.25	0.15		ppbV	1	5/20/2017 1:26:00 AM
Dibromochloromethane	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
Ethyl acetate	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-3
Lab Order:	C1705056	**Tag Number:**	225,388
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-003A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Ethylbenzene	0.19	0.15		ppbV	1	5/20/2017 1:26:00 AM
Freon 11	0.30	0.15		ppbV	1	5/20/2017 1:26:00 AM
Freon 113	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
Freon 114	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
Freon 12	0.56	0.15		ppbV	1	5/20/2017 1:26:00 AM
Heptane	0.20	0.15		ppbV	1	5/20/2017 1:26:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
Hexane	0.33	0.15		ppbV	1	5/20/2017 1:26:00 AM
Isopropyl alcohol	0.91	0.15		ppbV	1	5/20/2017 1:26:00 AM
m&p-Xylene	0.73	0.30		ppbV	1	5/20/2017 1:26:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	5/20/2017 1:26:00 AM
Methyl Ethyl Ketone	0.34	0.30		ppbV	1	5/20/2017 1:26:00 AM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	5/20/2017 1:26:00 AM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
Methylene chloride	0.36	0.15		ppbV	1	5/20/2017 1:26:00 AM
o-Xylene	0.29	0.15		ppbV	1	5/20/2017 1:26:00 AM
Propylene	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
Styrene	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
Tetrachloroethylene	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
Toluene	1.3	0.15		ppbV	1	5/20/2017 1:26:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
Trichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	5/20/2017 1:26:00 AM
Surr: Bromofluorobenzene	98.0	70-130		%REC	1	5/20/2017 1:26:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-4
Lab Order:	C1705056	**Tag Number:**	130,308
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-004A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab Vacuum In	-2			"Hg		5/18/2017
Lab Vacuum Out	-30			"Hg		5/18/2017
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	0.33	0.15		ppbV	1	5/20/2017 2:06:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
1,3,5-Trimethylbenzene	0.12	0.15	J	ppbV	1	5/20/2017 2:06:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	5/20/2017 2:06:00 AM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
4-ethyltoluene	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
Acetone	23	3.0		ppbV	10	5/23/2017 12:12:00 AM
Allyl chloride	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
Benzene	3.4	1.5		ppbV	10	5/23/2017 12:12:00 AM
Benzyl chloride	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
Bromoform	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
Carbon disulfide	4.3	1.5		ppbV	10	5/23/2017 12:12:00 AM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
Chloroform	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
Chloromethane	0.20	0.15		ppbV	1	5/20/2017 2:06:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
Cyclohexane	8.3	1.5		ppbV	10	5/23/2017 12:12:00 AM
Dibromochloromethane	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
Ethyl acetate	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-4
Lab Order:	C1705056	**Tag Number:**	130,308
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-004A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Ethylbenzene	0.50	0.15		ppbV	1	5/20/2017 2:06:00 AM
Freon 11	0.34	0.15		ppbV	1	5/20/2017 2:06:00 AM
Freon 113	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
Freon 114	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
Freon 12	0.58	0.15		ppbV	1	5/20/2017 2:06:00 AM
Heptane	13	1.5		ppbV	10	5/23/2017 12:12:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
Hexane	20	1.5		ppbV	10	5/23/2017 12:12:00 AM
Isopropyl alcohol	1.9	0.15		ppbV	1	5/20/2017 2:06:00 AM
m&p-Xylene	1.7	0.30		ppbV	1	5/20/2017 2:06:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	5/20/2017 2:06:00 AM
Methyl Ethyl Ketone	1.7	0.30		ppbV	1	5/20/2017 2:06:00 AM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	5/20/2017 2:06:00 AM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
Methylene chloride	0.59	0.15		ppbV	1	5/20/2017 2:06:00 AM
o-Xylene	0.91	0.15		ppbV	1	5/20/2017 2:06:00 AM
Propylene	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
Styrene	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
Tetrachloroethylene	0.51	0.15		ppbV	1	5/20/2017 2:06:00 AM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
Toluene	4.9	1.5		ppbV	10	5/23/2017 12:12:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
Trichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	5/20/2017 2:06:00 AM
Surr: Bromofluorobenzene	129	70-130		%REC	1	5/20/2017 2:06:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-5
Lab Order:	C1705056	**Tag Number:**	1184,251
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-005A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab Vacuum In	-3			"Hg		5/18/2017
Lab Vacuum Out	-30			"Hg		5/18/2017
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	0.83	0.15		ppbV	1	5/20/2017 2:47:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
1,2,4-Trimethylbenzene	0.27	0.15		ppbV	1	5/20/2017 2:47:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
1,3,5-Trimethylbenzene	0.13	0.15	J	ppbV	1	5/20/2017 2:47:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	5/20/2017 2:47:00 AM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
4-ethyltoluene	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
Acetone	24	3.0		ppbV	10	5/23/2017 12:49:00 AM
Allyl chloride	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
Benzene	2.8	1.5		ppbV	10	5/23/2017 12:49:00 AM
Benzyl chloride	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
Bromoform	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
Carbon disulfide	9.5	1.5		ppbV	10	5/23/2017 12:49:00 AM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
Chloroform	0.22	0.15		ppbV	1	5/20/2017 2:47:00 AM
Chloromethane	0.18	0.15		ppbV	1	5/20/2017 2:47:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
Cyclohexane	7.8	1.5		ppbV	10	5/23/2017 12:49:00 AM
Dibromochloromethane	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
Ethyl acetate	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-5
Lab Order:	C1705056	**Tag Number:**	1184,251
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-005A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Ethylbenzene	0.48	0.15		ppbV	1	5/20/2017 2:47:00 AM
Freon 11	0.32	0.15		ppbV	1	5/20/2017 2:47:00 AM
Freon 113	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
Freon 114	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
Freon 12	0.54	0.15		ppbV	1	5/20/2017 2:47:00 AM
Heptane	5.8	1.5		ppbV	10	5/23/2017 12:49:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
Hexane	14	1.5		ppbV	10	5/23/2017 12:49:00 AM
Isopropyl alcohol	1.3	0.15		ppbV	1	5/20/2017 2:47:00 AM
m&p-Xylene	1.5	0.30		ppbV	1	5/20/2017 2:47:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	5/20/2017 2:47:00 AM
Methyl Ethyl Ketone	3.1	3.0		ppbV	10	5/23/2017 12:49:00 AM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	5/20/2017 2:47:00 AM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
Methylene chloride	0.54	0.15		ppbV	1	5/20/2017 2:47:00 AM
o-Xylene	0.82	0.15		ppbV	1	5/20/2017 2:47:00 AM
Propylene	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
Styrene	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
Tetrachloroethylene	0.30	0.15		ppbV	1	5/20/2017 2:47:00 AM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
Toluene	3.4	1.5		ppbV	10	5/23/2017 12:49:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
Trichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
Vinyl acetate	11	1.5		ppbV	10	5/23/2017 12:49:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	5/20/2017 2:47:00 AM
Surr: Bromofluorobenzene	122	70-130		%REC	1	5/20/2017 2:47:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-6
Lab Order:	C1705056	**Tag Number:**	316,1160
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-006A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab Vacuum In	-4			"Hg		5/18/2017
Lab Vacuum Out	-30			"Hg		5/18/2017
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	5.6	1.5		ppbV	10	5/23/2017 1:27:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
1,2,4-Trimethylbenzene	0.25	0.15		ppbV	1	5/20/2017 3:28:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
1,3,5-Trimethylbenzene	0.10	0.15	J	ppbV	1	5/20/2017 3:28:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	5/20/2017 3:28:00 AM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
4-ethyltoluene	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
Acetone	34	3.0		ppbV	10	5/23/2017 1:27:00 AM
Allyl chloride	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
Benzene	0.65	0.15		ppbV	1	5/20/2017 3:28:00 AM
Benzyl chloride	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
Bromoform	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
Carbon disulfide	9.0	1.5		ppbV	10	5/23/2017 1:27:00 AM
Carbon tetrachloride	0.38	0.15		ppbV	1	5/20/2017 3:28:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
Chloroform	3.0	1.5		ppbV	10	5/23/2017 1:27:00 AM
Chloromethane	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
Cyclohexane	25	1.5		ppbV	10	5/23/2017 1:27:00 AM
Dibromochloromethane	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
Ethyl acetate	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-6
Lab Order:	C1705056	**Tag Number:**	316,1160
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-006A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Ethylbenzene	0.57	0.15		ppbV	1	5/20/2017 3:28:00 AM
Freon 11	0.30	0.15		ppbV	1	5/20/2017 3:28:00 AM
Freon 113	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
Freon 114	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
Freon 12	0.53	0.15		ppbV	1	5/20/2017 3:28:00 AM
Heptane	5.6	1.5		ppbV	10	5/23/2017 1:27:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
Hexane	12	1.5		ppbV	10	5/23/2017 1:27:00 AM
Isopropyl alcohol	0.87	0.15		ppbV	1	5/20/2017 3:28:00 AM
m&p-Xylene	1.9	0.30		ppbV	1	5/20/2017 3:28:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	5/20/2017 3:28:00 AM
Methyl Ethyl Ketone	1.4	0.30		ppbV	1	5/20/2017 3:28:00 AM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	5/20/2017 3:28:00 AM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
Methylene chloride	0.78	0.15		ppbV	1	5/20/2017 3:28:00 AM
o-Xylene	1.1	0.15		ppbV	1	5/20/2017 3:28:00 AM
Propylene	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
Styrene	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
Tetrachloroethylene	0.23	0.15		ppbV	1	5/20/2017 3:28:00 AM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
Toluene	2.8	1.5		ppbV	10	5/23/2017 1:27:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
Trichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	5/20/2017 3:28:00 AM
Surr: Bromofluorobenzene	145	70-130	S	%REC	1	5/20/2017 3:28:00 AM
Surr: Bromofluorobenzene	101	70-130		%REC	10	5/23/2017 1:27:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	IA-1
Lab Order:	C1705056	**Tag Number:**	351,1102
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-007A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab Vacuum In	-2			"Hg		5/18/2017
Lab Vacuum Out	-30			"Hg		5/18/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
1,2,4-Trimethylbenzene	0.44	0.15		ppbV	1	5/19/2017 2:00:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
1,3,5-Trimethylbenzene	0.12	0.15	J	ppbV	1	5/19/2017 2:00:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	5/19/2017 2:00:00 PM
2,2,4-trimethylpentane	0.25	0.15		ppbV	1	5/19/2017 2:00:00 PM
4-ethyltoluene	0.11	0.15	J	ppbV	1	5/19/2017 2:00:00 PM
Acetone	9.4	3.0		ppbV	10	5/20/2017 6:47:00 AM
Allyl chloride	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
Benzene	1.1	0.15		ppbV	1	5/19/2017 2:00:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
Bromoform	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
Carbon disulfide	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
Carbon tetrachloride	0.090	0.040		ppbV	1	5/19/2017 2:00:00 PM
Chlorobenzene	0.16	0.15		ppbV	1	5/19/2017 2:00:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
Chloroform	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
Chloromethane	0.87	0.15		ppbV	1	5/19/2017 2:00:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
Cyclohexane	0.20	0.15		ppbV	1	5/19/2017 2:00:00 PM
Dibromochloromethane	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
Ethyl acetate	0.24	0.15		ppbV	1	5/19/2017 2:00:00 PM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	IA-1
Lab Order:	C1705056	**Tag Number:**	351,1102
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-007A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
Ethylbenzene	0.31	0.15		ppbV	1	5/19/2017 2:00:00 PM
Freon 11	0.30	0.15		ppbV	1	5/19/2017 2:00:00 PM
Freon 113	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
Freon 114	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
Freon 12	0.55	0.15		ppbV	1	5/19/2017 2:00:00 PM
Heptane	0.22	0.15		ppbV	1	5/19/2017 2:00:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
Hexane	0.52	0.15		ppbV	1	5/19/2017 2:00:00 PM
Isopropyl alcohol	0.76	0.15		ppbV	1	5/19/2017 2:00:00 PM
m&p-Xylene	1.3	0.30		ppbV	1	5/19/2017 2:00:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	5/19/2017 2:00:00 PM
Methyl Ethyl Ketone	0.28	0.30	J	ppbV	1	5/19/2017 2:00:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	5/19/2017 2:00:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
Methylene chloride	0.13	0.15	J	ppbV	1	5/19/2017 2:00:00 PM
o-Xylene	0.45	0.15		ppbV	1	5/19/2017 2:00:00 PM
Propylene	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
Styrene	0.11	0.15	J	ppbV	1	5/19/2017 2:00:00 PM
Tetrachloroethylene	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
Toluene	3.7	1.5		ppbV	10	5/20/2017 6:47:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
Trichloroethene	< 0.040	0.040		ppbV	1	5/19/2017 2:00:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	5/19/2017 2:00:00 PM
Vinyl chloride	< 0.040	0.040		ppbV	1	5/19/2017 2:00:00 PM
Surr: Bromofluorobenzene	99.0	70-130		%REC	1	5/19/2017 2:00:00 PM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	IA-2
Lab Order:	C1705056	**Tag Number:**	260,298
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-008A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab Vacuum In	-1			"Hg		5/18/2017
Lab Vacuum Out	-30			"Hg		5/18/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	5/19/2017 2:40:00 PM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
Acetone	9.5	3.0		ppbV	10	5/20/2017 7:24:00 AM
Allyl chloride	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
Benzene	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
Bromoform	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
Carbon disulfide	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
Carbon tetrachloride	0.090	0.040		ppbV	1	5/19/2017 2:40:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
Chloroform	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
Chloromethane	1.1	0.15		ppbV	1	5/19/2017 2:40:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
Dibromochloromethane	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
Ethyl acetate	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	IA-2
Lab Order:	C1705056	**Tag Number:**	260,298
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-008A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
Ethylbenzene	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
Freon 11	0.30	0.15		ppbV	1	5/19/2017 2:40:00 PM
Freon 113	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
Freon 114	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
Freon 12	0.56	0.15		ppbV	1	5/19/2017 2:40:00 PM
Heptane	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
Hexane	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
Isopropyl alcohol	1.4	0.15		ppbV	1	5/19/2017 2:40:00 PM
m&p-Xylene	< 0.30	0.30		ppbV	1	5/19/2017 2:40:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	5/19/2017 2:40:00 PM
Methyl Ethyl Ketone	0.19	0.30	J	ppbV	1	5/19/2017 2:40:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	5/19/2017 2:40:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
Methylene chloride	0.18	0.15		ppbV	1	5/19/2017 2:40:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
Propylene	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
Styrene	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
Tetrachloroethylene	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
Toluene	0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
Trichloroethene	< 0.040	0.040		ppbV	1	5/19/2017 2:40:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	5/19/2017 2:40:00 PM
Vinyl chloride	< 0.040	0.040		ppbV	1	5/19/2017 2:40:00 PM
Surr: Bromofluorobenzene	92.0	70-130		%REC	1	5/19/2017 2:40:00 PM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	OA-1
Lab Order:	C1705056	**Tag Number:**	318,278
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-009A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab Vacuum In	-3			"Hg		5/18/2017
Lab Vacuum Out	-30			"Hg		5/18/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	5/19/2017 3:20:00 PM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
Acetone	11	3.0		ppbV	10	5/20/2017 8:01:00 AM
Allyl chloride	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
Benzene	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
Bromoform	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
Carbon disulfide	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
Carbon tetrachloride	0.090	0.040		ppbV	1	5/19/2017 3:20:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
Chloroform	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
Chloromethane	0.97	0.15		ppbV	1	5/19/2017 3:20:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
Dibromochloromethane	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
Ethyl acetate	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	OA-1
Lab Order:	C1705056	**Tag Number:**	318,278
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-009A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
Ethylbenzene	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
Freon 11	0.30	0.15		ppbV	1	5/19/2017 3:20:00 PM
Freon 113	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
Freon 114	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
Freon 12	0.55	0.15		ppbV	1	5/19/2017 3:20:00 PM
Heptane	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
Hexane	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
Isopropyl alcohol	1.3	0.15		ppbV	1	5/19/2017 3:20:00 PM
m&p-Xylene	< 0.30	0.30		ppbV	1	5/19/2017 3:20:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	5/19/2017 3:20:00 PM
Methyl Ethyl Ketone	0.25	0.30	J	ppbV	1	5/19/2017 3:20:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	5/19/2017 3:20:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
Methylene chloride	0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
Propylene	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
Styrene	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
Tetrachloroethylene	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
Toluene	0.17	0.15		ppbV	1	5/19/2017 3:20:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
Trichloroethene	0.11	0.040		ppbV	1	5/19/2017 3:20:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	5/19/2017 3:20:00 PM
Vinyl chloride	< 0.040	0.040		ppbV	1	5/19/2017 3:20:00 PM
Surr: Bromofluorobenzene	92.0	70-130		%REC	1	5/19/2017 3:20:00 PM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-7
Lab Order:	C1705056	**Tag Number:**	100,296
Project:	144 Lee St	**Collection Date:**	5/16/2017
Lab ID:	C1705056-010A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab Vacuum In	-3			"Hg		5/18/2017
Lab Vacuum Out	-30			"Hg		5/18/2017
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
1,3,5-Trimethylbenzene	0.13	0.15	J	ppbV	1	5/20/2017 4:08:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	5/20/2017 4:08:00 AM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
4-ethyltoluene	0.20	0.15		ppbV	1	5/20/2017 4:08:00 AM
Acetone	39	12		ppbV	40	5/23/2017 9:06:00 AM
Allyl chloride	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
Benzene	4.5	1.5		ppbV	10	5/23/2017 5:18:00 AM
Benzyl chloride	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
Bromoform	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
Carbon disulfide	0.84	0.15		ppbV	1	5/20/2017 4:08:00 AM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
Chloroform	0.28	0.15		ppbV	1	5/20/2017 4:08:00 AM
Chloromethane	0.28	0.15		ppbV	1	5/20/2017 4:08:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
Cyclohexane	44	6.0		ppbV	40	5/23/2017 9:06:00 AM
Dibromochloromethane	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
Ethyl acetate	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-7
Lab Order:	C1705056	**Tag Number:**	100,296
Project:	144 Lee St	**Collection Date:**	5/16/2017
Lab ID:	C1705056-010A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Ethylbenzene	1.1	0.15		ppbV	1	5/20/2017 4:08:00 AM
Freon 11	0.36	0.15		ppbV	1	5/20/2017 4:08:00 AM
Freon 113	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
Freon 114	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
Freon 12	0.52	0.15		ppbV	1	5/20/2017 4:08:00 AM
Heptane	55	6.0		ppbV	40	5/23/2017 9:06:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
Hexane	26	6.0		ppbV	40	5/23/2017 9:06:00 AM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
m&p-Xylene	3.5	0.30		ppbV	1	5/20/2017 4:08:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	5/20/2017 4:08:00 AM
Methyl Ethyl Ketone	3.9	3.0		ppbV	10	5/23/2017 5:18:00 AM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	5/20/2017 4:08:00 AM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
Methylene chloride	0.53	0.15		ppbV	1	5/20/2017 4:08:00 AM
o-Xylene	1.8	0.15		ppbV	1	5/20/2017 4:08:00 AM
Propylene	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
Styrene	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
Tetrachloroethylene	0.39	0.15		ppbV	1	5/20/2017 4:08:00 AM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
Toluene	21	6.0		ppbV	40	5/23/2017 9:06:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
Trichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	5/20/2017 4:08:00 AM
Surr: Bromofluorobenzene	202	70-130	S	%REC	1	5/20/2017 4:08:00 AM
Surr: Bromofluorobenzene	113	70-130		%REC	10	5/23/2017 5:18:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-8
Lab Order:	C1705056	**Tag Number:**	459,281
Project:	144 Lee St	**Collection Date:**	5/16/2017
Lab ID:	C1705056-011A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab Vacuum In	-3			"Hg		5/18/2017
Lab Vacuum Out	-30			"Hg		5/18/2017
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
1,3,5-Trimethylbenzene	0.18	0.15		ppbV	1	5/20/2017 4:49:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	5/20/2017 4:49:00 AM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
4-ethyltoluene	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
Acetone	94	81		ppbV	270	5/23/2017 6:36:00 AM
Allyl chloride	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
Benzene	12	1.5		ppbV	10	5/22/2017 2:34:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
Bromoform	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
Carbon disulfide	0.40	0.15		ppbV	1	5/20/2017 4:49:00 AM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
Chloroform	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
Chloromethane	0.55	0.15		ppbV	1	5/20/2017 4:49:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
Cyclohexane	17	1.5		ppbV	10	5/22/2017 2:34:00 PM
Dibromochloromethane	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
Ethyl acetate	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-8
Lab Order:	C1705056	**Tag Number:**	459,281
Project:	144 Lee St	**Collection Date:**	5/16/2017
Lab ID:	C1705056-011A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Ethylbenzene	2.8	1.5		ppbV	10	5/22/2017 2:34:00 PM
Freon 11	0.38	0.15		ppbV	1	5/20/2017 4:49:00 AM
Freon 113	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
Freon 114	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
Freon 12	0.54	0.15		ppbV	1	5/20/2017 4:49:00 AM
Heptane	100	40		ppbV	270	5/23/2017 6:36:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
Hexane	23	1.5		ppbV	10	5/22/2017 2:34:00 PM
Isopropyl alcohol	1.7	0.15		ppbV	1	5/20/2017 4:49:00 AM
m&p-Xylene	8.4	3.0		ppbV	10	5/22/2017 2:34:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	5/20/2017 4:49:00 AM
Methyl Ethyl Ketone	6.1	3.0		ppbV	10	5/22/2017 2:34:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	5/20/2017 4:49:00 AM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
Methylene chloride	0.65	0.15		ppbV	1	5/20/2017 4:49:00 AM
o-Xylene	3.4	1.5		ppbV	10	5/22/2017 2:34:00 PM
Propylene	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
Styrene	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
Tetrachloroethylene	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
Toluene	520	40		ppbV	270	5/23/2017 6:36:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
Trichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	5/20/2017 4:49:00 AM
Surr: Bromofluorobenzene	128	70-130		%REC	1	5/20/2017 4:49:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-9
Lab Order:	C1705056	**Tag Number:**	336,260
Project:	144 Lee St	**Collection Date:**	5/16/2017
Lab ID:	C1705056-012A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab Vacuum In	-1			"Hg		5/18/2017
Lab Vacuum Out	-30			"Hg		5/18/2017
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	5/20/2017 5:29:00 AM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
4-ethyltoluene	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
Acetone	16	3.0		ppbV	10	5/23/2017 7:13:00 AM
Allyl chloride	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
Benzene	0.40	0.15		ppbV	1	5/20/2017 5:29:00 AM
Benzyl chloride	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
Bromoform	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
Carbon disulfide	0.46	0.15		ppbV	1	5/20/2017 5:29:00 AM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
Chloroform	0.12	0.15	J	ppbV	1	5/20/2017 5:29:00 AM
Chloromethane	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
Cyclohexane	1.1	0.15		ppbV	1	5/20/2017 5:29:00 AM
Dibromochloromethane	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
Ethyl acetate	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-9
Lab Order:	C1705056	**Tag Number:**	336,260
Project:	144 Lee St	**Collection Date:**	5/16/2017
Lab ID:	C1705056-012A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Ethylbenzene	0.54	0.15		ppbV	1	5/20/2017 5:29:00 AM
Freon 11	0.33	0.15		ppbV	1	5/20/2017 5:29:00 AM
Freon 113	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
Freon 114	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
Freon 12	0.55	0.15		ppbV	1	5/20/2017 5:29:00 AM
Heptane	1.7	0.15		ppbV	1	5/20/2017 5:29:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
Hexane	1.2	0.15		ppbV	1	5/20/2017 5:29:00 AM
Isopropyl alcohol	1.8	0.15		ppbV	1	5/20/2017 5:29:00 AM
m&p-Xylene	1.7	0.30		ppbV	1	5/20/2017 5:29:00 AM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	5/20/2017 5:29:00 AM
Methyl Ethyl Ketone	1.9	0.30		ppbV	1	5/20/2017 5:29:00 AM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	5/20/2017 5:29:00 AM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
Methylene chloride	0.44	0.15		ppbV	1	5/20/2017 5:29:00 AM
o-Xylene	0.86	0.15		ppbV	1	5/20/2017 5:29:00 AM
Propylene	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
Styrene	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
Tetrachloroethylene	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
Toluene	3.5	1.5		ppbV	10	5/23/2017 7:13:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
Trichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	5/20/2017 5:29:00 AM
Surr: Bromofluorobenzene	101	70-130		%REC	1	5/20/2017 5:29:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	IA-3
Lab Order:	C1705056	**Tag Number:**	460,227
Project:	144 Lee St	**Collection Date:**	5/16/2017
Lab ID:	C1705056-013A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab Vacuum In	-2			"Hg		5/18/2017
Lab Vacuum Out	-30			"Hg		5/18/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	5/19/2017 4:00:00 PM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
Acetone	11	3.0		ppbV	10	5/20/2017 8:39:00 AM
Allyl chloride	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
Benzene	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
Bromoform	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
Carbon disulfide	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
Carbon tetrachloride	0.10	0.040		ppbV	1	5/19/2017 4:00:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
Chloroform	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
Chloromethane	0.74	0.15		ppbV	1	5/19/2017 4:00:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
Dibromochloromethane	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
Ethyl acetate	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	IA-3
Lab Order:	C1705056	**Tag Number:**	460,227
Project:	144 Lee St	**Collection Date:**	5/16/2017
Lab ID:	C1705056-013A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
Ethylbenzene	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
Freon 11	0.34	0.15		ppbV	1	5/19/2017 4:00:00 PM
Freon 113	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
Freon 114	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
Freon 12	0.59	0.15		ppbV	1	5/19/2017 4:00:00 PM
Heptane	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
Hexane	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
Isopropyl alcohol	0.64	0.15		ppbV	1	5/19/2017 4:00:00 PM
m&p-Xylene	< 0.30	0.30		ppbV	1	5/19/2017 4:00:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	5/19/2017 4:00:00 PM
Methyl Ethyl Ketone	0.22	0.30	J	ppbV	1	5/19/2017 4:00:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	5/19/2017 4:00:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
Methylene chloride	0.16	0.15		ppbV	1	5/19/2017 4:00:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
Propylene	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
Styrene	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
Tetrachloroethylene	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
Toluene	0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
Trichloroethene	< 0.040	0.040		ppbV	1	5/19/2017 4:00:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	5/19/2017 4:00:00 PM
Vinyl chloride	< 0.040	0.040		ppbV	1	5/19/2017 4:00:00 PM
Surr: Bromofluorobenzene	93.0	70-130		%REC	1	5/19/2017 4:00:00 PM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	IA-4
Lab Order:	C1705056	**Tag Number:**	139,249
Project:	144 Lee St	**Collection Date:**	5/16/2017
Lab ID:	C1705056-014A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab Vacuum In	-2			"Hg		5/18/2017
Lab Vacuum Out	-30			"Hg		5/18/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	5/19/2017 4:40:00 PM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
Acetone	11	3.0		ppbV	10	5/20/2017 9:17:00 AM
Allyl chloride	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
Benzene	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
Bromoform	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
Carbon disulfide	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
Carbon tetrachloride	0.090	0.040		ppbV	1	5/19/2017 4:40:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
Chloroform	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
Chloromethane	0.73	0.15		ppbV	1	5/19/2017 4:40:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
Dibromochloromethane	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
Ethyl acetate	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	IA-4
Lab Order:	C1705056	**Tag Number:**	139,249
Project:	144 Lee St	**Collection Date:**	5/16/2017
Lab ID:	C1705056-014A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
Ethylbenzene	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
Freon 11	0.34	0.15		ppbV	1	5/19/2017 4:40:00 PM
Freon 113	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
Freon 114	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
Freon 12	0.62	0.15		ppbV	1	5/19/2017 4:40:00 PM
Heptane	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
Hexane	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
Isopropyl alcohol	1.0	0.15		ppbV	1	5/19/2017 4:40:00 PM
m&p-Xylene	< 0.30	0.30		ppbV	1	5/19/2017 4:40:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	5/19/2017 4:40:00 PM
Methyl Ethyl Ketone	0.24	0.30	J	ppbV	1	5/19/2017 4:40:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	5/19/2017 4:40:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
Methylene chloride	0.13	0.15	J	ppbV	1	5/19/2017 4:40:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
Propylene	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
Styrene	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
Tetrachloroethylene	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
Toluene	0.26	0.15		ppbV	1	5/19/2017 4:40:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
Trichloroethene	< 0.040	0.040		ppbV	1	5/19/2017 4:40:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	5/19/2017 4:40:00 PM
Vinyl chloride	< 0.040	0.040		ppbV	1	5/19/2017 4:40:00 PM
Surr: Bromofluorobenzene	91.0	70-130		%REC	1	5/19/2017 4:40:00 PM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-10
Lab Order:	C1705056	**Tag Number:**	350,1163
Project:	144 Lee St	**Collection Date:**	5/16/2017
Lab ID:	C1705056-015A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab Vacuum In	-2			"Hg		5/18/2017
Lab Vacuum Out	-30			"Hg		5/18/2017
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	0.54	0.15		ppbV	1	5/20/2017 6:09:00 AM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
1,3-butadiene	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
1,4-Dioxane	< 0.30	0.30		ppbV	1	5/20/2017 6:09:00 AM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
4-ethyltoluene	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
Acetone	150	81		ppbV	270	5/23/2017 8:29:00 AM
Allyl chloride	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
Benzene	59	40		ppbV	270	5/23/2017 8:29:00 AM
Benzyl chloride	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
Bromodichloromethane	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
Bromoform	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
Bromomethane	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
Carbon disulfide	6.6	1.5		ppbV	10	5/22/2017 3:11:00 PM
Carbon tetrachloride	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
Chlorobenzene	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
Chloroethane	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
Chloroform	0.40	0.15		ppbV	1	5/20/2017 6:09:00 AM
Chloromethane	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
Cyclohexane	130	40		ppbV	270	5/23/2017 8:29:00 AM
Dibromochloromethane	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
Ethyl acetate	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-10
Lab Order:	C1705056	**Tag Number:**	350,1163
Project:	144 Lee St	**Collection Date:**	5/16/2017
Lab ID:	C1705056-015A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Ethylbenzene	2.9	1.5		ppbV	10	5/22/2017 3:11:00 PM
Freon 11	1.4	0.15		ppbV	1	5/20/2017 6:09:00 AM
Freon 113	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
Freon 114	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
Freon 12	0.52	0.15		ppbV	1	5/20/2017 6:09:00 AM
Heptane	120	40		ppbV	270	5/23/2017 8:29:00 AM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
Hexane	270	40		ppbV	270	5/23/2017 8:29:00 AM
Isopropyl alcohol	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
m&p-Xylene	8.4	3.0		ppbV	10	5/22/2017 3:11:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	5/20/2017 6:09:00 AM
Methyl Ethyl Ketone	12	3.0		ppbV	10	5/22/2017 3:11:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	5/20/2017 6:09:00 AM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
Methylene chloride	0.40	0.15		ppbV	1	5/20/2017 6:09:00 AM
o-Xylene	3.7	1.5		ppbV	10	5/22/2017 3:11:00 PM
Propylene	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
Styrene	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
Tetrachloroethylene	0.23	0.15		ppbV	1	5/20/2017 6:09:00 AM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
Toluene	59	40		ppbV	270	5/23/2017 8:29:00 AM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
Trichloroethene	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
Vinyl acetate	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
Vinyl Bromide	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
Vinyl chloride	< 0.15	0.15		ppbV	1	5/20/2017 6:09:00 AM
Surr: Bromofluorobenzene	251	70-130	S	%REC	1	5/20/2017 6:09:00 AM
Surr: Bromofluorobenzene	101	70-130		%REC	27	5/23/2017 7:52:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	OA-2
Lab Order:	C1705056	**Tag Number:**	133,400
Project:	144 Lee St	**Collection Date:**	5/16/2017
Lab ID:	C1705056-016A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab Vacuum In	-3			"Hg		5/18/2017
Lab Vacuum Out	-30			"Hg		5/18/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	5/19/2017 5:21:00 PM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
Acetone	18	3.0		ppbV	10	5/20/2017 9:54:00 AM
Allyl chloride	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
Benzene	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
Bromoform	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
Carbon disulfide	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
Carbon tetrachloride	0.080	0.040		ppbV	1	5/19/2017 5:21:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
Chloroform	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
Chloromethane	0.66	0.15		ppbV	1	5/19/2017 5:21:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
Dibromochloromethane	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
Ethyl acetate	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	OA-2
Lab Order:	C1705056	**Tag Number:**	133,400
Project:	144 Lee St	**Collection Date:**	5/16/2017
Lab ID:	C1705056-016A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
Ethylbenzene	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
Freon 11	0.33	0.15		ppbV	1	5/19/2017 5:21:00 PM
Freon 113	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
Freon 114	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
Freon 12	0.56	0.15		ppbV	1	5/19/2017 5:21:00 PM
Heptane	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
Hexane	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
Isopropyl alcohol	0.92	0.15		ppbV	1	5/19/2017 5:21:00 PM
m&p-Xylene	< 0.30	0.30		ppbV	1	5/19/2017 5:21:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	5/19/2017 5:21:00 PM
Methyl Ethyl Ketone	0.29	0.30	J	ppbV	1	5/19/2017 5:21:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	5/19/2017 5:21:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
Methylene chloride	0.16	0.15		ppbV	1	5/19/2017 5:21:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
Propylene	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
Styrene	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
Tetrachloroethylene	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
Toluene	0.18	0.15		ppbV	1	5/19/2017 5:21:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
Trichloroethene	< 0.040	0.040		ppbV	1	5/19/2017 5:21:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	5/19/2017 5:21:00 PM
Vinyl chloride	< 0.040	0.040		ppbV	1	5/19/2017 5:21:00 PM
Surr: Bromofluorobenzene	97.0	70-130		%REC	1	5/19/2017 5:21:00 PM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	IA-5
Lab Order:	C1705056	**Tag Number:**	195,1152
Project:	144 Lee St	**Collection Date:**	5/16/2017
Lab ID:	C1705056-017A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
FIELD PARAMETERS		**FLD**				Analyst:
Lab Vacuum In	-3			"Hg		5/18/2017
Lab Vacuum Out	-30			"Hg		5/18/2017
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
1,1,2,2-Tetrachloroethane	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
1,1,2-Trichloroethane	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
1,1-Dichloroethane	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
1,1-Dichloroethene	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
1,2,4-Trichlorobenzene	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
1,2,4-Trimethylbenzene	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
1,2-Dibromoethane	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
1,2-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
1,2-Dichloroethane	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
1,2-Dichloropropane	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
1,3,5-Trimethylbenzene	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
1,3-butadiene	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
1,3-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
1,4-Dichlorobenzene	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
1,4-Dioxane	< 0.30	0.30		ppbV	1	5/19/2017 6:01:00 PM
2,2,4-trimethylpentane	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
4-ethyltoluene	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
Acetone	15	3.0		ppbV	10	5/20/2017 10:32:00 AM
Allyl chloride	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
Benzene	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
Benzyl chloride	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
Bromodichloromethane	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
Bromoform	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
Bromomethane	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
Carbon disulfide	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
Carbon tetrachloride	0.10	0.040		ppbV	1	5/19/2017 6:01:00 PM
Chlorobenzene	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
Chloroethane	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
Chloroform	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
Chloromethane	1.3	0.15		ppbV	1	5/19/2017 6:01:00 PM
cis-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
cis-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
Cyclohexane	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
Dibromochloromethane	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
Ethyl acetate	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	IA-5
Lab Order:	C1705056	**Tag Number:**	195,1152
Project:	144 Lee St	**Collection Date:**	5/16/2017
Lab ID:	C1705056-017A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
Ethylbenzene	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
Freon 11	0.33	0.15		ppbV	1	5/19/2017 6:01:00 PM
Freon 113	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
Freon 114	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
Freon 12	0.58	0.15		ppbV	1	5/19/2017 6:01:00 PM
Heptane	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
Hexachloro-1,3-butadiene	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
Hexane	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
Isopropyl alcohol	0.90	0.15		ppbV	1	5/19/2017 6:01:00 PM
m&p-Xylene	0.12	0.30	J	ppbV	1	5/19/2017 6:01:00 PM
Methyl Butyl Ketone	< 0.30	0.30		ppbV	1	5/19/2017 6:01:00 PM
Methyl Ethyl Ketone	0.22	0.30	J	ppbV	1	5/19/2017 6:01:00 PM
Methyl Isobutyl Ketone	< 0.30	0.30		ppbV	1	5/19/2017 6:01:00 PM
Methyl tert-butyl ether	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
Methylene chloride	0.23	0.15		ppbV	1	5/19/2017 6:01:00 PM
o-Xylene	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
Propylene	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
Styrene	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
Tetrachloroethylene	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
Tetrahydrofuran	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
Toluene	0.22	0.15		ppbV	1	5/19/2017 6:01:00 PM
trans-1,2-Dichloroethene	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
trans-1,3-Dichloropropene	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
Trichloroethene	< 0.040	0.040		ppbV	1	5/19/2017 6:01:00 PM
Vinyl acetate	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
Vinyl Bromide	< 0.15	0.15		ppbV	1	5/19/2017 6:01:00 PM
Vinyl chloride	< 0.040	0.040		ppbV	1	5/19/2017 6:01:00 PM
Surr: Bromofluorobenzene	98.0	70-130		%REC	1	5/19/2017 6:01:00 PM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-1
Lab Order:	C1705056	**Tag Number:**	324,1166
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	5/20/2017 12:05:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	5/20/2017 12:05:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	5/20/2017 12:05:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	5/20/2017 12:05:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	5/20/2017 12:05:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	5/20/2017 12:05:00 AM
1,2,4-Trimethylbenzene	1.8	0.74		ug/m3	1	5/20/2017 12:05:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	5/20/2017 12:05:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/20/2017 12:05:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	5/20/2017 12:05:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	5/20/2017 12:05:00 AM
1,3,5-Trimethylbenzene	0.54	0.74	J	ug/m3	1	5/20/2017 12:05:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	5/20/2017 12:05:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/20/2017 12:05:00 AM
1,4-Dichlorobenzene	1.1	0.90		ug/m3	1	5/20/2017 12:05:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	5/20/2017 12:05:00 AM
2,2,4-trimethylpentane	1.0	0.70		ug/m3	1	5/20/2017 12:05:00 AM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	5/20/2017 12:05:00 AM
Acetone	20	7.1		ug/m3	10	5/22/2017 10:18:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	5/20/2017 12:05:00 AM
Benzene	3.9	0.48		ug/m3	1	5/20/2017 12:05:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	5/20/2017 12:05:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	5/20/2017 12:05:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	5/20/2017 12:05:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	5/20/2017 12:05:00 AM
Carbon disulfide	< 0.47	0.47		ug/m3	1	5/20/2017 12:05:00 AM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	5/20/2017 12:05:00 AM
Chlorobenzene	17	6.9		ug/m3	10	5/22/2017 10:18:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	5/20/2017 12:05:00 AM
Chloroform	< 0.73	0.73		ug/m3	1	5/20/2017 12:05:00 AM
Chloromethane	1.4	0.31		ug/m3	1	5/20/2017 12:05:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	5/20/2017 12:05:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	5/20/2017 12:05:00 AM
Cyclohexane	0.89	0.52		ug/m3	1	5/20/2017 12:05:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	5/20/2017 12:05:00 AM
Ethyl acetate	< 0.54	0.54		ug/m3	1	5/20/2017 12:05:00 AM
Ethylbenzene	1.3	0.65		ug/m3	1	5/20/2017 12:05:00 AM
Freon 11	1.7	0.84		ug/m3	1	5/20/2017 12:05:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	5/20/2017 12:05:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	5/20/2017 12:05:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-1
Lab Order:	C1705056	**Tag Number:**	324,1166
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-001A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Freon 12	2.8	0.74		ug/m3	1	5/20/2017 12:05:00 AM
Heptane	1.5	0.61		ug/m3	1	5/20/2017 12:05:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	5/20/2017 12:05:00 AM
Hexane	2.1	0.53		ug/m3	1	5/20/2017 12:05:00 AM
Isopropyl alcohol	2.5	0.37		ug/m3	1	5/20/2017 12:05:00 AM
m&p-Xylene	5.2	1.3		ug/m3	1	5/20/2017 12:05:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	5/20/2017 12:05:00 AM
Methyl Ethyl Ketone	1.1	0.88		ug/m3	1	5/20/2017 12:05:00 AM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	5/20/2017 12:05:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	5/20/2017 12:05:00 AM
Methylene chloride	1.1	0.52		ug/m3	1	5/20/2017 12:05:00 AM
o-Xylene	2.0	0.65		ug/m3	1	5/20/2017 12:05:00 AM
Propylene	< 0.26	0.26		ug/m3	1	5/20/2017 12:05:00 AM
Styrene	< 0.64	0.64		ug/m3	1	5/20/2017 12:05:00 AM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	5/20/2017 12:05:00 AM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	5/20/2017 12:05:00 AM
Toluene	7.5	0.57		ug/m3	1	5/20/2017 12:05:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	5/20/2017 12:05:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	5/20/2017 12:05:00 AM
Trichloroethene	< 0.81	0.81		ug/m3	1	5/20/2017 12:05:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	5/20/2017 12:05:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	5/20/2017 12:05:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	5/20/2017 12:05:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-2
Lab Order:	C1705056	**Tag Number:**	243,1165
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	5/20/2017 12:46:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	5/20/2017 12:46:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	5/20/2017 12:46:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	5/20/2017 12:46:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	5/20/2017 12:46:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	5/20/2017 12:46:00 AM
1,2,4-Trimethylbenzene	1.1	0.74		ug/m3	1	5/20/2017 12:46:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	5/20/2017 12:46:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/20/2017 12:46:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	5/20/2017 12:46:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	5/20/2017 12:46:00 AM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	5/20/2017 12:46:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	5/20/2017 12:46:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/20/2017 12:46:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/20/2017 12:46:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	5/20/2017 12:46:00 AM
2,2,4-trimethylpentane	0.61	0.70	J	ug/m3	1	5/20/2017 12:46:00 AM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	5/20/2017 12:46:00 AM
Acetone	19	7.1		ug/m3	10	5/22/2017 10:56:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	5/20/2017 12:46:00 AM
Benzene	1.9	0.48		ug/m3	1	5/20/2017 12:46:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	5/20/2017 12:46:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	5/20/2017 12:46:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	5/20/2017 12:46:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	5/20/2017 12:46:00 AM
Carbon disulfide	< 0.47	0.47		ug/m3	1	5/20/2017 12:46:00 AM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	5/20/2017 12:46:00 AM
Chlorobenzene	3.4	0.69		ug/m3	1	5/20/2017 12:46:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	5/20/2017 12:46:00 AM
Chloroform	< 0.73	0.73		ug/m3	1	5/20/2017 12:46:00 AM
Chloromethane	1.5	0.31		ug/m3	1	5/20/2017 12:46:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	5/20/2017 12:46:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	5/20/2017 12:46:00 AM
Cyclohexane	0.76	0.52		ug/m3	1	5/20/2017 12:46:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	5/20/2017 12:46:00 AM
Ethyl acetate	< 0.54	0.54		ug/m3	1	5/20/2017 12:46:00 AM
Ethylbenzene	0.87	0.65		ug/m3	1	5/20/2017 12:46:00 AM
Freon 11	1.7	0.84		ug/m3	1	5/20/2017 12:46:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	5/20/2017 12:46:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	5/20/2017 12:46:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-2
Lab Order:	C1705056	**Tag Number:**	243,1165
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-002A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Freon 12	2.8	0.74		ug/m3	1	5/20/2017 12:46:00 AM
Heptane	1.1	0.61		ug/m3	1	5/20/2017 12:46:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	5/20/2017 12:46:00 AM
Hexane	1.0	0.53		ug/m3	1	5/20/2017 12:46:00 AM
Isopropyl alcohol	1.2	0.37		ug/m3	1	5/20/2017 12:46:00 AM
m&p-Xylene	3.3	1.3		ug/m3	1	5/20/2017 12:46:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	5/20/2017 12:46:00 AM
Methyl Ethyl Ketone	0.88	0.88		ug/m3	1	5/20/2017 12:46:00 AM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	5/20/2017 12:46:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	5/20/2017 12:46:00 AM
Methylene chloride	1.1	0.52		ug/m3	1	5/20/2017 12:46:00 AM
o-Xylene	1.5	0.65		ug/m3	1	5/20/2017 12:46:00 AM
Propylene	< 0.26	0.26		ug/m3	1	5/20/2017 12:46:00 AM
Styrene	< 0.64	0.64		ug/m3	1	5/20/2017 12:46:00 AM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	5/20/2017 12:46:00 AM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	5/20/2017 12:46:00 AM
Toluene	4.6	0.57		ug/m3	1	5/20/2017 12:46:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	5/20/2017 12:46:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	5/20/2017 12:46:00 AM
Trichloroethene	< 0.81	0.81		ug/m3	1	5/20/2017 12:46:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	5/20/2017 12:46:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	5/20/2017 12:46:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	5/20/2017 12:46:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-3
Lab Order:	C1705056	**Tag Number:**	225,388
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-003A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	5/20/2017 1:26:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	5/20/2017 1:26:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	5/20/2017 1:26:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	5/20/2017 1:26:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	5/20/2017 1:26:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	5/20/2017 1:26:00 AM
1,2,4-Trimethylbenzene	1.2	0.74		ug/m3	1	5/20/2017 1:26:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	5/20/2017 1:26:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/20/2017 1:26:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	5/20/2017 1:26:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	5/20/2017 1:26:00 AM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	5/20/2017 1:26:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	5/20/2017 1:26:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/20/2017 1:26:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/20/2017 1:26:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	5/20/2017 1:26:00 AM
2,2,4-trimethylpentane	0.65	0.70	J	ug/m3	1	5/20/2017 1:26:00 AM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	5/20/2017 1:26:00 AM
Acetone	18	7.1		ug/m3	10	5/22/2017 11:34:00 PM
Allyl chloride	< 0.47	0.47		ug/m3	1	5/20/2017 1:26:00 AM
Benzene	2.0	0.48		ug/m3	1	5/20/2017 1:26:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	5/20/2017 1:26:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	5/20/2017 1:26:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	5/20/2017 1:26:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	5/20/2017 1:26:00 AM
Carbon disulfide	< 0.47	0.47		ug/m3	1	5/20/2017 1:26:00 AM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	5/20/2017 1:26:00 AM
Chlorobenzene	1.2	0.69		ug/m3	1	5/20/2017 1:26:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	5/20/2017 1:26:00 AM
Chloroform	< 0.73	0.73		ug/m3	1	5/20/2017 1:26:00 AM
Chloromethane	1.6	0.31		ug/m3	1	5/20/2017 1:26:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	5/20/2017 1:26:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	5/20/2017 1:26:00 AM
Cyclohexane	0.86	0.52		ug/m3	1	5/20/2017 1:26:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	5/20/2017 1:26:00 AM
Ethyl acetate	< 0.54	0.54		ug/m3	1	5/20/2017 1:26:00 AM
Ethylbenzene	0.82	0.65		ug/m3	1	5/20/2017 1:26:00 AM
Freon 11	1.7	0.84		ug/m3	1	5/20/2017 1:26:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	5/20/2017 1:26:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	5/20/2017 1:26:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-3
Lab Order:	C1705056	**Tag Number:**	225,388
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-003A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Freon 12	2.8	0.74		ug/m3	1	5/20/2017 1:26:00 AM
Heptane	0.82	0.61		ug/m3	1	5/20/2017 1:26:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	5/20/2017 1:26:00 AM
Hexane	1.2	0.53		ug/m3	1	5/20/2017 1:26:00 AM
Isopropyl alcohol	2.2	0.37		ug/m3	1	5/20/2017 1:26:00 AM
m&p-Xylene	3.2	1.3		ug/m3	1	5/20/2017 1:26:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	5/20/2017 1:26:00 AM
Methyl Ethyl Ketone	1.0	0.88		ug/m3	1	5/20/2017 1:26:00 AM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	5/20/2017 1:26:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	5/20/2017 1:26:00 AM
Methylene chloride	1.3	0.52		ug/m3	1	5/20/2017 1:26:00 AM
o-Xylene	1.3	0.65		ug/m3	1	5/20/2017 1:26:00 AM
Propylene	< 0.26	0.26		ug/m3	1	5/20/2017 1:26:00 AM
Styrene	< 0.64	0.64		ug/m3	1	5/20/2017 1:26:00 AM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	5/20/2017 1:26:00 AM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	5/20/2017 1:26:00 AM
Toluene	4.7	0.57		ug/m3	1	5/20/2017 1:26:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	5/20/2017 1:26:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	5/20/2017 1:26:00 AM
Trichloroethene	< 0.81	0.81		ug/m3	1	5/20/2017 1:26:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	5/20/2017 1:26:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	5/20/2017 1:26:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	5/20/2017 1:26:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-4
Lab Order:	C1705056	**Tag Number:**	130,308
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-004A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	1.8	0.82		ug/m3	1	5/20/2017 2:06:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	5/20/2017 2:06:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	5/20/2017 2:06:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	5/20/2017 2:06:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	5/20/2017 2:06:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	5/20/2017 2:06:00 AM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	5/20/2017 2:06:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	5/20/2017 2:06:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/20/2017 2:06:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	5/20/2017 2:06:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	5/20/2017 2:06:00 AM
1,3,5-Trimethylbenzene	0.59	0.74	J	ug/m3	1	5/20/2017 2:06:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	5/20/2017 2:06:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/20/2017 2:06:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/20/2017 2:06:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	5/20/2017 2:06:00 AM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	5/20/2017 2:06:00 AM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	5/20/2017 2:06:00 AM
Acetone	55	7.1		ug/m3	10	5/23/2017 12:12:00 AM
Allyl chloride	< 0.47	0.47		ug/m3	1	5/20/2017 2:06:00 AM
Benzene	11	4.8		ug/m3	10	5/23/2017 12:12:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	5/20/2017 2:06:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	5/20/2017 2:06:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	5/20/2017 2:06:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	5/20/2017 2:06:00 AM
Carbon disulfide	13	4.7		ug/m3	10	5/23/2017 12:12:00 AM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	5/20/2017 2:06:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	5/20/2017 2:06:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	5/20/2017 2:06:00 AM
Chloroform	< 0.73	0.73		ug/m3	1	5/20/2017 2:06:00 AM
Chloromethane	0.41	0.31		ug/m3	1	5/20/2017 2:06:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	5/20/2017 2:06:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	5/20/2017 2:06:00 AM
Cyclohexane	29	5.2		ug/m3	10	5/23/2017 12:12:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	5/20/2017 2:06:00 AM
Ethyl acetate	< 0.54	0.54		ug/m3	1	5/20/2017 2:06:00 AM
Ethylbenzene	2.2	0.65		ug/m3	1	5/20/2017 2:06:00 AM
Freon 11	1.9	0.84		ug/m3	1	5/20/2017 2:06:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	5/20/2017 2:06:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	5/20/2017 2:06:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-4
Lab Order:	C1705056	**Tag Number:**	130,308
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-004A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Freon 12	2.9	0.74		ug/m3	1	5/20/2017 2:06:00 AM
Heptane	53	6.1		ug/m3	10	5/23/2017 12:12:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	5/20/2017 2:06:00 AM
Hexane	71	5.3		ug/m3	10	5/23/2017 12:12:00 AM
Isopropyl alcohol	4.8	0.37		ug/m3	1	5/20/2017 2:06:00 AM
m&p-Xylene	7.5	1.3		ug/m3	1	5/20/2017 2:06:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	5/20/2017 2:06:00 AM
Methyl Ethyl Ketone	5.0	0.88		ug/m3	1	5/20/2017 2:06:00 AM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	5/20/2017 2:06:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	5/20/2017 2:06:00 AM
Methylene chloride	2.0	0.52		ug/m3	1	5/20/2017 2:06:00 AM
o-Xylene	4.0	0.65		ug/m3	1	5/20/2017 2:06:00 AM
Propylene	< 0.26	0.26		ug/m3	1	5/20/2017 2:06:00 AM
Styrene	< 0.64	0.64		ug/m3	1	5/20/2017 2:06:00 AM
Tetrachloroethylene	3.5	1.0		ug/m3	1	5/20/2017 2:06:00 AM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	5/20/2017 2:06:00 AM
Toluene	18	5.7		ug/m3	10	5/23/2017 12:12:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	5/20/2017 2:06:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	5/20/2017 2:06:00 AM
Trichloroethene	< 0.81	0.81		ug/m3	1	5/20/2017 2:06:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	5/20/2017 2:06:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	5/20/2017 2:06:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	5/20/2017 2:06:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-5
Lab Order:	C1705056	**Tag Number:**	1184,251
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-005A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	4.5	0.82		ug/m3	1	5/20/2017 2:47:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	5/20/2017 2:47:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	5/20/2017 2:47:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	5/20/2017 2:47:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	5/20/2017 2:47:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	5/20/2017 2:47:00 AM
1,2,4-Trimethylbenzene	1.3	0.74		ug/m3	1	5/20/2017 2:47:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	5/20/2017 2:47:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/20/2017 2:47:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	5/20/2017 2:47:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	5/20/2017 2:47:00 AM
1,3,5-Trimethylbenzene	0.64	0.74	J	ug/m3	1	5/20/2017 2:47:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	5/20/2017 2:47:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/20/2017 2:47:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/20/2017 2:47:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	5/20/2017 2:47:00 AM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	5/20/2017 2:47:00 AM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	5/20/2017 2:47:00 AM
Acetone	57	7.1		ug/m3	10	5/23/2017 12:49:00 AM
Allyl chloride	< 0.47	0.47		ug/m3	1	5/20/2017 2:47:00 AM
Benzene	8.9	4.8		ug/m3	10	5/23/2017 12:49:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	5/20/2017 2:47:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	5/20/2017 2:47:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	5/20/2017 2:47:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	5/20/2017 2:47:00 AM
Carbon disulfide	30	4.7		ug/m3	10	5/23/2017 12:49:00 AM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	5/20/2017 2:47:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	5/20/2017 2:47:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	5/20/2017 2:47:00 AM
Chloroform	1.1	0.73		ug/m3	1	5/20/2017 2:47:00 AM
Chloromethane	0.37	0.31		ug/m3	1	5/20/2017 2:47:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	5/20/2017 2:47:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	5/20/2017 2:47:00 AM
Cyclohexane	27	5.2		ug/m3	10	5/23/2017 12:49:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	5/20/2017 2:47:00 AM
Ethyl acetate	< 0.54	0.54		ug/m3	1	5/20/2017 2:47:00 AM
Ethylbenzene	2.1	0.65		ug/m3	1	5/20/2017 2:47:00 AM
Freon 11	1.8	0.84		ug/m3	1	5/20/2017 2:47:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	5/20/2017 2:47:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	5/20/2017 2:47:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-5
Lab Order:	C1705056	**Tag Number:**	1184,251
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-005A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Freon 12	2.7	0.74		ug/m3	1	5/20/2017 2:47:00 AM
Heptane	24	6.1		ug/m3	10	5/23/2017 12:49:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	5/20/2017 2:47:00 AM
Hexane	50	5.3		ug/m3	10	5/23/2017 12:49:00 AM
Isopropyl alcohol	3.2	0.37		ug/m3	1	5/20/2017 2:47:00 AM
m&p-Xylene	6.6	1.3		ug/m3	1	5/20/2017 2:47:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	5/20/2017 2:47:00 AM
Methyl Ethyl Ketone	9.1	8.8		ug/m3	10	5/23/2017 12:49:00 AM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	5/20/2017 2:47:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	5/20/2017 2:47:00 AM
Methylene chloride	1.9	0.52		ug/m3	1	5/20/2017 2:47:00 AM
o-Xylene	3.6	0.65		ug/m3	1	5/20/2017 2:47:00 AM
Propylene	< 0.26	0.26		ug/m3	1	5/20/2017 2:47:00 AM
Styrene	< 0.64	0.64		ug/m3	1	5/20/2017 2:47:00 AM
Tetrachloroethylene	2.0	1.0		ug/m3	1	5/20/2017 2:47:00 AM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	5/20/2017 2:47:00 AM
Toluene	13	5.7		ug/m3	10	5/23/2017 12:49:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	5/20/2017 2:47:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	5/20/2017 2:47:00 AM
Trichloroethene	< 0.81	0.81		ug/m3	1	5/20/2017 2:47:00 AM
Vinyl acetate	38	5.3		ug/m3	10	5/23/2017 12:49:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	5/20/2017 2:47:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	5/20/2017 2:47:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-6
Lab Order:	C1705056	**Tag Number:**	316,1160
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-006A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	31	8.2		ug/m3	10	5/23/2017 1:27:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	5/20/2017 3:28:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	5/20/2017 3:28:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	5/20/2017 3:28:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	5/20/2017 3:28:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	5/20/2017 3:28:00 AM
1,2,4-Trimethylbenzene	1.2	0.74		ug/m3	1	5/20/2017 3:28:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	5/20/2017 3:28:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/20/2017 3:28:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	5/20/2017 3:28:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	5/20/2017 3:28:00 AM
1,3,5-Trimethylbenzene	0.49	0.74	J	ug/m3	1	5/20/2017 3:28:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	5/20/2017 3:28:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/20/2017 3:28:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/20/2017 3:28:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	5/20/2017 3:28:00 AM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	5/20/2017 3:28:00 AM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	5/20/2017 3:28:00 AM
Acetone	80	7.1		ug/m3	10	5/23/2017 1:27:00 AM
Allyl chloride	< 0.47	0.47		ug/m3	1	5/20/2017 3:28:00 AM
Benzene	2.1	0.48		ug/m3	1	5/20/2017 3:28:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	5/20/2017 3:28:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	5/20/2017 3:28:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	5/20/2017 3:28:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	5/20/2017 3:28:00 AM
Carbon disulfide	28	4.7		ug/m3	10	5/23/2017 1:27:00 AM
Carbon tetrachloride	2.4	0.94		ug/m3	1	5/20/2017 3:28:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	5/20/2017 3:28:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	5/20/2017 3:28:00 AM
Chloroform	15	7.3		ug/m3	10	5/23/2017 1:27:00 AM
Chloromethane	< 0.31	0.31		ug/m3	1	5/20/2017 3:28:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	5/20/2017 3:28:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	5/20/2017 3:28:00 AM
Cyclohexane	85	5.2		ug/m3	10	5/23/2017 1:27:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	5/20/2017 3:28:00 AM
Ethyl acetate	< 0.54	0.54		ug/m3	1	5/20/2017 3:28:00 AM
Ethylbenzene	2.5	0.65		ug/m3	1	5/20/2017 3:28:00 AM
Freon 11	1.7	0.84		ug/m3	1	5/20/2017 3:28:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	5/20/2017 3:28:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	5/20/2017 3:28:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-6
Lab Order:	C1705056	**Tag Number:**	316,1160
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-006A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Freon 12	2.6	0.74		ug/m3	1	5/20/2017 3:28:00 AM
Heptane	23	6.1		ug/m3	10	5/23/2017 1:27:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	5/20/2017 3:28:00 AM
Hexane	42	5.3		ug/m3	10	5/23/2017 1:27:00 AM
Isopropyl alcohol	2.1	0.37		ug/m3	1	5/20/2017 3:28:00 AM
m&p-Xylene	8.3	1.3		ug/m3	1	5/20/2017 3:28:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	5/20/2017 3:28:00 AM
Methyl Ethyl Ketone	4.0	0.88		ug/m3	1	5/20/2017 3:28:00 AM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	5/20/2017 3:28:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	5/20/2017 3:28:00 AM
Methylene chloride	2.7	0.52		ug/m3	1	5/20/2017 3:28:00 AM
o-Xylene	4.6	0.65		ug/m3	1	5/20/2017 3:28:00 AM
Propylene	< 0.26	0.26		ug/m3	1	5/20/2017 3:28:00 AM
Styrene	< 0.64	0.64		ug/m3	1	5/20/2017 3:28:00 AM
Tetrachloroethylene	1.6	1.0		ug/m3	1	5/20/2017 3:28:00 AM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	5/20/2017 3:28:00 AM
Toluene	11	5.7		ug/m3	10	5/23/2017 1:27:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	5/20/2017 3:28:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	5/20/2017 3:28:00 AM
Trichloroethene	< 0.81	0.81		ug/m3	1	5/20/2017 3:28:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	5/20/2017 3:28:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	5/20/2017 3:28:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	5/20/2017 3:28:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	IA-1
Lab Order:	C1705056	**Tag Number:**	351,1102
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-007A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	5/19/2017 2:00:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	5/19/2017 2:00:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	5/19/2017 2:00:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	5/19/2017 2:00:00 PM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	5/19/2017 2:00:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	5/19/2017 2:00:00 PM
1,2,4-Trimethylbenzene	2.2	0.74		ug/m3	1	5/19/2017 2:00:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	5/19/2017 2:00:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/19/2017 2:00:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	5/19/2017 2:00:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	5/19/2017 2:00:00 PM
1,3,5-Trimethylbenzene	0.59	0.74	J	ug/m3	1	5/19/2017 2:00:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	5/19/2017 2:00:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/19/2017 2:00:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/19/2017 2:00:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	5/19/2017 2:00:00 PM
2,2,4-trimethylpentane	1.2	0.70		ug/m3	1	5/19/2017 2:00:00 PM
4-ethyltoluene	0.54	0.74	J	ug/m3	1	5/19/2017 2:00:00 PM
Acetone	22	7.1		ug/m3	10	5/20/2017 6:47:00 AM
Allyl chloride	< 0.47	0.47		ug/m3	1	5/19/2017 2:00:00 PM
Benzene	3.6	0.48		ug/m3	1	5/19/2017 2:00:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	5/19/2017 2:00:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	5/19/2017 2:00:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	5/19/2017 2:00:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	5/19/2017 2:00:00 PM
Carbon disulfide	< 0.47	0.47		ug/m3	1	5/19/2017 2:00:00 PM
Carbon tetrachloride	0.57	0.25		ug/m3	1	5/19/2017 2:00:00 PM
Chlorobenzene	0.74	0.69		ug/m3	1	5/19/2017 2:00:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	5/19/2017 2:00:00 PM
Chloroform	< 0.73	0.73		ug/m3	1	5/19/2017 2:00:00 PM
Chloromethane	1.8	0.31		ug/m3	1	5/19/2017 2:00:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	5/19/2017 2:00:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	5/19/2017 2:00:00 PM
Cyclohexane	0.69	0.52		ug/m3	1	5/19/2017 2:00:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	5/19/2017 2:00:00 PM
Ethyl acetate	0.86	0.54		ug/m3	1	5/19/2017 2:00:00 PM
Ethylbenzene	1.3	0.65		ug/m3	1	5/19/2017 2:00:00 PM
Freon 11	1.7	0.84		ug/m3	1	5/19/2017 2:00:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	5/19/2017 2:00:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	5/19/2017 2:00:00 PM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	IA-1
Lab Order:	C1705056	**Tag Number:**	351,1102
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-007A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
Freon 12	2.7	0.74		ug/m3	1	5/19/2017 2:00:00 PM
Heptane	0.90	0.61		ug/m3	1	5/19/2017 2:00:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	5/19/2017 2:00:00 PM
Hexane	1.8	0.53		ug/m3	1	5/19/2017 2:00:00 PM
Isopropyl alcohol	1.9	0.37		ug/m3	1	5/19/2017 2:00:00 PM
m&p-Xylene	5.6	1.3		ug/m3	1	5/19/2017 2:00:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	5/19/2017 2:00:00 PM
Methyl Ethyl Ketone	0.83	0.88	J	ug/m3	1	5/19/2017 2:00:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	5/19/2017 2:00:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	5/19/2017 2:00:00 PM
Methylene chloride	0.45	0.52	J	ug/m3	1	5/19/2017 2:00:00 PM
o-Xylene	2.0	0.65		ug/m3	1	5/19/2017 2:00:00 PM
Propylene	< 0.26	0.26		ug/m3	1	5/19/2017 2:00:00 PM
Styrene	0.47	0.64	J	ug/m3	1	5/19/2017 2:00:00 PM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	5/19/2017 2:00:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	5/19/2017 2:00:00 PM
Toluene	14	5.7		ug/m3	10	5/20/2017 6:47:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	5/19/2017 2:00:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	5/19/2017 2:00:00 PM
Trichloroethene	< 0.21	0.21		ug/m3	1	5/19/2017 2:00:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	5/19/2017 2:00:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	5/19/2017 2:00:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	5/19/2017 2:00:00 PM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	IA-2
Lab Order:	C1705056	**Tag Number:**	260,298
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-008A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	5/19/2017 2:40:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	5/19/2017 2:40:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	5/19/2017 2:40:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	5/19/2017 2:40:00 PM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	5/19/2017 2:40:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	5/19/2017 2:40:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	5/19/2017 2:40:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	5/19/2017 2:40:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/19/2017 2:40:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	5/19/2017 2:40:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	5/19/2017 2:40:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	5/19/2017 2:40:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	5/19/2017 2:40:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/19/2017 2:40:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/19/2017 2:40:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	5/19/2017 2:40:00 PM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	5/19/2017 2:40:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	5/19/2017 2:40:00 PM
Acetone	23	7.1		ug/m3	10	5/20/2017 7:24:00 AM
Allyl chloride	< 0.47	0.47		ug/m3	1	5/19/2017 2:40:00 PM
Benzene	< 0.48	0.48		ug/m3	1	5/19/2017 2:40:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	5/19/2017 2:40:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	5/19/2017 2:40:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	5/19/2017 2:40:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	5/19/2017 2:40:00 PM
Carbon disulfide	< 0.47	0.47		ug/m3	1	5/19/2017 2:40:00 PM
Carbon tetrachloride	0.57	0.25		ug/m3	1	5/19/2017 2:40:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	5/19/2017 2:40:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	5/19/2017 2:40:00 PM
Chloroform	< 0.73	0.73		ug/m3	1	5/19/2017 2:40:00 PM
Chloromethane	2.3	0.31		ug/m3	1	5/19/2017 2:40:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	5/19/2017 2:40:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	5/19/2017 2:40:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	5/19/2017 2:40:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	5/19/2017 2:40:00 PM
Ethyl acetate	< 0.54	0.54		ug/m3	1	5/19/2017 2:40:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	5/19/2017 2:40:00 PM
Freon 11	1.7	0.84		ug/m3	1	5/19/2017 2:40:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	5/19/2017 2:40:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	5/19/2017 2:40:00 PM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	IA-2
Lab Order:	C1705056	**Tag Number:**	260,298
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-008A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
Freon 12	2.8	0.74		ug/m3	1	5/19/2017 2:40:00 PM
Heptane	< 0.61	0.61		ug/m3	1	5/19/2017 2:40:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	5/19/2017 2:40:00 PM
Hexane	< 0.53	0.53		ug/m3	1	5/19/2017 2:40:00 PM
Isopropyl alcohol	3.4	0.37		ug/m3	1	5/19/2017 2:40:00 PM
m&p-Xylene	< 1.3	1.3		ug/m3	1	5/19/2017 2:40:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	5/19/2017 2:40:00 PM
Methyl Ethyl Ketone	0.56	0.88	J	ug/m3	1	5/19/2017 2:40:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	5/19/2017 2:40:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	5/19/2017 2:40:00 PM
Methylene chloride	0.63	0.52		ug/m3	1	5/19/2017 2:40:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	5/19/2017 2:40:00 PM
Propylene	< 0.26	0.26		ug/m3	1	5/19/2017 2:40:00 PM
Styrene	< 0.64	0.64		ug/m3	1	5/19/2017 2:40:00 PM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	5/19/2017 2:40:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	5/19/2017 2:40:00 PM
Toluene	0.57	0.57		ug/m3	1	5/19/2017 2:40:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	5/19/2017 2:40:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	5/19/2017 2:40:00 PM
Trichloroethene	< 0.21	0.21		ug/m3	1	5/19/2017 2:40:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	5/19/2017 2:40:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	5/19/2017 2:40:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	5/19/2017 2:40:00 PM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	OA-1
Lab Order:	C1705056	**Tag Number:**	318,278
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-009A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	5/19/2017 3:20:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	5/19/2017 3:20:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	5/19/2017 3:20:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	5/19/2017 3:20:00 PM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	5/19/2017 3:20:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	5/19/2017 3:20:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	5/19/2017 3:20:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	5/19/2017 3:20:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/19/2017 3:20:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	5/19/2017 3:20:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	5/19/2017 3:20:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	5/19/2017 3:20:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	5/19/2017 3:20:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/19/2017 3:20:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/19/2017 3:20:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	5/19/2017 3:20:00 PM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	5/19/2017 3:20:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	5/19/2017 3:20:00 PM
Acetone	27	7.1		ug/m3	10	5/20/2017 8:01:00 AM
Allyl chloride	< 0.47	0.47		ug/m3	1	5/19/2017 3:20:00 PM
Benzene	< 0.48	0.48		ug/m3	1	5/19/2017 3:20:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	5/19/2017 3:20:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	5/19/2017 3:20:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	5/19/2017 3:20:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	5/19/2017 3:20:00 PM
Carbon disulfide	< 0.47	0.47		ug/m3	1	5/19/2017 3:20:00 PM
Carbon tetrachloride	0.57	0.25		ug/m3	1	5/19/2017 3:20:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	5/19/2017 3:20:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	5/19/2017 3:20:00 PM
Chloroform	< 0.73	0.73		ug/m3	1	5/19/2017 3:20:00 PM
Chloromethane	2.0	0.31		ug/m3	1	5/19/2017 3:20:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	5/19/2017 3:20:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	5/19/2017 3:20:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	5/19/2017 3:20:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	5/19/2017 3:20:00 PM
Ethyl acetate	< 0.54	0.54		ug/m3	1	5/19/2017 3:20:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	5/19/2017 3:20:00 PM
Freon 11	1.7	0.84		ug/m3	1	5/19/2017 3:20:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	5/19/2017 3:20:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	5/19/2017 3:20:00 PM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	OA-1
Lab Order:	C1705056	**Tag Number:**	318,278
Project:	144 Lee St	**Collection Date:**	5/15/2017
Lab ID:	C1705056-009A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
Freon 12	2.7	0.74		ug/m3	1	5/19/2017 3:20:00 PM
Heptane	< 0.61	0.61		ug/m3	1	5/19/2017 3:20:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	5/19/2017 3:20:00 PM
Hexane	< 0.53	0.53		ug/m3	1	5/19/2017 3:20:00 PM
Isopropyl alcohol	3.2	0.37		ug/m3	1	5/19/2017 3:20:00 PM
m&p-Xylene	< 1.3	1.3		ug/m3	1	5/19/2017 3:20:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	5/19/2017 3:20:00 PM
Methyl Ethyl Ketone	0.74	0.88	J	ug/m3	1	5/19/2017 3:20:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	5/19/2017 3:20:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	5/19/2017 3:20:00 PM
Methylene chloride	0.52	0.52		ug/m3	1	5/19/2017 3:20:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	5/19/2017 3:20:00 PM
Propylene	< 0.26	0.26		ug/m3	1	5/19/2017 3:20:00 PM
Styrene	< 0.64	0.64		ug/m3	1	5/19/2017 3:20:00 PM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	5/19/2017 3:20:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	5/19/2017 3:20:00 PM
Toluene	0.64	0.57		ug/m3	1	5/19/2017 3:20:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	5/19/2017 3:20:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	5/19/2017 3:20:00 PM
Trichloroethene	0.59	0.21		ug/m3	1	5/19/2017 3:20:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	5/19/2017 3:20:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	5/19/2017 3:20:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	5/19/2017 3:20:00 PM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-7
Lab Order:	C1705056	**Tag Number:**	100,296
Project:	144 Lee St	**Collection Date:**	5/16/2017
Lab ID:	C1705056-010A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	5/20/2017 4:08:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	5/20/2017 4:08:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	5/20/2017 4:08:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	5/20/2017 4:08:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	5/20/2017 4:08:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	5/20/2017 4:08:00 AM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	5/20/2017 4:08:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	5/20/2017 4:08:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/20/2017 4:08:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	5/20/2017 4:08:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	5/20/2017 4:08:00 AM
1,3,5-Trimethylbenzene	0.64	0.74	J	ug/m3	1	5/20/2017 4:08:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	5/20/2017 4:08:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/20/2017 4:08:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/20/2017 4:08:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	5/20/2017 4:08:00 AM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	5/20/2017 4:08:00 AM
4-ethyltoluene	0.98	0.74		ug/m3	1	5/20/2017 4:08:00 AM
Acetone	92	28		ug/m3	40	5/23/2017 9:06:00 AM
Allyl chloride	< 0.47	0.47		ug/m3	1	5/20/2017 4:08:00 AM
Benzene	14	4.8		ug/m3	10	5/23/2017 5:18:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	5/20/2017 4:08:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	5/20/2017 4:08:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	5/20/2017 4:08:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	5/20/2017 4:08:00 AM
Carbon disulfide	2.6	0.47		ug/m3	1	5/20/2017 4:08:00 AM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	5/20/2017 4:08:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	5/20/2017 4:08:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	5/20/2017 4:08:00 AM
Chloroform	1.4	0.73		ug/m3	1	5/20/2017 4:08:00 AM
Chloromethane	0.58	0.31		ug/m3	1	5/20/2017 4:08:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	5/20/2017 4:08:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	5/20/2017 4:08:00 AM
Cyclohexane	150	21		ug/m3	40	5/23/2017 9:06:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	5/20/2017 4:08:00 AM
Ethyl acetate	< 0.54	0.54		ug/m3	1	5/20/2017 4:08:00 AM
Ethylbenzene	4.7	0.65		ug/m3	1	5/20/2017 4:08:00 AM
Freon 11	2.0	0.84		ug/m3	1	5/20/2017 4:08:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	5/20/2017 4:08:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	5/20/2017 4:08:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-7
Lab Order:	C1705056	**Tag Number:**	100,296
Project:	144 Lee St	**Collection Date:**	5/16/2017
Lab ID:	C1705056-010A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Freon 12	2.6	0.74		ug/m3	1	5/20/2017 4:08:00 AM
Heptane	220	25		ug/m3	40	5/23/2017 9:06:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	5/20/2017 4:08:00 AM
Hexane	93	21		ug/m3	40	5/23/2017 9:06:00 AM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	5/20/2017 4:08:00 AM
m&p-Xylene	15	1.3		ug/m3	1	5/20/2017 4:08:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	5/20/2017 4:08:00 AM
Methyl Ethyl Ketone	11	8.8		ug/m3	10	5/23/2017 5:18:00 AM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	5/20/2017 4:08:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	5/20/2017 4:08:00 AM
Methylene chloride	1.8	0.52		ug/m3	1	5/20/2017 4:08:00 AM
o-Xylene	7.9	0.65		ug/m3	1	5/20/2017 4:08:00 AM
Propylene	< 0.26	0.26		ug/m3	1	5/20/2017 4:08:00 AM
Styrene	< 0.64	0.64		ug/m3	1	5/20/2017 4:08:00 AM
Tetrachloroethylene	2.6	1.0		ug/m3	1	5/20/2017 4:08:00 AM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	5/20/2017 4:08:00 AM
Toluene	78	23		ug/m3	40	5/23/2017 9:06:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	5/20/2017 4:08:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	5/20/2017 4:08:00 AM
Trichloroethene	< 0.81	0.81		ug/m3	1	5/20/2017 4:08:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	5/20/2017 4:08:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	5/20/2017 4:08:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	5/20/2017 4:08:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-8
Lab Order:	C1705056	**Tag Number:**	459,281
Project:	144 Lee St	**Collection Date:**	5/16/2017
Lab ID:	C1705056-011A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	5/20/2017 4:49:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	5/20/2017 4:49:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	5/20/2017 4:49:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	5/20/2017 4:49:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	5/20/2017 4:49:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	5/20/2017 4:49:00 AM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	5/20/2017 4:49:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	5/20/2017 4:49:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/20/2017 4:49:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	5/20/2017 4:49:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	5/20/2017 4:49:00 AM
1,3,5-Trimethylbenzene	0.88	0.74		ug/m3	1	5/20/2017 4:49:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	5/20/2017 4:49:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/20/2017 4:49:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/20/2017 4:49:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	5/20/2017 4:49:00 AM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	5/20/2017 4:49:00 AM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	5/20/2017 4:49:00 AM
Acetone	220	190		ug/m3	270	5/23/2017 6:36:00 AM
Allyl chloride	< 0.47	0.47		ug/m3	1	5/20/2017 4:49:00 AM
Benzene	38	4.8		ug/m3	10	5/22/2017 2:34:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	5/20/2017 4:49:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	5/20/2017 4:49:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	5/20/2017 4:49:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	5/20/2017 4:49:00 AM
Carbon disulfide	1.2	0.47		ug/m3	1	5/20/2017 4:49:00 AM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	5/20/2017 4:49:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	5/20/2017 4:49:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	5/20/2017 4:49:00 AM
Chloroform	< 0.73	0.73		ug/m3	1	5/20/2017 4:49:00 AM
Chloromethane	1.1	0.31		ug/m3	1	5/20/2017 4:49:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	5/20/2017 4:49:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	5/20/2017 4:49:00 AM
Cyclohexane	59	5.2		ug/m3	10	5/22/2017 2:34:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	5/20/2017 4:49:00 AM
Ethyl acetate	< 0.54	0.54		ug/m3	1	5/20/2017 4:49:00 AM
Ethylbenzene	12	6.5		ug/m3	10	5/22/2017 2:34:00 PM
Freon 11	2.1	0.84		ug/m3	1	5/20/2017 4:49:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	5/20/2017 4:49:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	5/20/2017 4:49:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-8
Lab Order:	C1705056	**Tag Number:**	459,281
Project:	144 Lee St	**Collection Date:**	5/16/2017
Lab ID:	C1705056-011A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Freon 12	2.7	0.74		ug/m3	1	5/20/2017 4:49:00 AM
Heptane	420	160		ug/m3	270	5/23/2017 6:36:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	5/20/2017 4:49:00 AM
Hexane	81	5.3		ug/m3	10	5/22/2017 2:34:00 PM
Isopropyl alcohol	4.3	0.37		ug/m3	1	5/20/2017 4:49:00 AM
m&p-Xylene	36	13		ug/m3	10	5/22/2017 2:34:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	5/20/2017 4:49:00 AM
Methyl Ethyl Ketone	18	8.8		ug/m3	10	5/22/2017 2:34:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	5/20/2017 4:49:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	5/20/2017 4:49:00 AM
Methylene chloride	2.3	0.52		ug/m3	1	5/20/2017 4:49:00 AM
o-Xylene	15	6.5		ug/m3	10	5/22/2017 2:34:00 PM
Propylene	< 0.26	0.26		ug/m3	1	5/20/2017 4:49:00 AM
Styrene	< 0.64	0.64		ug/m3	1	5/20/2017 4:49:00 AM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	5/20/2017 4:49:00 AM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	5/20/2017 4:49:00 AM
Toluene	2000	150		ug/m3	270	5/23/2017 6:36:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	5/20/2017 4:49:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	5/20/2017 4:49:00 AM
Trichloroethene	< 0.81	0.81		ug/m3	1	5/20/2017 4:49:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	5/20/2017 4:49:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	5/20/2017 4:49:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	5/20/2017 4:49:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-9
Lab Order:	C1705056	**Tag Number:**	336,260
Project:	144 Lee St	**Collection Date:**	5/16/2017
Lab ID:	C1705056-012A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	5/20/2017 5:29:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	5/20/2017 5:29:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	5/20/2017 5:29:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	5/20/2017 5:29:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	5/20/2017 5:29:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	5/20/2017 5:29:00 AM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	5/20/2017 5:29:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	5/20/2017 5:29:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/20/2017 5:29:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	5/20/2017 5:29:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	5/20/2017 5:29:00 AM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	5/20/2017 5:29:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	5/20/2017 5:29:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/20/2017 5:29:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/20/2017 5:29:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	5/20/2017 5:29:00 AM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	5/20/2017 5:29:00 AM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	5/20/2017 5:29:00 AM
Acetone	38	7.1		ug/m3	10	5/23/2017 7:13:00 AM
Allyl chloride	< 0.47	0.47		ug/m3	1	5/20/2017 5:29:00 AM
Benzene	1.3	0.48		ug/m3	1	5/20/2017 5:29:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	5/20/2017 5:29:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	5/20/2017 5:29:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	5/20/2017 5:29:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	5/20/2017 5:29:00 AM
Carbon disulfide	1.4	0.47		ug/m3	1	5/20/2017 5:29:00 AM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	5/20/2017 5:29:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	5/20/2017 5:29:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	5/20/2017 5:29:00 AM
Chloroform	0.59	0.73	J	ug/m3	1	5/20/2017 5:29:00 AM
Chloromethane	< 0.31	0.31		ug/m3	1	5/20/2017 5:29:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	5/20/2017 5:29:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	5/20/2017 5:29:00 AM
Cyclohexane	3.8	0.52		ug/m3	1	5/20/2017 5:29:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	5/20/2017 5:29:00 AM
Ethyl acetate	< 0.54	0.54		ug/m3	1	5/20/2017 5:29:00 AM
Ethylbenzene	2.3	0.65		ug/m3	1	5/20/2017 5:29:00 AM
Freon 11	1.9	0.84		ug/m3	1	5/20/2017 5:29:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	5/20/2017 5:29:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	5/20/2017 5:29:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-9
Lab Order:	C1705056	**Tag Number:**	336,260
Project:	144 Lee St	**Collection Date:**	5/16/2017
Lab ID:	C1705056-012A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Freon 12	2.7	0.74		ug/m3	1	5/20/2017 5:29:00 AM
Heptane	7.1	0.61		ug/m3	1	5/20/2017 5:29:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	5/20/2017 5:29:00 AM
Hexane	4.4	0.53		ug/m3	1	5/20/2017 5:29:00 AM
Isopropyl alcohol	4.3	0.37		ug/m3	1	5/20/2017 5:29:00 AM
m&p-Xylene	7.5	1.3		ug/m3	1	5/20/2017 5:29:00 AM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	5/20/2017 5:29:00 AM
Methyl Ethyl Ketone	5.6	0.88		ug/m3	1	5/20/2017 5:29:00 AM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	5/20/2017 5:29:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	5/20/2017 5:29:00 AM
Methylene chloride	1.5	0.52		ug/m3	1	5/20/2017 5:29:00 AM
o-Xylene	3.7	0.65		ug/m3	1	5/20/2017 5:29:00 AM
Propylene	< 0.26	0.26		ug/m3	1	5/20/2017 5:29:00 AM
Styrene	< 0.64	0.64		ug/m3	1	5/20/2017 5:29:00 AM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	5/20/2017 5:29:00 AM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	5/20/2017 5:29:00 AM
Toluene	13	5.7		ug/m3	10	5/23/2017 7:13:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	5/20/2017 5:29:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	5/20/2017 5:29:00 AM
Trichloroethene	< 0.81	0.81		ug/m3	1	5/20/2017 5:29:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	5/20/2017 5:29:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	5/20/2017 5:29:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	5/20/2017 5:29:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	IA-3
Lab Order:	C1705056	**Tag Number:**	460,227
Project:	144 Lee St	**Collection Date:**	5/16/2017
Lab ID:	C1705056-013A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	5/19/2017 4:00:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	5/19/2017 4:00:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	5/19/2017 4:00:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	5/19/2017 4:00:00 PM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	5/19/2017 4:00:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	5/19/2017 4:00:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	5/19/2017 4:00:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	5/19/2017 4:00:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/19/2017 4:00:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	5/19/2017 4:00:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	5/19/2017 4:00:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	5/19/2017 4:00:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	5/19/2017 4:00:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/19/2017 4:00:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/19/2017 4:00:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	5/19/2017 4:00:00 PM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	5/19/2017 4:00:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	5/19/2017 4:00:00 PM
Acetone	25	7.1		ug/m3	10	5/20/2017 8:39:00 AM
Allyl chloride	< 0.47	0.47		ug/m3	1	5/19/2017 4:00:00 PM
Benzene	< 0.48	0.48		ug/m3	1	5/19/2017 4:00:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	5/19/2017 4:00:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	5/19/2017 4:00:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	5/19/2017 4:00:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	5/19/2017 4:00:00 PM
Carbon disulfide	< 0.47	0.47		ug/m3	1	5/19/2017 4:00:00 PM
Carbon tetrachloride	0.63	0.25		ug/m3	1	5/19/2017 4:00:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	5/19/2017 4:00:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	5/19/2017 4:00:00 PM
Chloroform	< 0.73	0.73		ug/m3	1	5/19/2017 4:00:00 PM
Chloromethane	1.5	0.31		ug/m3	1	5/19/2017 4:00:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	5/19/2017 4:00:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	5/19/2017 4:00:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	5/19/2017 4:00:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	5/19/2017 4:00:00 PM
Ethyl acetate	< 0.54	0.54		ug/m3	1	5/19/2017 4:00:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	5/19/2017 4:00:00 PM
Freon 11	1.9	0.84		ug/m3	1	5/19/2017 4:00:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	5/19/2017 4:00:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	5/19/2017 4:00:00 PM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	IA-3
Lab Order:	C1705056	**Tag Number:**	460,227
Project:	144 Lee St	**Collection Date:**	5/16/2017
Lab ID:	C1705056-013A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
Freon 12	2.9	0.74		ug/m3	1	5/19/2017 4:00:00 PM
Heptane	< 0.61	0.61		ug/m3	1	5/19/2017 4:00:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	5/19/2017 4:00:00 PM
Hexane	< 0.53	0.53		ug/m3	1	5/19/2017 4:00:00 PM
Isopropyl alcohol	1.6	0.37		ug/m3	1	5/19/2017 4:00:00 PM
m&p-Xylene	< 1.3	1.3		ug/m3	1	5/19/2017 4:00:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	5/19/2017 4:00:00 PM
Methyl Ethyl Ketone	0.65	0.88	J	ug/m3	1	5/19/2017 4:00:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	5/19/2017 4:00:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	5/19/2017 4:00:00 PM
Methylene chloride	0.56	0.52		ug/m3	1	5/19/2017 4:00:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	5/19/2017 4:00:00 PM
Propylene	< 0.26	0.26		ug/m3	1	5/19/2017 4:00:00 PM
Styrene	< 0.64	0.64		ug/m3	1	5/19/2017 4:00:00 PM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	5/19/2017 4:00:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	5/19/2017 4:00:00 PM
Toluene	0.57	0.57		ug/m3	1	5/19/2017 4:00:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	5/19/2017 4:00:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	5/19/2017 4:00:00 PM
Trichloroethene	< 0.21	0.21		ug/m3	1	5/19/2017 4:00:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	5/19/2017 4:00:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	5/19/2017 4:00:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	5/19/2017 4:00:00 PM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	IA-4
Lab Order:	C1705056	**Tag Number:**	139,249
Project:	144 Lee St	**Collection Date:**	5/16/2017
Lab ID:	C1705056-014A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	5/19/2017 4:40:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	5/19/2017 4:40:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	5/19/2017 4:40:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	5/19/2017 4:40:00 PM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	5/19/2017 4:40:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	5/19/2017 4:40:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	5/19/2017 4:40:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	5/19/2017 4:40:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/19/2017 4:40:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	5/19/2017 4:40:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	5/19/2017 4:40:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	5/19/2017 4:40:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	5/19/2017 4:40:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/19/2017 4:40:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/19/2017 4:40:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	5/19/2017 4:40:00 PM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	5/19/2017 4:40:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	5/19/2017 4:40:00 PM
Acetone	26	7.1		ug/m3	10	5/20/2017 9:17:00 AM
Allyl chloride	< 0.47	0.47		ug/m3	1	5/19/2017 4:40:00 PM
Benzene	< 0.48	0.48		ug/m3	1	5/19/2017 4:40:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	5/19/2017 4:40:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	5/19/2017 4:40:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	5/19/2017 4:40:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	5/19/2017 4:40:00 PM
Carbon disulfide	< 0.47	0.47		ug/m3	1	5/19/2017 4:40:00 PM
Carbon tetrachloride	0.57	0.25		ug/m3	1	5/19/2017 4:40:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	5/19/2017 4:40:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	5/19/2017 4:40:00 PM
Chloroform	< 0.73	0.73		ug/m3	1	5/19/2017 4:40:00 PM
Chloromethane	1.5	0.31		ug/m3	1	5/19/2017 4:40:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	5/19/2017 4:40:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	5/19/2017 4:40:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	5/19/2017 4:40:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	5/19/2017 4:40:00 PM
Ethyl acetate	< 0.54	0.54		ug/m3	1	5/19/2017 4:40:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	5/19/2017 4:40:00 PM
Freon 11	1.9	0.84		ug/m3	1	5/19/2017 4:40:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	5/19/2017 4:40:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	5/19/2017 4:40:00 PM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	IA-4
Lab Order:	C1705056	**Tag Number:**	139,249
Project:	144 Lee St	**Collection Date:**	5/16/2017
Lab ID:	C1705056-014A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
Freon 12	3.1	0.74		ug/m3	1	5/19/2017 4:40:00 PM
Heptane	< 0.61	0.61		ug/m3	1	5/19/2017 4:40:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	5/19/2017 4:40:00 PM
Hexane	< 0.53	0.53		ug/m3	1	5/19/2017 4:40:00 PM
Isopropyl alcohol	2.5	0.37		ug/m3	1	5/19/2017 4:40:00 PM
m&p-Xylene	< 1.3	1.3		ug/m3	1	5/19/2017 4:40:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	5/19/2017 4:40:00 PM
Methyl Ethyl Ketone	0.71	0.88	J	ug/m3	1	5/19/2017 4:40:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	5/19/2017 4:40:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	5/19/2017 4:40:00 PM
Methylene chloride	0.45	0.52	J	ug/m3	1	5/19/2017 4:40:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	5/19/2017 4:40:00 PM
Propylene	< 0.26	0.26		ug/m3	1	5/19/2017 4:40:00 PM
Styrene	< 0.64	0.64		ug/m3	1	5/19/2017 4:40:00 PM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	5/19/2017 4:40:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	5/19/2017 4:40:00 PM
Toluene	0.98	0.57		ug/m3	1	5/19/2017 4:40:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	5/19/2017 4:40:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	5/19/2017 4:40:00 PM
Trichloroethene	< 0.21	0.21		ug/m3	1	5/19/2017 4:40:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	5/19/2017 4:40:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	5/19/2017 4:40:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	5/19/2017 4:40:00 PM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-10
Lab Order:	C1705056	**Tag Number:**	350,1163
Project:	144 Lee St	**Collection Date:**	5/16/2017
Lab ID:	C1705056-015A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	2.9	0.82		ug/m3	1	5/20/2017 6:09:00 AM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	5/20/2017 6:09:00 AM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	5/20/2017 6:09:00 AM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	5/20/2017 6:09:00 AM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	5/20/2017 6:09:00 AM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	5/20/2017 6:09:00 AM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	5/20/2017 6:09:00 AM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	5/20/2017 6:09:00 AM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/20/2017 6:09:00 AM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	5/20/2017 6:09:00 AM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	5/20/2017 6:09:00 AM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	5/20/2017 6:09:00 AM
1,3-butadiene	< 0.33	0.33		ug/m3	1	5/20/2017 6:09:00 AM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/20/2017 6:09:00 AM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/20/2017 6:09:00 AM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	5/20/2017 6:09:00 AM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	5/20/2017 6:09:00 AM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	5/20/2017 6:09:00 AM
Acetone	370	190		ug/m3	270	5/23/2017 8:29:00 AM
Allyl chloride	< 0.47	0.47		ug/m3	1	5/20/2017 6:09:00 AM
Benzene	190	130		ug/m3	270	5/23/2017 8:29:00 AM
Benzyl chloride	< 0.86	0.86		ug/m3	1	5/20/2017 6:09:00 AM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	5/20/2017 6:09:00 AM
Bromoform	< 1.6	1.6		ug/m3	1	5/20/2017 6:09:00 AM
Bromomethane	< 0.58	0.58		ug/m3	1	5/20/2017 6:09:00 AM
Carbon disulfide	21	4.7		ug/m3	10	5/22/2017 3:11:00 PM
Carbon tetrachloride	< 0.94	0.94		ug/m3	1	5/20/2017 6:09:00 AM
Chlorobenzene	< 0.69	0.69		ug/m3	1	5/20/2017 6:09:00 AM
Chloroethane	< 0.40	0.40		ug/m3	1	5/20/2017 6:09:00 AM
Chloroform	2.0	0.73		ug/m3	1	5/20/2017 6:09:00 AM
Chloromethane	< 0.31	0.31		ug/m3	1	5/20/2017 6:09:00 AM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	5/20/2017 6:09:00 AM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	5/20/2017 6:09:00 AM
Cyclohexane	450	140		ug/m3	270	5/23/2017 8:29:00 AM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	5/20/2017 6:09:00 AM
Ethyl acetate	< 0.54	0.54		ug/m3	1	5/20/2017 6:09:00 AM
Ethylbenzene	13	6.5		ug/m3	10	5/22/2017 3:11:00 PM
Freon 11	7.6	0.84		ug/m3	1	5/20/2017 6:09:00 AM
Freon 113	< 1.1	1.1		ug/m3	1	5/20/2017 6:09:00 AM
Freon 114	< 1.0	1.0		ug/m3	1	5/20/2017 6:09:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	SSV-10
Lab Order:	C1705056	**Tag Number:**	350,1163
Project:	144 Lee St	**Collection Date:**	5/16/2017
Lab ID:	C1705056-015A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 BY METHOD TO15		**TO-15**				Analyst: **RJP**
Freon 12	2.6	0.74		ug/m3	1	5/20/2017 6:09:00 AM
Heptane	490	160		ug/m3	270	5/23/2017 8:29:00 AM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	5/20/2017 6:09:00 AM
Hexane	960	140		ug/m3	270	5/23/2017 8:29:00 AM
Isopropyl alcohol	< 0.37	0.37		ug/m3	1	5/20/2017 6:09:00 AM
m&p-Xylene	36	13		ug/m3	10	5/22/2017 3:11:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	5/20/2017 6:09:00 AM
Methyl Ethyl Ketone	36	8.8		ug/m3	10	5/22/2017 3:11:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	5/20/2017 6:09:00 AM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	5/20/2017 6:09:00 AM
Methylene chloride	1.4	0.52		ug/m3	1	5/20/2017 6:09:00 AM
o-Xylene	16	6.5		ug/m3	10	5/22/2017 3:11:00 PM
Propylene	< 0.26	0.26		ug/m3	1	5/20/2017 6:09:00 AM
Styrene	< 0.64	0.64		ug/m3	1	5/20/2017 6:09:00 AM
Tetrachloroethylene	1.6	1.0		ug/m3	1	5/20/2017 6:09:00 AM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	5/20/2017 6:09:00 AM
Toluene	220	150		ug/m3	270	5/23/2017 8:29:00 AM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	5/20/2017 6:09:00 AM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	5/20/2017 6:09:00 AM
Trichloroethene	< 0.81	0.81		ug/m3	1	5/20/2017 6:09:00 AM
Vinyl acetate	< 0.53	0.53		ug/m3	1	5/20/2017 6:09:00 AM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	5/20/2017 6:09:00 AM
Vinyl chloride	< 0.38	0.38		ug/m3	1	5/20/2017 6:09:00 AM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	OA-2
Lab Order:	C1705056	**Tag Number:**	133,400
Project:	144 Lee St	**Collection Date:**	5/16/2017
Lab ID:	C1705056-016A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	5/19/2017 5:21:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	5/19/2017 5:21:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	5/19/2017 5:21:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	5/19/2017 5:21:00 PM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	5/19/2017 5:21:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	5/19/2017 5:21:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	5/19/2017 5:21:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	5/19/2017 5:21:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/19/2017 5:21:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	5/19/2017 5:21:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	5/19/2017 5:21:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	5/19/2017 5:21:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	5/19/2017 5:21:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/19/2017 5:21:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/19/2017 5:21:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	5/19/2017 5:21:00 PM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	5/19/2017 5:21:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	5/19/2017 5:21:00 PM
Acetone	43	7.1		ug/m3	10	5/20/2017 9:54:00 AM
Allyl chloride	< 0.47	0.47		ug/m3	1	5/19/2017 5:21:00 PM
Benzene	< 0.48	0.48		ug/m3	1	5/19/2017 5:21:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	5/19/2017 5:21:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	5/19/2017 5:21:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	5/19/2017 5:21:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	5/19/2017 5:21:00 PM
Carbon disulfide	< 0.47	0.47		ug/m3	1	5/19/2017 5:21:00 PM
Carbon tetrachloride	0.50	0.25		ug/m3	1	5/19/2017 5:21:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	5/19/2017 5:21:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	5/19/2017 5:21:00 PM
Chloroform	< 0.73	0.73		ug/m3	1	5/19/2017 5:21:00 PM
Chloromethane	1.4	0.31		ug/m3	1	5/19/2017 5:21:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	5/19/2017 5:21:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	5/19/2017 5:21:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	5/19/2017 5:21:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	5/19/2017 5:21:00 PM
Ethyl acetate	< 0.54	0.54		ug/m3	1	5/19/2017 5:21:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	5/19/2017 5:21:00 PM
Freon 11	1.9	0.84		ug/m3	1	5/19/2017 5:21:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	5/19/2017 5:21:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	5/19/2017 5:21:00 PM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	OA-2
Lab Order:	C1705056	**Tag Number:**	133,400
Project:	144 Lee St	**Collection Date:**	5/16/2017
Lab ID:	C1705056-016A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
Freon 12	2.8	0.74		ug/m3	1	5/19/2017 5:21:00 PM
Heptane	< 0.61	0.61		ug/m3	1	5/19/2017 5:21:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	5/19/2017 5:21:00 PM
Hexane	< 0.53	0.53		ug/m3	1	5/19/2017 5:21:00 PM
Isopropyl alcohol	2.3	0.37		ug/m3	1	5/19/2017 5:21:00 PM
m&p-Xylene	< 1.3	1.3		ug/m3	1	5/19/2017 5:21:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	5/19/2017 5:21:00 PM
Methyl Ethyl Ketone	0.86	0.88	J	ug/m3	1	5/19/2017 5:21:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	5/19/2017 5:21:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	5/19/2017 5:21:00 PM
Methylene chloride	0.56	0.52		ug/m3	1	5/19/2017 5:21:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	5/19/2017 5:21:00 PM
Propylene	< 0.26	0.26		ug/m3	1	5/19/2017 5:21:00 PM
Styrene	< 0.64	0.64		ug/m3	1	5/19/2017 5:21:00 PM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	5/19/2017 5:21:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	5/19/2017 5:21:00 PM
Toluene	0.68	0.57		ug/m3	1	5/19/2017 5:21:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	5/19/2017 5:21:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	5/19/2017 5:21:00 PM
Trichloroethene	< 0.21	0.21		ug/m3	1	5/19/2017 5:21:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	5/19/2017 5:21:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	5/19/2017 5:21:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	5/19/2017 5:21:00 PM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	IA-5
Lab Order:	C1705056	**Tag Number:**	195,1152
Project:	144 Lee St	**Collection Date:**	5/16/2017
Lab ID:	C1705056-017A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
1,1,1-Trichloroethane	< 0.82	0.82		ug/m3	1	5/19/2017 6:01:00 PM
1,1,2,2-Tetrachloroethane	< 1.0	1.0		ug/m3	1	5/19/2017 6:01:00 PM
1,1,2-Trichloroethane	< 0.82	0.82		ug/m3	1	5/19/2017 6:01:00 PM
1,1-Dichloroethane	< 0.61	0.61		ug/m3	1	5/19/2017 6:01:00 PM
1,1-Dichloroethene	< 0.59	0.59		ug/m3	1	5/19/2017 6:01:00 PM
1,2,4-Trichlorobenzene	< 1.1	1.1		ug/m3	1	5/19/2017 6:01:00 PM
1,2,4-Trimethylbenzene	< 0.74	0.74		ug/m3	1	5/19/2017 6:01:00 PM
1,2-Dibromoethane	< 1.2	1.2		ug/m3	1	5/19/2017 6:01:00 PM
1,2-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/19/2017 6:01:00 PM
1,2-Dichloroethane	< 0.61	0.61		ug/m3	1	5/19/2017 6:01:00 PM
1,2-Dichloropropane	< 0.69	0.69		ug/m3	1	5/19/2017 6:01:00 PM
1,3,5-Trimethylbenzene	< 0.74	0.74		ug/m3	1	5/19/2017 6:01:00 PM
1,3-butadiene	< 0.33	0.33		ug/m3	1	5/19/2017 6:01:00 PM
1,3-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/19/2017 6:01:00 PM
1,4-Dichlorobenzene	< 0.90	0.90		ug/m3	1	5/19/2017 6:01:00 PM
1,4-Dioxane	< 1.1	1.1		ug/m3	1	5/19/2017 6:01:00 PM
2,2,4-trimethylpentane	< 0.70	0.70		ug/m3	1	5/19/2017 6:01:00 PM
4-ethyltoluene	< 0.74	0.74		ug/m3	1	5/19/2017 6:01:00 PM
Acetone	35	7.1		ug/m3	10	5/20/2017 10:32:00 AM
Allyl chloride	< 0.47	0.47		ug/m3	1	5/19/2017 6:01:00 PM
Benzene	< 0.48	0.48		ug/m3	1	5/19/2017 6:01:00 PM
Benzyl chloride	< 0.86	0.86		ug/m3	1	5/19/2017 6:01:00 PM
Bromodichloromethane	< 1.0	1.0		ug/m3	1	5/19/2017 6:01:00 PM
Bromoform	< 1.6	1.6		ug/m3	1	5/19/2017 6:01:00 PM
Bromomethane	< 0.58	0.58		ug/m3	1	5/19/2017 6:01:00 PM
Carbon disulfide	< 0.47	0.47		ug/m3	1	5/19/2017 6:01:00 PM
Carbon tetrachloride	0.63	0.25		ug/m3	1	5/19/2017 6:01:00 PM
Chlorobenzene	< 0.69	0.69		ug/m3	1	5/19/2017 6:01:00 PM
Chloroethane	< 0.40	0.40		ug/m3	1	5/19/2017 6:01:00 PM
Chloroform	< 0.73	0.73		ug/m3	1	5/19/2017 6:01:00 PM
Chloromethane	2.7	0.31		ug/m3	1	5/19/2017 6:01:00 PM
cis-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	5/19/2017 6:01:00 PM
cis-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	5/19/2017 6:01:00 PM
Cyclohexane	< 0.52	0.52		ug/m3	1	5/19/2017 6:01:00 PM
Dibromochloromethane	< 1.3	1.3		ug/m3	1	5/19/2017 6:01:00 PM
Ethyl acetate	< 0.54	0.54		ug/m3	1	5/19/2017 6:01:00 PM
Ethylbenzene	< 0.65	0.65		ug/m3	1	5/19/2017 6:01:00 PM
Freon 11	1.9	0.84		ug/m3	1	5/19/2017 6:01:00 PM
Freon 113	< 1.1	1.1		ug/m3	1	5/19/2017 6:01:00 PM
Freon 114	< 1.0	1.0		ug/m3	1	5/19/2017 6:01:00 PM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

Centek Laboratories, LLC

Date: *25-May-17*

CLIENT:	Benchmark Environmental Engineering & S	**Client Sample ID:**	IA-5
Lab Order:	C1705056	**Tag Number:**	195,1152
Project:	144 Lee St	**Collection Date:**	5/16/2017
Lab ID:	C1705056-017A	**Matrix:**	AIR

Analyses	Result	**Limit	Qual	Units	DF	Date Analyzed
1UG/M3 W/ 0.25UG/M3 CT-TCE-VC		**TO-15**				Analyst: **RJP**
Freon 12	2.9	0.74		ug/m3	1	5/19/2017 6:01:00 PM
Heptane	< 0.61	0.61		ug/m3	1	5/19/2017 6:01:00 PM
Hexachloro-1,3-butadiene	< 1.6	1.6		ug/m3	1	5/19/2017 6:01:00 PM
Hexane	< 0.53	0.53		ug/m3	1	5/19/2017 6:01:00 PM
Isopropyl alcohol	2.2	0.37		ug/m3	1	5/19/2017 6:01:00 PM
m&p-Xylene	0.52	1.3	J	ug/m3	1	5/19/2017 6:01:00 PM
Methyl Butyl Ketone	< 1.2	1.2		ug/m3	1	5/19/2017 6:01:00 PM
Methyl Ethyl Ketone	0.65	0.88	J	ug/m3	1	5/19/2017 6:01:00 PM
Methyl Isobutyl Ketone	< 1.2	1.2		ug/m3	1	5/19/2017 6:01:00 PM
Methyl tert-butyl ether	< 0.54	0.54		ug/m3	1	5/19/2017 6:01:00 PM
Methylene chloride	0.80	0.52		ug/m3	1	5/19/2017 6:01:00 PM
o-Xylene	< 0.65	0.65		ug/m3	1	5/19/2017 6:01:00 PM
Propylene	< 0.26	0.26		ug/m3	1	5/19/2017 6:01:00 PM
Styrene	< 0.64	0.64		ug/m3	1	5/19/2017 6:01:00 PM
Tetrachloroethylene	< 1.0	1.0		ug/m3	1	5/19/2017 6:01:00 PM
Tetrahydrofuran	< 0.44	0.44		ug/m3	1	5/19/2017 6:01:00 PM
Toluene	0.83	0.57		ug/m3	1	5/19/2017 6:01:00 PM
trans-1,2-Dichloroethene	< 0.59	0.59		ug/m3	1	5/19/2017 6:01:00 PM
trans-1,3-Dichloropropene	< 0.68	0.68		ug/m3	1	5/19/2017 6:01:00 PM
Trichloroethene	< 0.21	0.21		ug/m3	1	5/19/2017 6:01:00 PM
Vinyl acetate	< 0.53	0.53		ug/m3	1	5/19/2017 6:01:00 PM
Vinyl Bromide	< 0.66	0.66		ug/m3	1	5/19/2017 6:01:00 PM
Vinyl chloride	< 0.10	0.10		ug/m3	1	5/19/2017 6:01:00 PM

Qualifiers:

**	Quantitation Limit	.	Results reported are not blank corrected
B	Analyte detected in the associated Method Blank	E	Estimated Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limit
JN	Non-routine analyte. Quantitation estimated.	ND	Not Detected at the Limit of Detection
S	Spike Recovery outside accepted recovery limits		

ATTACHMENT 5

NYSDOH
SOIL VAPOR / INDOOR AIR MATRICES 1 & 2

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

ATTACHMENT 5A

SOIL VAPOR / INDOOR AIR MATRIX 1
Carbon Tetrachloride, Trichloroethene (TCE) & Vinyl Chloride
(October 2006/June 2007)

Soil Vapor Investigation Report
140 Lee Street Site (C915231)
Buffalo, New York

SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m^3)	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m^3)			
	< 0.25	**0.25 to < 1**	**1 to < 5.0**	**5.0 and above**
< 5	1. No further action	2. Take reasonable and practical actions to identify source(s) and reduce exposures	3. Take reasonable and practical actions to identify source(s) and reduce exposures	4. Take reasonable and practical actions to identify source(s) and reduce exposures
5 to < 50	5. No further action	6. MONITOR	7. MONITOR	8. MITIGATE
50 to < 250	9. MONITOR	10. MONITOR/MITIGATE	11. MITIGATE	12. MITIGATE
250 and above	13. MITIGATE	14. MITIGATE	15. MITIGATE	16. MITIGATE

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

ATTACHMENT 5B

SOIL VAPOR / INDOOR AIR MATRIX 2
Tetrachloroethene (PCE), 1,1,1,-Trichloroethane (1,1,1-TCA)
cis-1,2-dichloroethene (cis-1,2, DCE), 1,1-Dichloroethene (1,1, DCE)
(October 2006/June 2007)

Soil Vapor Investigation Report
140 Lee Street Site (C915231)
Buffalo, New York

SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m^3)	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m^3)			
	< 3	3 to < 30	30 to < 100	100 and above
< 100	1. No further action	2. Take reasonable and practical actions to identify source(s) and reduce exposures	3. Take reasonable and practical actions to identify source(s) and reduce exposures	4. Take reasonable and practical actions to identify source(s) and reduce exposures
100 to < 1,000	5. MONITOR	6. MONITOR/MITIGATE	7. MITIGATE	8. MITIGATE
1,000 and above	9. MITIGATE	10. MITIGATE	11. MITIGATE	12. MITIGATE

Appendix D

Redevelopment Figures

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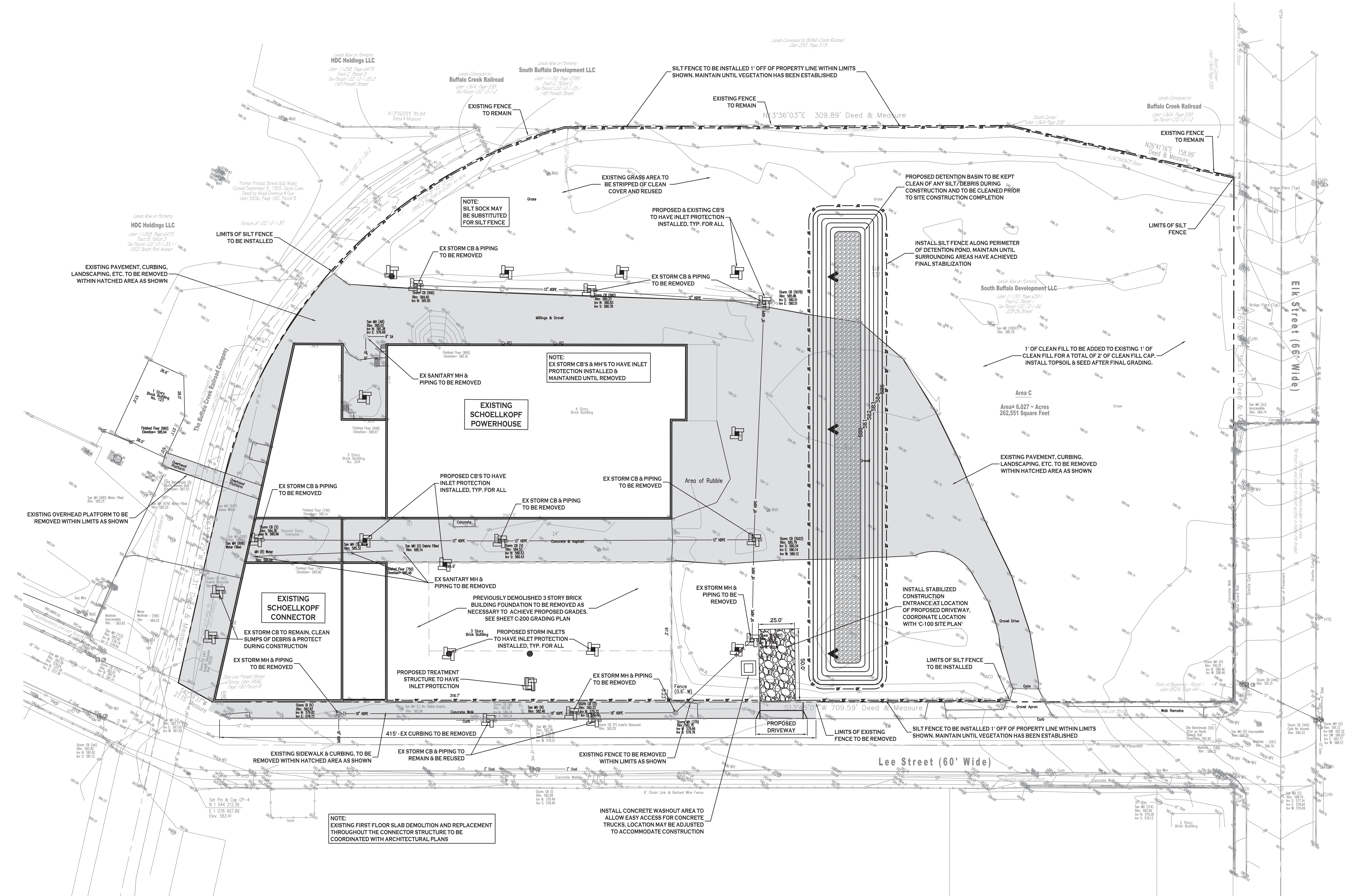

DEMOLITION & EROSION CONTROL PLAN

SCALE: 1"=30'

EROSION CONTROL PLAN

THE FOLLOWING EROSION CONTROL PROCEDURE SHALL BE ADHERED TO BY THE CONTRACTOR:

1. INSTALL TEMPORARY SILT FENCE BARRIERS AS DIRECTED BY THE OWNER AND AS SHOWN ON THE EROSION CONTROL PLAN TO PREVENT SEDIMENT MIGRATION. ALL SILT FENCE BARRIERS SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILS SHOWN ON THE PLANS.
2. ALL SILT FENCE BARRIERS SHALL BE REPLACED WHEREVER THEY BECOME CLOGGED OR INOPERABLE.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE AND REMOVAL OF TEMPORARY SEDIMENTATION CONTROLS.
4. THE CONTRACTOR MUST CONTROL DUST DURING CONSTRUCTION. DURING EARTHWORK OPERATIONS, WATER-SPREADING EQUIPMENT SHALL BE PROVIDED BY THE CONTRACTOR, AND WATER SPREAD AS NECESSARY AND AS DIRECTED BY THE OWNER IN ORDER TO CONTROL DUST.
5. DIRT OR DEBRIS LEFT ON LOCAL PUBLIC ROADS AS A RESULT OF THIS CONSTRUCTION PROJECT SHALL BE REMOVED AND ROAD SURFACES CLEANED BY THE CONTRACTOR ON A DAILY BASIS.
6. ALL DISTURBED AREAS (EXCEPT STABILIZED STONE AREAS) SHALL BE SEEDED IMMEDIATELY AFTER FINE GRADING TAKES PLACE AND AS SOON AS PHYSICALLY POSSIBLE.
7. THE CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF DOWNSTREAM STORM SEWERS, DITCHES, AND CULVERTS. SILT BUILDUP FOUND TO BE A RESULT OF THIS SITE CONSTRUCTION WORK SHALL BE REMOVED FROM DOWNSTREAM CULVERTS BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER OR THE TOWN.
8. ALL SOIL EROSION AND SEDIMENT CONTROL DEVICES AND MATERIALS SHALL BE MAINTAINED UNTIL THE NEW SLOPES ARE STABILIZED WITH SEEDING AND/OR SLOPE PROTECTION, AS DIRECTED BY THE ENGINEER.
9. THE CONTRACTOR SHALL FOLLOW THE REGULATIONS SET FORTH IN THE NYSDEC SPDES GENERAL PERMIT FOR STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES.
10. ON-SITE STORAGE OF MATERIALS & EQUIPMENT SHALL BE DONE SO IN ACCORDANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) PREPARED FOR THIS PROJECT, THIS SHALL INCLUDE IMPLEMENTATION OF A SPILL PREVENTION PLAN FOR SPILLAGE OF FUEL, OIL, PESTICIDES, ETC.
11. ON-SITE STOCKPILING OF EXCESS FILL, SPOILS, TOPSOIL OR STONE MATERIALS SHALL BE DONE SO IN ACCORDANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) PREPARED FOR THIS PROJECT, THIS SHALL INCLUDE INSTALLING TEMPORARY SILT FENCE AROUND THE BASE OF STOCKPILES.
12. THE TOPSOIL SHALL BE STRIPPED AND STOCKPILED ON SITE FOR RE-USE AS DIRECTED BY THE OWNER. ALL LOCAL ORDINANCES REGARDING THE SALE OF TOPSOIL MUST BE FOLLOWED. TOPSOIL MAY NOT BE REMOVED WITHOUT A PERMIT.

NOTES:

1. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PROTECT THOSE ITEMS TO REMAIN, SUCH AS TREES, PROPERTY CORNER PINS, UTILITY POLES, VALVES, HYDRANTS, CURBS, MANHOLES AND CATCH BASINS.
2. TEMPORARY SILT FENCE AND EROSION CONTROL DEVICES TO BE INSTALLED AS DIRECTED BY THE OWNERS FIELD REPRESENTATIVE. MAINTAIN UNTIL VEGETATION IS ESTABLISHED AND PAVEMENT IS INSTALLED.
3. THE CONTRACTOR SHALL INSTALL STABILIZED CONSTRUCTION ENTRANCES WHERE ACCESSING THE SITE FROM PAVED ROADWAYS.
4. THE CONTRACTOR SHALL INSTALL TEMPORARY TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH NYS M.U.T.C.D. STANDARDS PRIOR TO STARTING WORK.

SEQUENCE OF MAJOR ACTIVITIES

THE CONTRACTOR WILL BE RESPONSIBLE FOR IMPLEMENTING THE FOLLOWING EROSION CONTROL AND STORM WATER MANAGEMENT CONTROL MEASURES. THE CONTRACTOR MAY DESIGNATE THESE TASKS TO CERTAIN SUBCONTRACTORS AS HE SEES FIT, BUT THE ULTIMATE RESPONSIBILITY FOR IMPLEMENTING THESE CONTROLS AND ENSURING THEIR PROPER FUNCTIONING REMAINS WITH THE CONTRACTOR. THE ORDER OF ACTIVITIES WILL BE AS FOLLOWS:

A. COMMENCE REMEDIATION ACTIVITIES WHICH DISTURB UNDER 1 ACRE.
B. INSTALL STABILIZED CONSTRUCTION ENTRANCE
C. INSTALL PERIMETER SILT FENCES/SILT SOCK IN THE LOCATIONS SHOWN ON THE DEMOLITION AND EROSION CONTROL PLAN SHEET.
D. CLEAR & GRUB SITE.
E. ROUGH GRADING AND INSTALLATION OF STONE SUBBASE IN PAVED AREAS AND BUILDING PADS.
F. INSTALL STONE CHECK DAMS IN SWALES WHERE SHOWN.
G. COMMENCE OTHER SITE GRADING.
H. DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS CEASED FOR MORE THAN 14 DAYS SHALL BE TEMPORARILY SEEDED AND WATERED.
I. FINALIZE PAVEMENT SUBGRADE PREPARATION.
J. CONSTRUCT ALL CURB, DRAINAGE INLETS, STORM SEWER PIPES AND STORM SEWER MANHOLES, AS SHOWN ON THE PLANS. INSTALL TEMPORARY INLET PROTECTION AT THE LOCATIONS OF ALL NEW INLETS.
K. REMOVE INLET PROTECTION AROUND INLETS AND MANHOLES NO MORE THAN 48 HOURS PRIOR TO PLACING STABILIZED BASE COURSE.
L. INSTALL BASE MATERIAL AS REQUIRED FOR PAVEMENT.
M. CARRY OUT FINAL GRADING AND SEEDING AND PLANTING.
N. CLEAN STORM SYSTEM FOLLOWING CONSTRUCTION.
O. REMOVE SILT FENCING ONLY AFTER ALL PAVING IS COMPLETE AND EXPOSED SURFACES ARE STABILIZED.

INSPECTION AND MAINTENANCE PROCEDURES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ASSIGNING AN INDIVIDUAL TO BE RESPONSIBLE FOR THE INSPECTION AND MAINTENANCE OF TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES. THE WORK MAY INCLUDE, BUT NOT LIMITED TO THE FOLLOWING:
   - 1.1. ALL EROSION CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE EVERY SEVEN CALENDAR DAYS.
   - 1.2. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED IN GOOD WORKING ORDER. AS DEEMED NECESSARY BY THE TOWN AND ENGINEER, REPAIRS SHALL BE COMPLETED WITHIN 24 HOURS OF BEING REPORTED.
   - 1.3. CHECK AND REPAIR SILT FENCING AND EROSION CONTROL DEVICES, AS NECESSARY.
   - 1.4. TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH AND REPAIRED AS NECESSARY.
   - 1.5. NEIGHBORING ROADWAYS WILL BE MONITORED TO ENSURE THAT ANY TRACKED MUD, DIRT, OR ROCK IS SWEPT AS NECESSARY.

RESTORATION NOTES

1. THE ADJACENT AREAS DISTURBED OR DAMAGED DURING CONSTRUCTION MUST BE RESTORED IN KIND TO THE SATISFACTION OF THE OWNER.
2. WHEN RESTORING LAWN AREAS ADJACENT TO NEW CONSTRUCTION, ON-SITE MATERIAL MAY BE USED TO BACKFILL THE AREA WITHIN SIX INCHES OF THE FINISHED SURFACE. ON-SITE MATERIAL SHALL BE THOROUGHLY COMPACTED AND FREE OF GRASS CLUMPS, TREE ROOTS PIECES OF ASPHALT AND OTHER EXTRANEOUS MATERIALS, AND STONES LARGER THAN 1 INCH IN SIZE.
3. ALL DISTURBED UNSURFACED AREAS SHALL RECEIVE FOUR INCHES OF TOPSOIL, SEED AND MULCH AND SHALL BE WATERED UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.
4. WHEN ADJACENT ASPHALT, CONCRETE OR PAVING STONE AREAS ARE DISTURBED AS PART OF THE CONSTRUCTION, THE CONTRACTOR SHALL BE REQUIRED TO REPLACE THE DAMAGED OR EXCAVATED AREA. THE PERIMETER OF THE DISTURBED AREA SHALL BE SAW CUT FULL DEPTH, SO THAT ALL LINES ARE STRAIGHT AND TRUE. PAVING STONES SHALL BE REPLACED IN WHOLE UNITS ONLY, AND ALL REPLACEMENT PAVING STONES ARE TO MATCH THE EXISTING ONES IN SIZE, SHAPE AND COLOR. ASPHALT SHALL BE COMPACTED TO A SMOOTH FINISH AND SHALL BE FLUSH WITH THE EXISTING ADJACENT AREA THAT IS TO REMAIN.

DEMOLITION & EROSION CONTROL LEGEND

EXISTING PAVEMENT/SIDEWALK/CURBING TO BE SAWCUT & REMOVED	(hatched)
PROPOSED SILT FENCE	— SF — SF —
PROPOSED STORM INLET PROTECTION	(symbol)

NOTE: BOUNDARY AND TOPOGRAPHIC INFORMATION PROVIDED BY OTHERS, CARMINA WOOD MORRIS, D.P.C. ASSUMES NO RESPONSIBILITY FOR ITS ACCURACY.

30' 30 0 30 60Ft.

Carmina • Wood • Morris DPC
487 Main Street Suite 500
Buffalo, New York 14203
P 716.842.3165
F 716.842.0263

STATE OF NEW YORK · R. CHRISTOPHER WOOD · 076394 · LICENSED PROFESSIONAL ENGINEER

REVISIONS:
No. Description Date

PROJECT NAME:
Historic Renovation For
Schoellkopf Connector & Powerhouse
Lee and Elk Streets
Buffalo, New York

Issued for Construction: xx.xx.xx
Municipality Submission: xx.xx.xx
Drawn by:
Scale: 1:30

DRAWING NAME:
Demolition & Erosion Control Plan

DRAWING NO.
C-001

Project no.: 17.109

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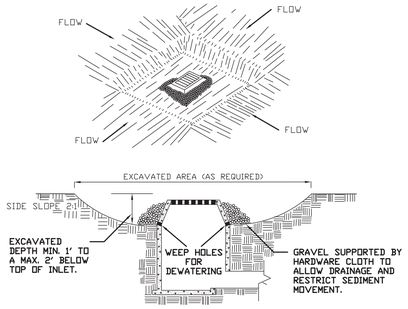


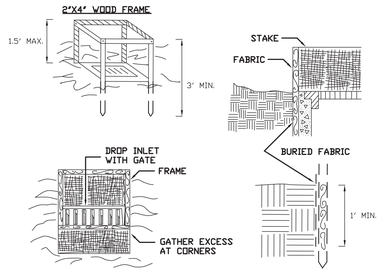
CONSTRUCTION SPECIFICATIONS

1. CLEAR THE AREA OF ALL DEBRIS THAT WILL HINDER EXCAVATION.
2. GRADE APPROACH TO THE INLET UNIFORMLY AROUND THE BASIN.
3. WEEP HOLES SHALL BE PROTECTED BY GRAVEL.
4. UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREA, SEAL WEEP HOLES, FILL BASIN WITH STABLE SOIL TO FINAL GRADE, COMPACT IT PROPERLY AND STABILIZE WITH PERMANENT SEEDING.

MAXIMUM DRAINAGE AREA 1 ACRE

INLET PROTECTION DETAIL 1

NOT TO SCALE



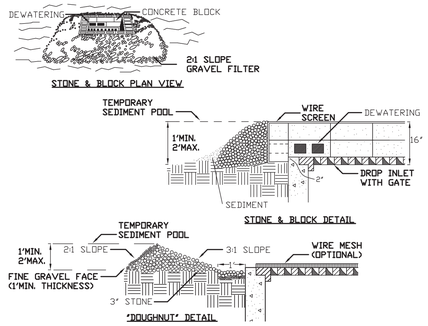
CONSTRUCTION SPECIFICATIONS

1. FILTER FABRIC SHALL HAVE AN EOS OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
3. STAKE MATERIALS WILL BE STANDARD 2" x 4" WOOD OR EQUIVALENT. METAL WITH A MINIMUM LENGTH OF 3 FEET.
4. SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
6. A 2" x 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.

MAXIMUN DRAINAGE AREA 1 ACRE

INLET PROTECTION DETAIL 2

NOT TO SCALE



CONSTRUCTION SPECIFICATIONS

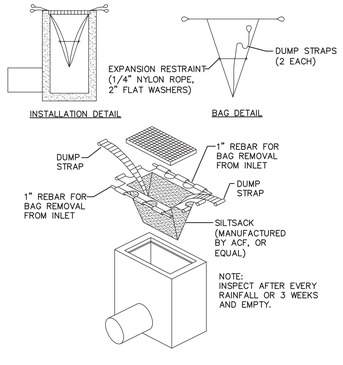
1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE FOR DEWATERING. FOUNDATION SHALL BE 2 INCHES MINIMUM BELOW REST OF INLET AND BLOCKS SHALL BE PLACED AGAINST INLET FOR SUPPORT.
2. HARDWARE CLOTH OR 1/2" WIRE MESH SHALL BE PLACED OVER BLOCK OPENINGS TO SUPPORT STONE.
3. USE CLEAN STONE OR GRAVEL 1/2-3/4 INCH IN DIAMETER PLACED 2 INCHES BELOW TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER.
4. FOR STONE STRUCTURES ONLY, A 1 FOOT THICK LAYER OF THE FILTER STONE WILL BE PLACED AGAINST THE 3 INCH STONE AS SHOWN ON THE DRAWINGS.

MAXIMUM DRAINAGE AREA 1 ACRE

INLET PROTECTION DETAIL 3

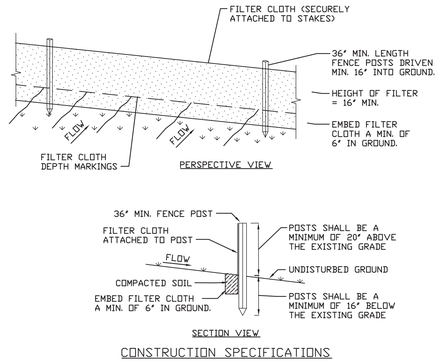
NOT TO SCALE

NOTE: INSTALL ONE OF THE INLET PROTECTION OPTIONS SHOWN FOLLOWING INSTALLATION OF THE PROPOSED CB'S



SILT SACK DETAIL

NOT TO SCALE

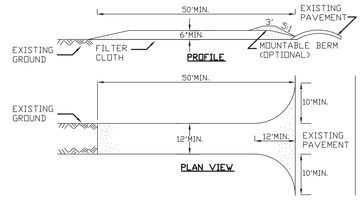


CONSTRUCTION SPECIFICATIONS

1. WOVEN FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
3. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

SILT FENCE DETAIL

NOT TO SCALE

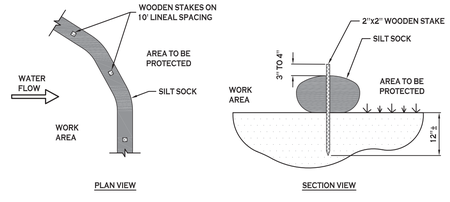


CONSTRUCTION SPECIFICATIONS

1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ENTRANCE DETAIL

NOT TO SCALE



NOTES:

CONTRACTOR SHALL INSPECT AND MAINTAIN SILT SOCK AS NEEDED DURING THE DURATION OF CONSTRUCTION PROJECT.

CONTRACTOR SHALL REMOVE SEDIMENT COLLECTED AT THE BASE OF THE SILT SOCK WHEN IT HAS REACHED ½ OF THE EXPOSED HEIGHT OF THE SILT SOCK. ALTERNATIVELY, RATHER THAN CREATE A SOIL DISTURBING ACTIVITY, THE ENGINEER MAY CALL FOR ADDITIONAL SILT SOCK TO BE ADDED AT AREAS OF HIGH SEDIMENTATION, PLACED IMMEDIATELY ON TOP OF THE EXISTING SEDIMENT LADEN SILT SOCK.

SILT SOCK DETAIL

NOT TO SCALE

Carmina Wood Morris DPC
487 Main Street Suite 500
Buffalo, New York 14203
P 716.842.3165
F 716.842.0263

STATE OF NEW YORK · CHRISTOPHER M. WOJS · 079394 · LICENSED PROFESSIONAL ENGINEER

REVISIONS:

No.	Description	Date

PROJECT NAME:

Historic Renovation For

Schoellkopf Connector & Powerhouse

Lee and Elk Streets
Buffalo, New York

Issued for Construction: xx.xx.xx
Municipality Submission: xx.xx.xx
Drawn by:
Scale: 1:30

DRAWING NAME:

Demolition & Erosion Control Details

DRAWING NO.

C-002

Project no.: 17.109

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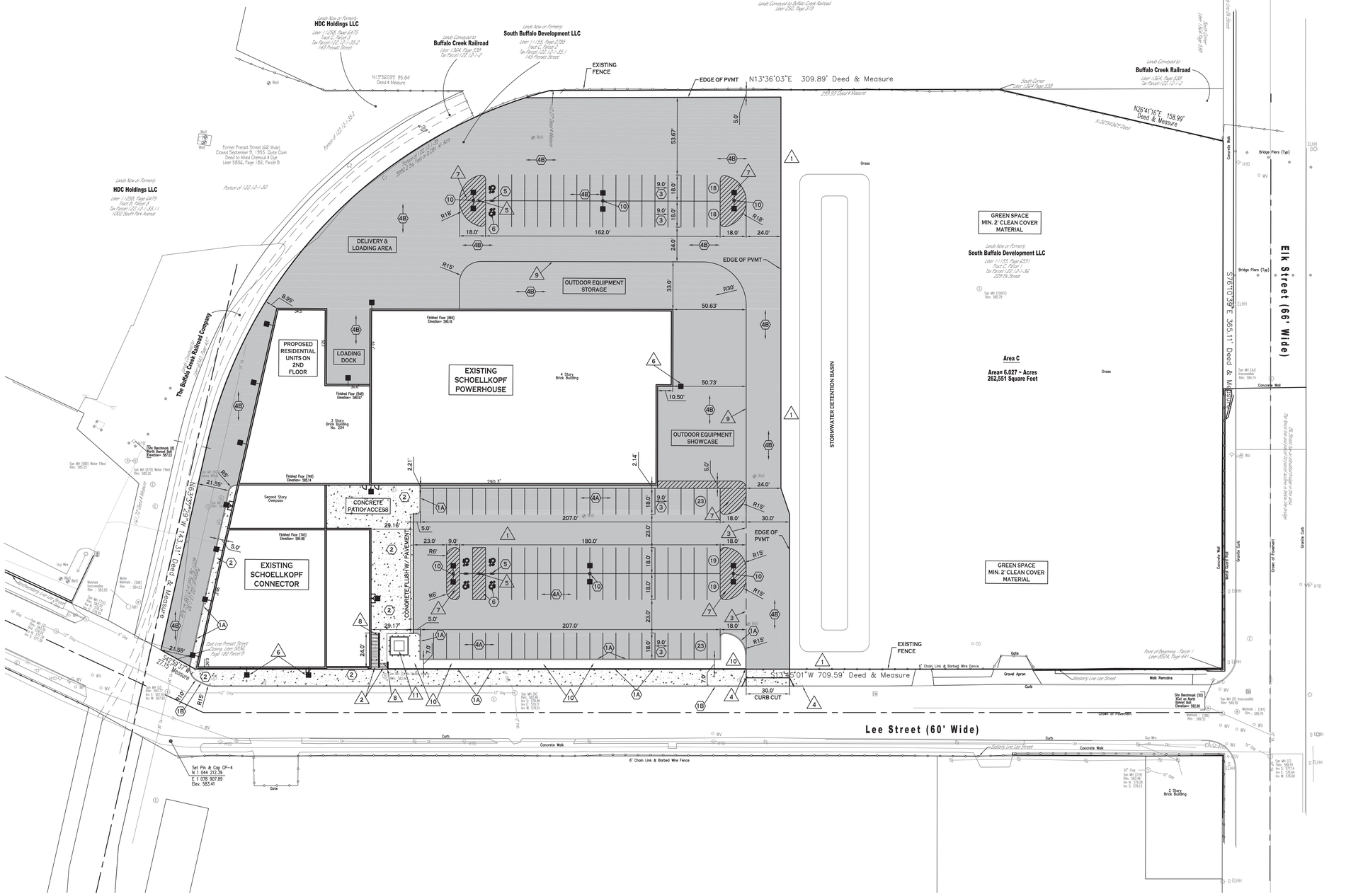


SITE PLAN

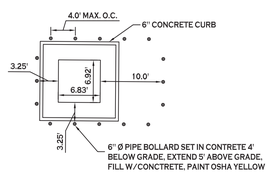
SCALE: 1"=30'

NOTE LEGEND

1. LANDSCAPED AREA - SEE LANDSCAPE PLAN, IF NO PLANTINGS, INSTALL TOPSOIL & SEED
2. RAMP & STAIRS, SEE ARCHITECTURAL DRAWINGS
3. LIMIT OF HEAVY DUTY PAVEMENT
4. RUNOUT CURB IN 2' OR MATCH EXISTING CURB
5. INSTALL "NO PARKING" SIGN, M.U.T.C.D. SIGN NO. P1-1C
6. WALL MOUNTED LIGHT FIXTURE, COORDINATE WITH ARCHITECTURAL PLANS AND LIGHTING PLAN LP-100
7. 4" WIDE YELLOW PAVEMENT STRIPES @ 2' O.C. & @ 45° TO PARKING LINES
8. CAST IN PLACE CONCRETE RETAINING WALL, COORDINATE WITH STAIR & RAMP DESIGN
9. 4" WIDE SOLID YELLOW PAVEMENT STRIPE
10. LANDSCAPED AREA - SEE LANDSCAPE PLAN FOR PLANTINGS, INSTALL #3 WASHED LANDSCAPE STONE OVER WOVEN LANDSCAPE FABRIC, COORDINATE COLOR AND STYLE OF STONE WITH OWNER
11. TRANSFORMER PAD - SIZE, LOCATION, & BOLLARD LAYOUT TO BE COORDINATED WITH SERVICE PROVIDER

DETAIL LEGEND SEE SITE DETAIL SHEET

- 1A TYPE "A" CONCRETE CURB
- 1B GRANITE CURB, CITY OF BUFFALO SPEC
- 2 CONCRETE SIDEWALK
- 3 90° PARKING STALL
- 4A STANDARD DUTY ASPHALT
- 4B HEAVY DUTY ASPHALT
- 5 HANDICAPPED PARKING SIGN
- 6 HANDICAPPED PAVEMENT MARKINGS
- 7 LIGHT POLE FOUNDATION
- 8 HANDICAPPED PAVEMENT RAMP
- 9 4' HIGH WROUGHT IRON TYPE FENCE
- 10 LIGHT POLE FOUNDATION



NOTE: TRANSFORMER PAD SIZE, LAYOUT, LOCATION, & BOLLARD LAYOUT TO BE COORDINATED WITH SERVICE PROVIDER

TRANSFORMER PAD LAYOUT

15kV TRANSFORMER PAD 750-2500kVA

SITE DATA

SITE AREA = 6.027± ACRES	
ZONED: D-IH (HEAVY INDUSTRIAL)	
BUILDING AREA:	
EXISTING CONNECTOR:	36,270 G.S.F.
EXISTING POWERHOUSE:	26,120 G.S.F.
GREENSPACE	
OVERALL PROVIDED:	3.24 AC
INTERIOR OF PARKING:	NOT REQUIRED (D-IH ZONE)
PARKING	
PROVIDED:	120 SPACES

SITE LEGEND

- PROPERTY LINE
- PROPOSED CURB
- PROPOSED SIDEWALK / CONCRETE PAD
- PROPOSED PAVEMENT
- NUMBER OF PARKING SPACES (27)
- PROPOSED SIGN
- PROPOSED LIGHT POLE W/ SINGLE FIXTURE
- PROPOSED LIGHT POLE W/ DOUBLE FIXTURE
- PROPOSED WALL MOUNTED FIXTURE

NOTE: BOUNDARY AND TOPOGRAPHIC INFORMATION PROVIDED BY OTHERS, CARMINA WOOD MORRIS, D.P.C. ASSUMES NO RESPONSIBILITY FOR ITS ACCURACY.

30' 30 0 30 60Ft.

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STATE OF NEW YORK — CHRISTOPHER M. WOOD — 078194 — LICENSED PROFESSIONAL ENGINEER

REVISIONS:

No.	Description	Date

PROJECT NAME:

Historic Renovation For

Schoellkopf Connector & Powerhouse

Lee and Elk Streets
Buffalo, New York

Issued for Construction: xx.xx.xx
Municipality Submission: 09.19.2017
Drawn by: jlp
Scale: 1:30

DRAWING NAME:

Site Plan

DRAWING NO.

C-100

Project no.: 17.109

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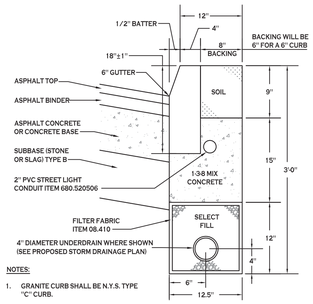
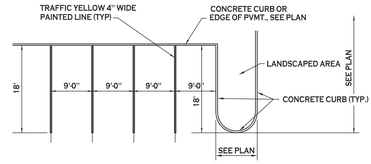
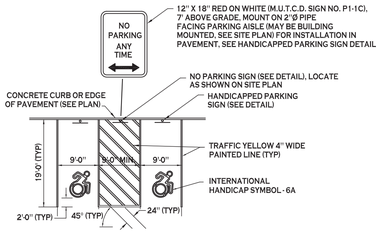


NOTES:
1. GRANITE CURB SHALL BE N.Y.S. TYPE "C" CURB.
2. REFERENCE CITY OF BUFFALO DEPARTMENT OF PUBLIC WORKS DIVISION OF ENGINEERING SS-1.

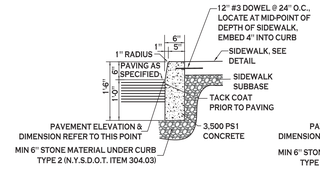
GRANITE CURB - 1B
(CITY OF BUFFALO DETAIL: N.T.S.)



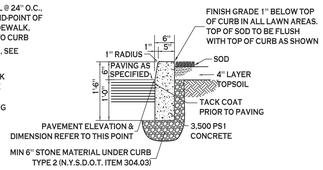
90 PARKING STALL LAYOUT - 3



HANDICAPPED PAVEMENT MARKINGS & SIGNAGE - 6



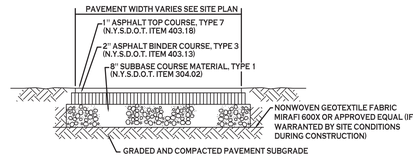
ABUTTING SIDEWALK



ABUTTING LANDSCAPE/GRASS

NOTES:
1. CONTROL JOINTS TO BE 2" DEEP AT 15'-0" O.C. - SEE SPECIFICATIONS FOR FURTHER JOINT REQUIREMENTS NYSDOT 702-0700.
2. WHERE THE CURB DROPS (IS FLUSH WITH ASPHALT) THE DEPTH OF CURB BELOW GRADE SHALL BE INCREASED TO 1'-6" AND OTHER DIMENSIONS ADJUSTED ACCORDINGLY.

TYPE "A" CONCRETE CURB - 1A



NOTE: CONSTRUCTION METHODS FOR ASPHALT PAVEMENT SHALL CONFORM TO NYSDOT STANDARD SPECIFICATION 401-3. WITH SUBBASE CONSTRUCTION METHODS CONFORMING TO NYSDOT STANDARD SPECIFICATION 304-3.

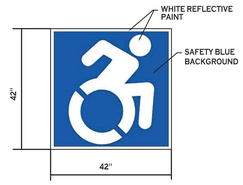
STANDARD DUTY ASPHALT SECTION - 4A

NOTE: CONSTRUCTION METHODS FOR ASPHALT PAVEMENT SHALL CONFORM TO NYSDOT STANDARD SPECIFICATION 401-3. WITH SUBBASE CONSTRUCTION METHODS CONFORMING TO NYSDOT STANDARD SPECIFICATION 304-3.

HEAVY DUTY ASPHALT SECTION - 4B

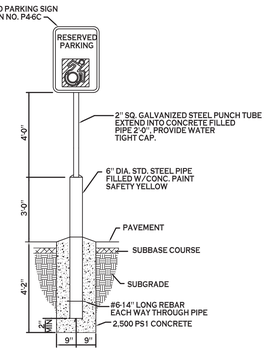
NOTES:
1. CONTROL JOINTS TO BE AT 5'-0" O.C., BOTH WAYS WHERE APPLICABLE. SEE SPECIFICATIONS FOR FURTHER JOINT REQUIREMENTS NYSDOT 702-0700.
2. CONCRETE SIDEWALK AND DRIVEWAY MATERIAL SHALL CONFORM TO NYSDOT STANDARD SPECIFICATION 501 AND CONSTRUCTION METHODS SHALL CONFORM TO NYSDOT STANDARD SPECIFICATION 608-3.
3. SUBBASE GRADE SHALL FOLLOW THE PROPOSED GRADE OF THE SIDEWALK AND SLOPE AWAY FROM BUILDING WHERE APPLICABLE, PROVIDE CONTINUOUS STONE PATH TO CURB UNDERDRAIN WHERE PROVIDED.
4. FULL DEPTH EXPANSION JOINTS SHALL BE INSTALLED EVERY 20' O.C., BOTHWAYS WHERE APPLICABLE. SEE SPECIFICATIONS FOR FURTHER JOINT REQUIREMENTS NYSDOT 702-0700.
5. SEE CURB DETAIL FOR DOWLING REQUIREMENTS WHERE ABUTTING CURB.
6. INSTALL 6" LONG #3 DOWELS @ 12" O.C. WHERE SIDEWALK ABUTS A BUILDING WALL AT AN ENTRANCE, THICKEN SIDEWALK TO 6" AT BUILDING WALL AND INSTALL DOWEL CENTERED IN THE 6" DEPTH. DOWELS AND THICKENING OF SIDEWALK SHALL EXTEND 18" EITHER SIDE OF ENTRANCE.
7. INSTALL 1/2" PREMOLDED EXPANSION JOINT WITH BACKER ROD & SEALANT WHERE SIDEWALK ABUTS BUILDING OR OTHER STRUCTURE.

CONCRETE SIDEWALK - 2



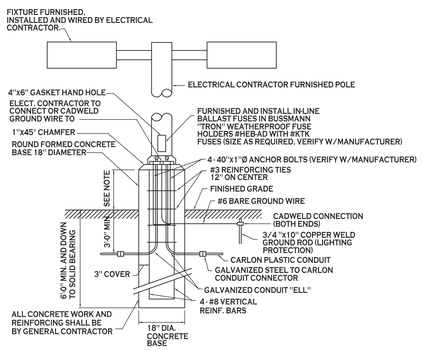
SYMBOL TO BE CENTERED IN PARKING SPACE

INTERNATIONAL HANDICAP SYMBOL - 6A



NOTES:
1., HANDICAPPED PARKING SIGN SHALL CONFORM WITH CURRENT STATE AND LOCAL CODES AND REGULATIONS.

HANDICAP PARKING SIGNS - 5
INSTALLED IN PAVEMENT



NOTES:
1. FOR LOCATIONS OF FOUNDATIONS SEE SITE PLAN
2. FOR LIGHT FIXTURE, POLE & BASE ORDERING INFORMATION SEE LIGHTING PLAN VERIFY INFORMATION WITH OWNER PRIOR TO ORDERING.
3. LIGHT POLE BASE EXPOSURE ABOVE GRADE SHALL BE:
   IN CURBED ISLANDS: 6" ABOVE TOP OF CURB ELEVATION
   IN PAVEMENT: 3" ABOVE GRADE
   IN NON-CURBED GRASS AREAS: 6" ABOVE GRADE

LIGHT POLE FOUNDATION - 7

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STATE OF NEW YORK — ROBERT JOSEPH WOOD — 076394 — LICENSED PROFESSIONAL ENGINEER

REVISIONS:

No.	Description	Date

PROJECT NAME:
Historic Renovation For
Schoellkopf Connector & Powerhouse
Lee and Elk Streets
Buffalo, New York

Issued for Construction: xx.xx.xx
Municipality Submission: 02.02.2017
Drawn by: jlp
Scale: none

DRAWING NAME:
Site Details

DRAWING NO.
C-101

Project no.: 17.109

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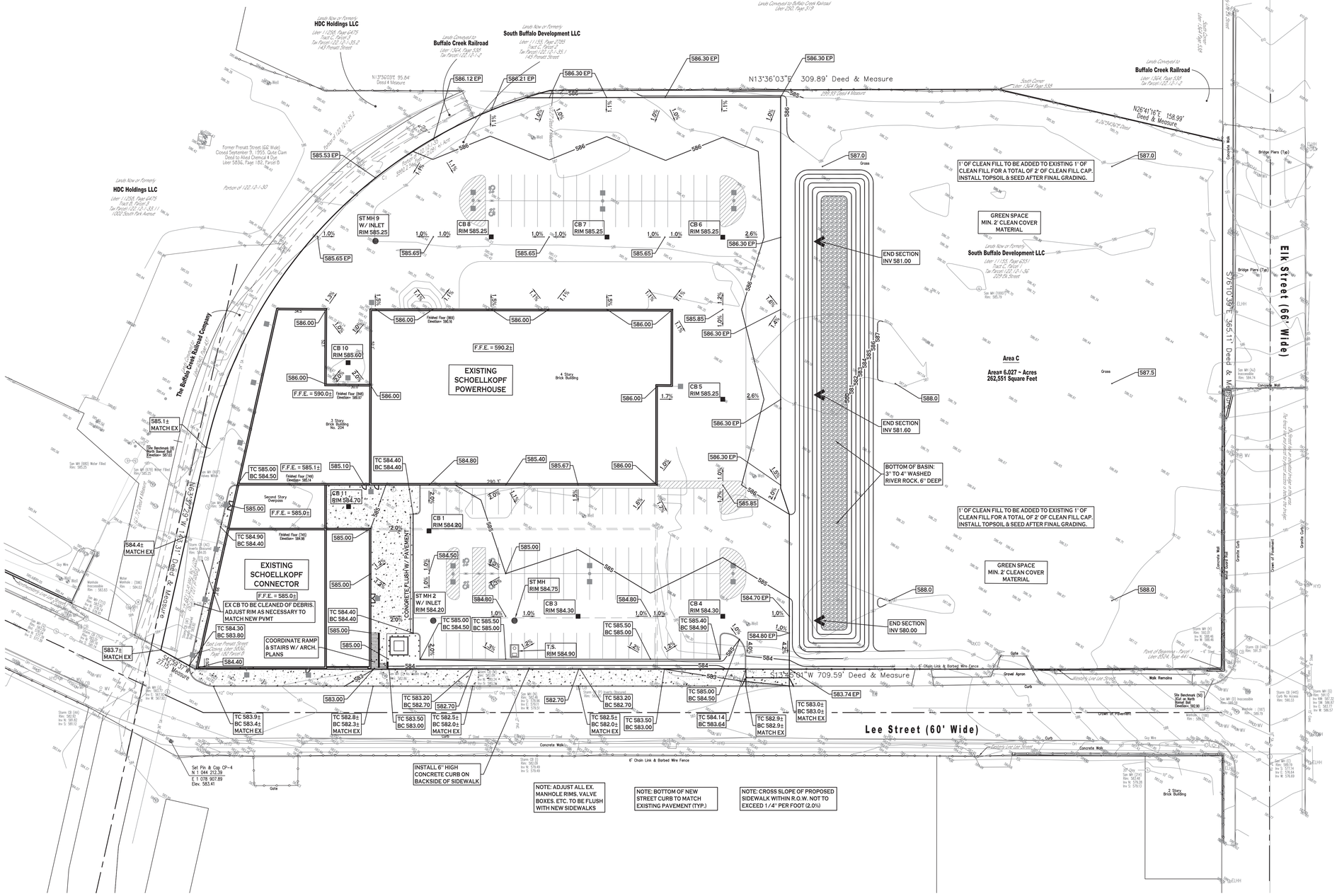
Lands Now or Formerly HDC Holdings LLC
Liber 11258, Page 6475
Tract C, Parcel 3
Tax Parcel# 122.12-1-33.11
1000 Elkoh Park Avenue
Lands Now or Formerly South Buffalo Development LLC
Liber 11155, Page 2765
Tract C, Parcel 2
Tax Parcel# 122.12-1-35.1
145 Prenatt Street
Lands Conveyed to Buffalo Creek Railroad
Liber 1364, Page 538
Tax Parcel# 122.12-1-2
Lands Conveyed to Buffalo Creek Railroad
Liber 250, Page 319
N13°39'03"E 95.84' Deed & Measure
N13°36'03"E 309.89' Deed & Measure
N26°41'16"E 158.99' Deed & Measure
S13°36'51"W 709.59' Deed & Measure
S76°10'39"E 365.11' Deed & Measure
Elk Street (66' Wide)
Lee Street (60' Wide)
The Buffalo Creek Railroad Company
Former Prenatt Street (60' Wide) Closed September 9, 1955. Quite Claim Deed to Allied Chemical & Dye Liber 5836, Page 182, Parcel B
Portion of 122.12-1-30
EXISTING SCHOELLKOPF POWERHOUSE
4 Story Brick Building
F.F.E. = 590.2±
F.F.E. = 590.0±
3 Story Brick Building No. 224
EXISTING SCHOELLKOPF CONNECTOR
F.F.E. = 585.0±
F.F.E. = 585.1±
F.F.E. = 585.0±
Second Story Overpass
2 Story Brick Building
Area C
Area= 6.027 ± Acres
262,551 Square Feet
1' OF CLEAN FILL TO BE ADDED TO EXISTING 1' OF CLEAN FILL FOR A TOTAL OF 2' OF CLEAN FILL CAP. INSTALL TOPSOIL & SEED AFTER FINAL GRADING.
GREEN SPACE MIN. 2' CLEAN COVER MATERIAL
END SECTION INV 581.00
END SECTION INV 580.00
BOTTOM OF BASIN: 3" TO 4" WASHED RIVER ROCK, 6" DEEP
CB 1 RIM 584.20
CB 3 RIM 584.30
CB 4 RIM 584.30
CB 5 RIM 585.25
CB 6 RIM 585.25
CB 7 RIM 585.25
CB 8 RIM 585.25
CB 10 RIM 585.60
CB 11 RIM 584.70
ST MH 2 W/ INLET RIM 584.20
ST MH 9 W/ INLET RIM 585.25
ST MH RIM 584.75
T.S. RIM 584.90
TC 584.40 BC 584.40
TC 584.90 BC 584.40
TC 584.30 BC 583.80
TC 585.00 BC 584.50
TC 585.50 BC 585.00
TC 585.40 BC 584.90
TC 583.20 BC 582.70
TC 583.50 BC 583.00
TC 582.5± BC 582.0± MATCH EX
TC 582.8± BC 582.3± MATCH EX
TC 582.9± BC 582.4± MATCH EX
TC 583.0± BC 583.0± MATCH EX
TC 583.9± BC 583.4± MATCH EX
TC 584.14 BC 583.64
585.1± MATCH EX
584.4± MATCH EX
583.7± MATCH EX
COORDINATE RAMP & STAIRS W/ ARCH. PLANS
EX CB TO BE CLEANED OF DEBRIS. ADJUST RIM AS NECESSARY TO MATCH NEW PVMT
CONCRETE FLUSH W/ PAVEMENT
INSTALL 6" HIGH CONCRETE CURB ON BACKSIDE OF SIDEWALK
NOTE: ADJUST ALL EX. MANHOLE RIMS, VALVE BOXES, ETC. TO BE FLUSH WITH NEW SIDEWALKS
NOTE: BOTTOM OF NEW STREET CURB TO MATCH EXISTING PAVEMENT (TYP.)
NOTE: CROSS SLOPE OF PROPOSED SIDEWALK WITHIN R.O.W. NOT TO EXCEED 1/4" PER FOOT (2.0%)
Set Pin & Cap CP-4
N 1 044 212.39
E 1 078 907.89
Elev. 583.41
Site Benchmark (SB) Nail Set in Top of Concrete Wall Elevation: 587.02
Site Benchmark (NB) Cut in North Bound Rail Elevation: 582.90
6' Chain Link & Barbed Wire Fence
Concrete Wall
Concrete Walk
Gravel Apron
Walk Remains
Bridge Piers (Typ)
Gate
Grass
Curb
Gutter
Granite Curb
Concrete Curb
Existing Lot Line Street
Former Prenatt Street (66' Wide) Closed Liber 5836, Page 182, Parcel A
Point of Beginning - Parcel 1 - 4.47 Acres Liber 10324, Page 441
Point of Beginning - Parcel 2 - 1.55 Acres Liber 10324, Page 441
Storm MH (S) Rim 586.57 Inv N 578.46 Inv W 578.46
Storm MH (S) Rim 586.57 Inv SW 580.57 Inv E 583.57 Inv W 586.57
Storm CB (445) Curb No Access Rim 586.37
Storm MH (SE) Rim 585.82 Inv E 577.14 Inv S 576.64 Inv W 576.69
Storm MH (254) Rim 583.48 Inv N 579.28 Inv S 578.13
Storm CB (AA) Rim 585.82 Inv N 581.82 Inv S 580.12
Storm CB (AC) Inverts Obscured Rim 584.05
Storm MH (SW) Rim 582.93 Inv E 577.43 Inv W 577.43
Storm MH (NW) Rim 582.93 Inv E 577.43 Inv W 577.43
San MH (NW) Rim 585.25
San MH (SW) Rim 585.25
San MH (SE) Rim 583.83
San MH (NE) Rim 583.83
San MH (NW) Rim 583.83
San MH (SW) Rim 583.83
San MH (NE) Rim 583.83
San MH (A2) Inaccessible Rim 584.74
San MH (1000) Rim 585.79
San MH (1) Inaccessible Rim 586.22
Manhole (587) Rim 586.79
Manhole (588) Rim 586.79
Manhole (586) Rim 586.63
Manhole (586) Rim 584.63
Guy Wire
Utility Pole
Light Pole
Water Valve
Gas Valve
Hydrant
Catch Basin
Drain Manhole
Sign
Bollard
Fence
Overhead Wires
Underground Gas Line
Underground Water Line
Underground Storm Line
Underground Sanitary Line
Underground Electric Line
Underground Telephone Line
Underground Fiber Optic Line
Underground Steam Line
Underground Unknown Line
Underground Electric Duct Bank
Underground Telephone Duct Bank
Underground Fiber Optic Duct Bank
Underground Steam Duct Bank
Underground Unknown Duct Bank
Underground Electric Conduit
Underground Telephone Conduit
Underground Fiber Optic Conduit
Underground Steam Conduit
Underground Unknown Conduit
Underground Electric Manhole
Underground Telephone Manhole
Underground Fiber Optic Manhole
Underground Steam Manhole
Underground Unknown Manhole
Underground Electric Vault
Underground Telephone Vault
Underground Fiber Optic Vault
Underground Steam Vault
Underground Unknown Vault
Underground Electric Pedestal
Underground Telephone Pedestal
Underground Fiber Optic Pedestal
Underground Steam Pedestal
Underground Unknown Pedestal
Underground Electric Box
Underground Telephone Box
Underground Fiber Optic Box
Underground Steam Box
Underground Unknown Box
Underground Electric Cable
Underground Telephone Cable
Underground Fiber Optic Cable
Underground Steam Cable
Underground Unknown Cable
Underground Electric Duct
Underground Telephone Duct
Underground Fiber Optic Duct
Underground Steam Duct
Underground Unknown Duct

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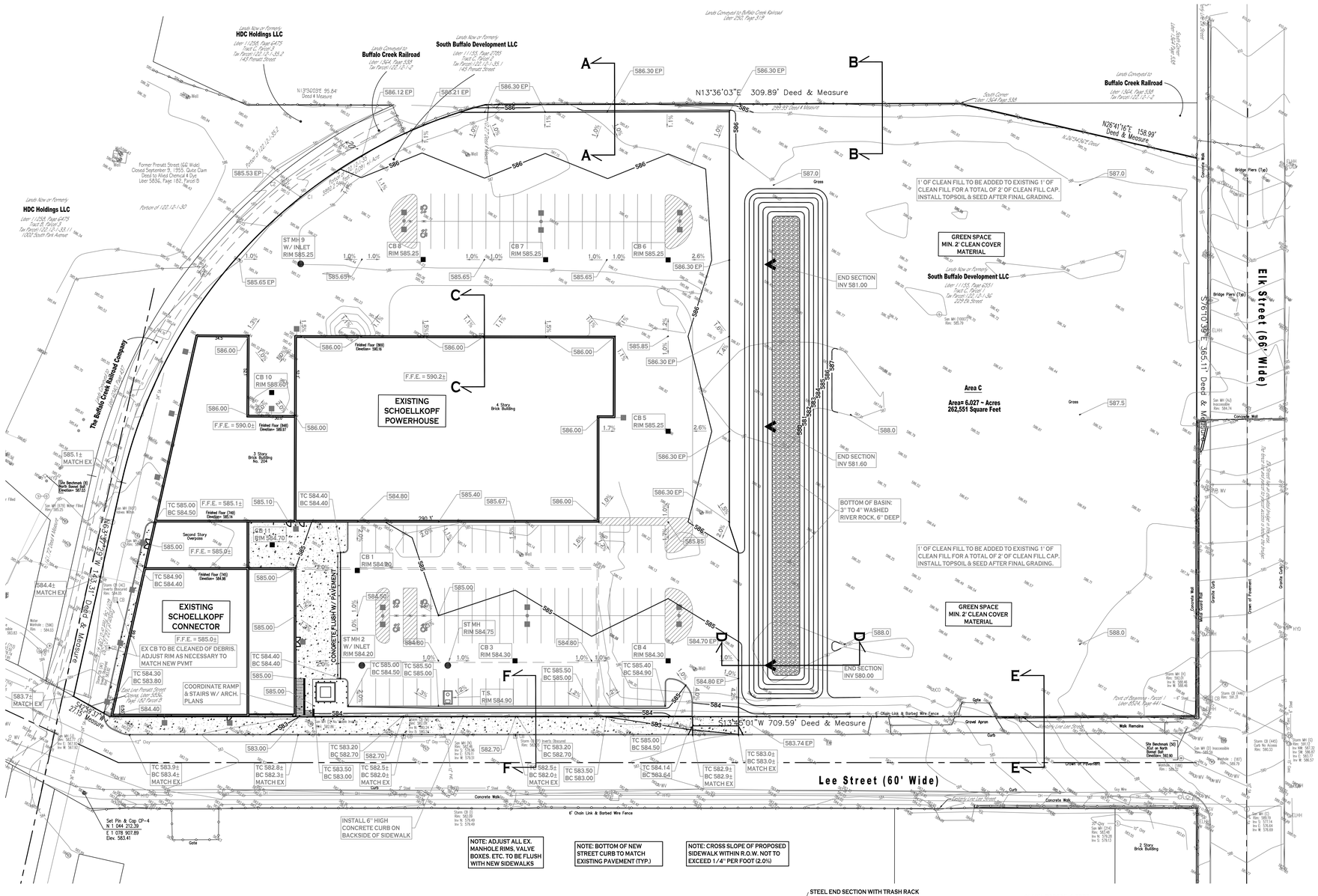
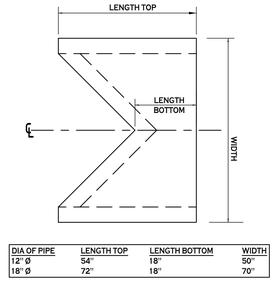
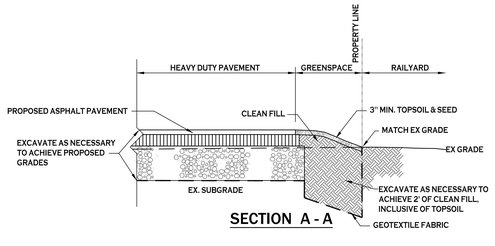




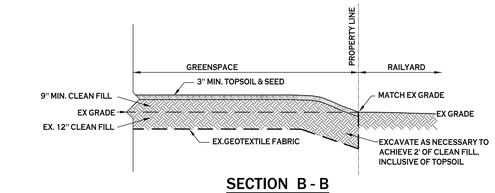
DIA OF PIPE	LENGTH TOP	LENGTH BOTTOM	WIDTH
12" Ø	54"	18"	50"
18" Ø	72"	18"	70"

PIPE LINER BOOT DETAIL

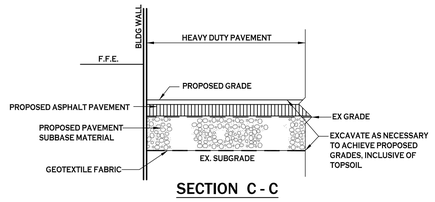
TYPICAL SECTIONS
SCALE: 1"=30'



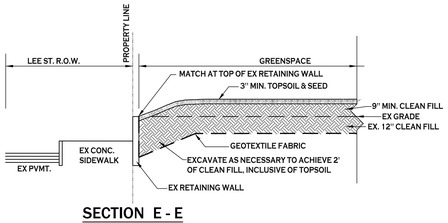
SECTION A - A



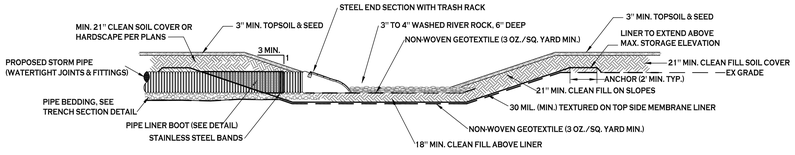
SECTION B - B



SECTION C - C

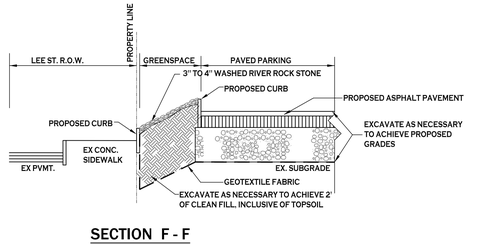


SECTION E - E



SECTION D - D

NOTE: EXISTING SUBGRADE TO BE EXCAVATED AS NECESSARY TO ALLOW FOR PLACEMENT OF 2 FT OF CLEAN FILL, INCLUSIVE OF TOPSOIL



SECTION F - F

PROPOSED GRADING LEGEND

PROPOSED CONTOUR	101
PROPOSED SPOT ELEVATION	100.80
PROPOSED TOP/BOTTOM OF CURB ELEV.	TC 100.50 / BC 100.00
PROPOSED CATCH BASIN	CB
PAVEMENT/GROUND SLOPE	→
PROPOSED YARD DRAIN	YD
PROPOSED MANHOLE	MH

NOTE: BOUNDARY AND TOPOGRAPHIC INFORMATION PROVIDED BY OTHERS, CARMINA WOOD MORRIS, D.P.C. ASSUMES NO RESPONSIBILITY FOR ITS ACCURACY.

30 0 30 60Ft.

Carmina Wood Morris DPC
487 Main Street Suite 500
Buffalo, New York 14203
P 716.842.3165
F 716.842.0263

REVISIONS:

No.	Description	Date

PROJECT NAME:
Historic Renovation For
Schoellkopf Connector & Powerhouse
Lee and Elk Streets
Buffalo, New York

Issued for Construction: xx.xx.xx
Municipality Submission: xx.xx.xx
Drawn by: jlp
Scale: 1:30

DRAWING NAME:
Typical Sections

DRAWING NO.
C-201

Project no.: 17.109

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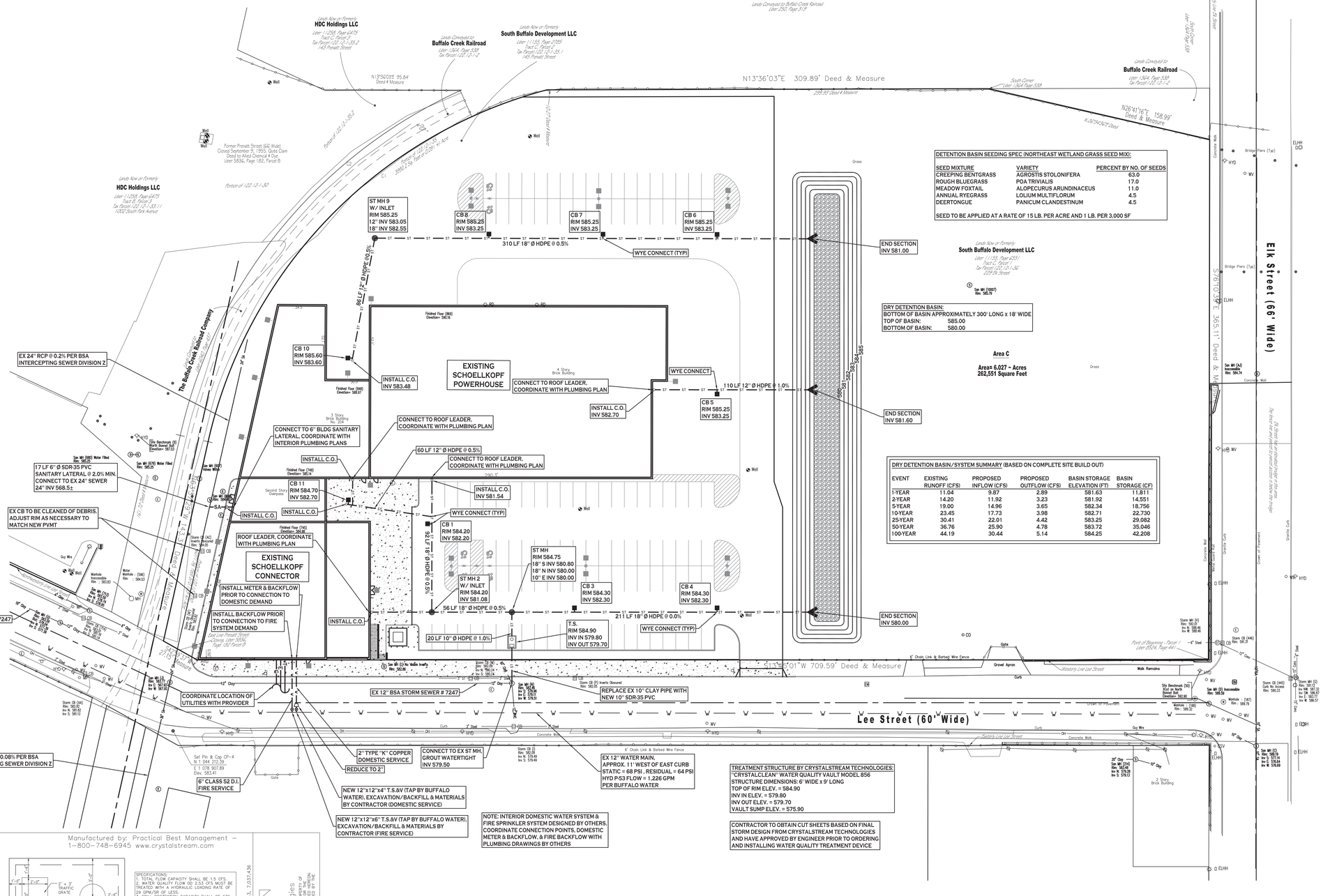
Lands Now or Formerly HDC Holdings LLC
Liber 11258, Page 6475
Tract C, Parcel 3
Tax Parcel: 122.12-1-33.2
143 Prospect Street
Lands Conveyed to Buffalo Creek Railroad
Liber 11304, Page 538
Tax Parcel: 122.12-1-2
Lands Now or Formerly South Buffalo Development LLC
Liber 11155, Page 2765
Tract C, Parcel 2
Tax Parcel: 122.12-1-35.1
145 Prospect Street
Lands Conveyed to Buffalo Creek Railroad
Liber 250, Page 319
N13°36'03"E 309.89' Deed & Measure
N13°39'03"E 95.84' Deed & Measure
208.93' Deed & Measure
N26°41'16"E 158.99' Deed & Measure
N26°54'36"E Deed
Former Prospect Street (60' Wide) Closed September 9, 1955. Quite Claim Deed to Allied Chemical & Dye Liber 5836, Page 152, Parcel B
Portion of 122.12-1-30
Portion of 122.12-1-33.2
Portion of 122.12-1-35.2
Lands Now or Formerly HDC Holdings LLC
Liber 11258, Page 6475
Tract B, Parcel 2
Tax Parcel: 122.12-1-33.11
1002 South Park Avenue
ST MH 9 W/ INLET RIM 585.25 12" INV 583.05 18" INV 582.55
CB 8 RIM 585.25 INV 583.25
CB 7 RIM 585.25 INV 583.25
CB 6 RIM 585.25 INV 583.25
310 LF 18" Ø HDPE @ 0.5%
WYE CONNECT (TYP)
END SECTION INV 581.00
END SECTION INV 581.60
END SECTION INV 580.00
86 LF 12" Ø HDPE @0.5%
DETENTION BASIN SEEDING SPEC (NORTHEAST WETLAND GRASS SEED MIX):
SEED MIXTURE / VARIETY / PERCENT BY NO. OF SEEDS
CREEPING BENTGRASS — AGROSTIS STOLONIFERA — 63.0
ROUGH BLUEGRASS — POA TRIVIALIS — 17.0
MEADOW FOXTAIL — ALOPECURUS ARUNDINACEUS — 11.0
ANNUAL RYEGRASS — LOLIUM MULTIFLORUM — 4.5
DEERTONGUE — PANICUM CLANDESTINUM — 4.5
SEED TO BE APPLIED AT A RATE OF 15 LB. PER ACRE AND 1 LB. PER 3,000 SF
DRY DETENTION BASIN:
BOTTOM OF BASIN APPROXIMATELY 300' LONG x 18' WIDE
TOP OF BASIN: 585.00
BOTTOM OF BASIN: 580.00
Area C
Area= 6.027 ± Acres
262,551 Square Feet
Lands Now or Formerly South Buffalo Development LLC
Liber 11155, Page 2751
Tract C, Parcel 1
Tax Parcel: 122.12-1-36
229 Elk Street
See MH (1007) Rim: 585.79
EXISTING SCHOELLKOPF POWERHOUSE
4 Story Brick Building
Finished Floor (869) Elevation: 590.16
Finished Floor (869) Elevation: 588.67
Finished Floor (748) Elevation: 580.14
Second Story Overpass
3 Story Brick Building No. 624
2 Story Brick Building
CONNECT TO ROOF LEADER, COORDINATE WITH PLUMBING PLAN
CONNECT TO 6" BLDG SANITARY LATERAL, COORDINATE WITH INTERIOR PLUMBING PLANS
CONNECT TO ROOF LEADER, COORDINATE WITH PLUMBING PLAN
CONNECT TO ROOF LEADER, COORDINATE WITH PLUMBING PLAN
ROOF LEADER, COORDINATE WITH PLUMBING PLAN
EXISTING SCHOELLKOPF CONNECTOR
INSTALL METER & BACKFLOW PRIOR TO CONNECTION TO DOMESTIC DEMAND
INSTALL BACKFLOW PRIOR TO CONNECTION TO FIRE SYSTEM DEMAND
CB 10 RIM 585.60 INV 583.60
CB 11 RIM 584.70 INV 582.70
CB 1 RIM 584.20 INV 582.20
ST MH 2 W/ INLET RIM 584.20 INV 581.08
CB 3 RIM 584.30 INV 582.30
CB 4 RIM 584.30 INV 582.30
ST MH RIM 584.75 18" S INV 580.80 18" N INV 580.00 10" E INV 580.00
T.S. RIM 584.90 INV IN 579.80 INV OUT 579.70
INSTALL C.O. INV 583.48
INSTALL C.O. INV 582.70
INSTALL C.O. INV 581.54
INSTALL C.O.
INSTALL C.O.
INSTALL C.O.
INSTALL C.O.
WYE CONNECT
WYE CONNECT (TYP)
WYE CONNECT (TYP)
110 LF 12" Ø HDPE @ 1.0%
CB 5 RIM 585.25 INV 583.25
60 LF 12" Ø HDPE @ 0.5%
92 LF 18" Ø HDPE @ 0.5%
56 LF 18" Ø HDPE @ 0.5%
211 LF 18" Ø HDPE @ 0.0%
20 LF 10" Ø HDPE @ 1.0%
EX 24" RCP @ 0.2% PER BSA INTERCEPTING SEWER DIVISION Z
17 LF 6" Ø SDR-35 PVC SANITARY LATERAL @ 2.0% MIN. CONNECT TO EX 24" SEWER 24" INV 568.5±
EX CB TO BE CLEANED OF DEBRIS. ADJUST RIM AS NECESSARY TO MATCH NEW PVMT
EX 18" BSA STORM SEWER # 7247
EX 36" RCP @ 0.08% PER BSA INTERCEPTING SEWER DIVISION Z
EX 12" BSA STORM SEWER # 7247
COORDINATE LOCATION OF UTILITIES WITH PROVIDER
REPLACE EX 10" CLAY PIPE WITH NEW 10" SDR-35 PVC
2" TYPE "K" COPPER DOMESTIC SERVICE
REDUCE TO 2"
CONNECT TO EX ST MH, GROUT WATERTIGHT INV 579.50
6" CLASS 52 D.I. FIRE SERVICE
NEW 12"x12"x4" T.S.&V (TAP BY BUFFALO WATER), EXCAVATION/BACKFILL & MATERIALS BY CONTRACTOR (DOMESTIC SERVICE)
NEW 12"x12"x6" T.S.&V (TAP BY BUFFALO WATER), EXCAVATION/BACKFILL & MATERIALS BY CONTRACTOR (FIRE SERVICE)
EX 12" WATER MAIN, APPROX. 11' WEST OF EAST CURB STATIC = 68 PSI , RESIDUAL = 64 PSI HYD P-53 FLOW = 1,226 GPM PER BUFFALO WATER
NOTE: INTERIOR DOMESTIC WATER SYSTEM & FIRE SPRINKLER SYSTEM DESIGNED BY OTHERS, COORDINATE CONNECTION POINTS, DOMESTIC METER & BACKFLOW, & FIRE BACKFLOW WITH PLUMBING DRAWINGS BY OTHERS
TREATMENT STRUCTURE BY CRYSTALSTREAM TECHNOLOGIES: "CRYSTALCLEAN" WATER QUALITY VAULT MODEL 856
STRUCTURE DIMENSIONS: 6' WIDE x 9' LONG
TOP OF RIM ELEV. = 584.90
INV IN ELEV. = 579.80
INV OUT ELEV. = 579.70
VAULT SUMP ELEV. = 575.90
CONTRACTOR TO OBTAIN CUT SHEETS BASED ON FINAL STORM DESIGN FROM CRYSTALSTREAM TECHNOLOGIES AND HAVE APPROVED BY ENGINEER PRIOR TO ORDERING AND INSTALLING WATER QUALITY TREATMENT DEVICE
Elk Street (66' Wide)
Lee Street (60' Wide)
S76°10'39"E 365.11' Deed & Measure
Bridge Piers (Typ)
Concrete Wall
Gravel Apron
Curb
Gate
6' Chain Link & Barbed Wire Fence
Historic Low Line Street
Walk Remains
Concrete Walk
Edge of Pavement
Granite Curb
Point of Beginning - Parcel I Liber 8504, Page 441
Point of Beginning - Parcel II Liber 8504, Page 441
Site Benchmark (SB) Cut on North Domed Bolt Elev/Elev= 583.90
See MH (A) Inv= 584.74 Rim= 584.74
See MH (C) Inv= 580.19 Rim= 585.19
See MH (D) Inv= 580.19 Rim= 585.19
See MH (E) Inv= 579.69 Rim= 584.69
See MH (F) Inv= 579.19 Rim= 584.19
See MH (G) Inv= 578.69 Rim= 584.69
See MH (H) Inv= 578.19 Rim= 584.19
See MH (I) Inv= 577.69 Rim= 584.69
See MH (J) Inv= 577.19 Rim= 584.19
See MH (K) Inv= 576.69 Rim= 584.69
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See MH (S) Inv= 572.69 Rim= 584.69
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See MH (Z) Inv= 569.19 Rim= 584.19
See MH (AA) Inv= 568.69 Rim= 584.69
See MH (AB) Inv= 568.19 Rim= 584.19
See MH (AC) Inverts Obscured Rim: 584.05
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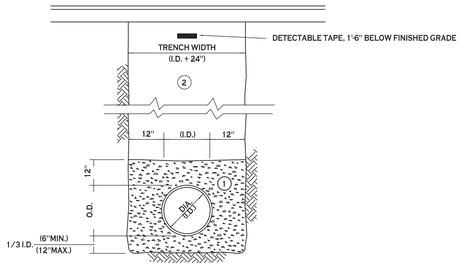


NOTES:

A. PIPE INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

B. TRENCHING OPERATIONS SHALL INCLUDE ALL NECESSARY DEWATERING.

C. TRENCH DETAILS ARE ONLY SHOWN FOR PURPOSES OF MATERIAL PLACEMENT AND MAXIMUM PAY LIMITS.

D. AN OSHA APPROVED MOVABLE PROTECTIVE TRENCH SHIELD SHALL BE USED IN ALL UNSHEETED TRENCH AREAS.

MATERIALS

PIPE BEDDING MATERIAL (NYSDOT 1985 EDITION)

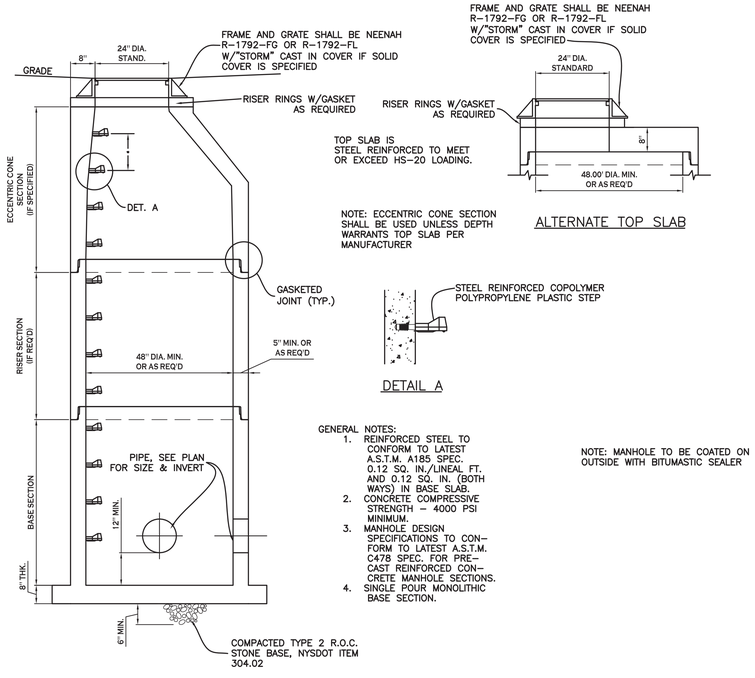
(1) NO. 1 CRUSHED STONE OR CRUSHED GRAVEL WITH A GRADATION CONFORMING WITH NYSDOT SECTION 703-02. THE MATERIAL SHALL BE WELL GRADED WITH NO PARTICLES LARGER THAN ONE INCH AND HAVING A MAXIMUM GRADATION MEETING THE LIMITS DESCRIBED IN THE SPECIFICATIONS. THE BEDDING SHALL BE COMPACTED IN 6" LIFTS WITH EQUIPMENT ACCEPTABLE TO THE PIPE MANUFACTURER.

NO SLAG SHALL BE ALLOWED FOR MATERIAL (1)

(2) TYPE 2 CRUSHED STONE OR CRUSHED GRAVEL WITH A GRADATION CONFORMING WITH NYSDOT SECTION 304-2.02 TYPE 2. THE MATERAIL SHALL BE WELL GRADED WITH NO PARTICLES LARGER THAN TWO INCHES AND HAVING A MAXIMUM GRADATION MEETING THE LIMITS DESCRIBED IN THE SPECIFICATIONS. THE BEDDING SHALL BE COMPACTED IN 6" LIFTS WITH EQUIPMENT ACCEPTABLE TO THE PIPE MANUFACTURER.

NO SLAG SHALL BE ALLOWED FOR MATERIAL (2)

STORM SEWER TRENCH SECTION IN PAVED AREAS



NOTE: ECCENTRIC CONE SECTION SHALL BE USED UNLESS DEPTH WARRANTS TOP SLAB PER MANUFACTURER

ALTERNATE TOP SLAB

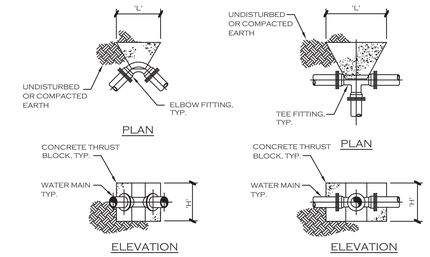
DETAIL A

GENERAL NOTES:

1. REINFORCED STEEL TO CONFORM TO LATEST A.S.T.M. A185 SPEC. 0.12 SQ. IN./LINEAL FT. AND 0.12 SQ. IN. (BOTH WAYS) IN BASE SLAB.
2. CONCRETE COMPRESSIVE STRENGTH – 4000 PSI MINIMUM.
3. MANHOLE DESIGN SPECIFICATIONS TO CONFORM TO LATEST A.S.T.M. C478 SPEC. FOR PRECAST REINFORCED CONCRETE MANHOLE SECTIONS.
4. SINGLE POUR MONOLITHIC BASE SECTION.

NOTE: MANHOLE TO BE COATED ON OUTSIDE WITH BITUMASTIC SEALER

TYPICAL STORM MANHOLE DETAIL

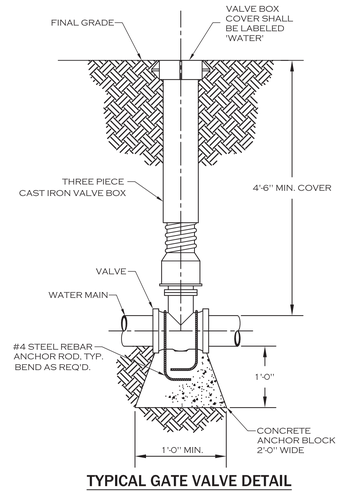


DIMENSION SCHEDULE								
PIPE SIZE	90° ELBOW		45° ELBOW		22.5° ELBOW		11.25° ELBOW	
	'H'	'L'	'H'	'L'	'H'	'L'	'H'	'L'
4"	1.5'	2.0'	1.0'	2.0'	1.0'	1.0'	1.0'	1.0'
6"	2.0'	2.5'	1.5'	2.0'	1.0'	1.5'	1.0'	1.5'
8"	2.5'	3.5'	2.0'	2.5'	1.5'	1.5'	1.0'	2.0'
10"	3.0'	4.5'	2.5'	3.0'	1.5'	3.0'	1.0'	2.5'
12"	3.5'	5.0'	3.0'	3.5'	2.5'	2.5'	1.5'	2.5'

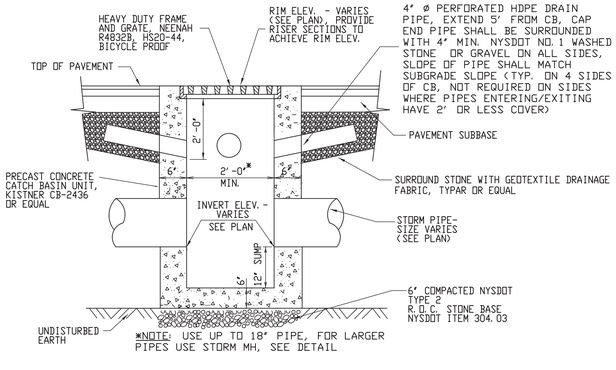
DIMENSION SCHEDULE		
PIPE SIZE	TEE OR TAP SLEEVE	
—	'H'	'L'
4"	1.5'	1.0'
6"	1.5'	2.5'
8"	1.5'	3.5'
10"	2.5'	3.5'
12"	3.5'	3.5'

THRUST BLOCK SCHEDULE

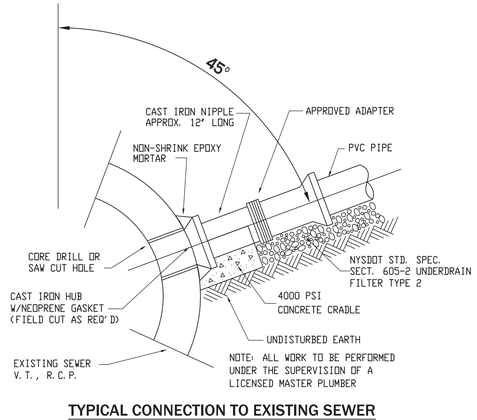
WATER MAIN



TYPICAL GATE VALVE DETAIL

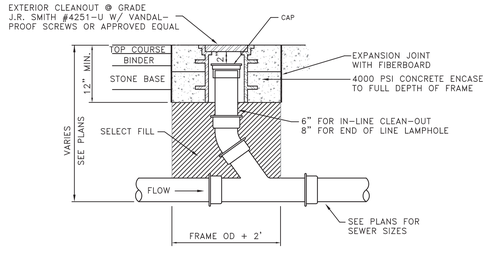


TYPICAL PRECAST CATCH BASIN



TYPICAL CONNECTION TO EXISTING SEWER

N.T.S.



Lamphole/Cleanout in Pavement/Sidewalk

NOT TO SCALE

Carmina Wood Morris DPC
487 Main Street Suite 500
Buffalo, New York 14203
P 716.842.3165
F 716.842.0263

REVISIONS:

No.	Description	Date

PROJECT NAME:

Historic Renovation For

Schoellkopf Connector & Powerhouse

Lee and Elk Streets
Buffalo, New York

Issued for Construction: xx.xx.xx
Municipality Submission: xx.xx.xx
Drawn by: jlp
Scale: as noted

DRAWING NAME:

Storm Drainage Details

DRAWING NO.

C-301

Project no.: 17.109

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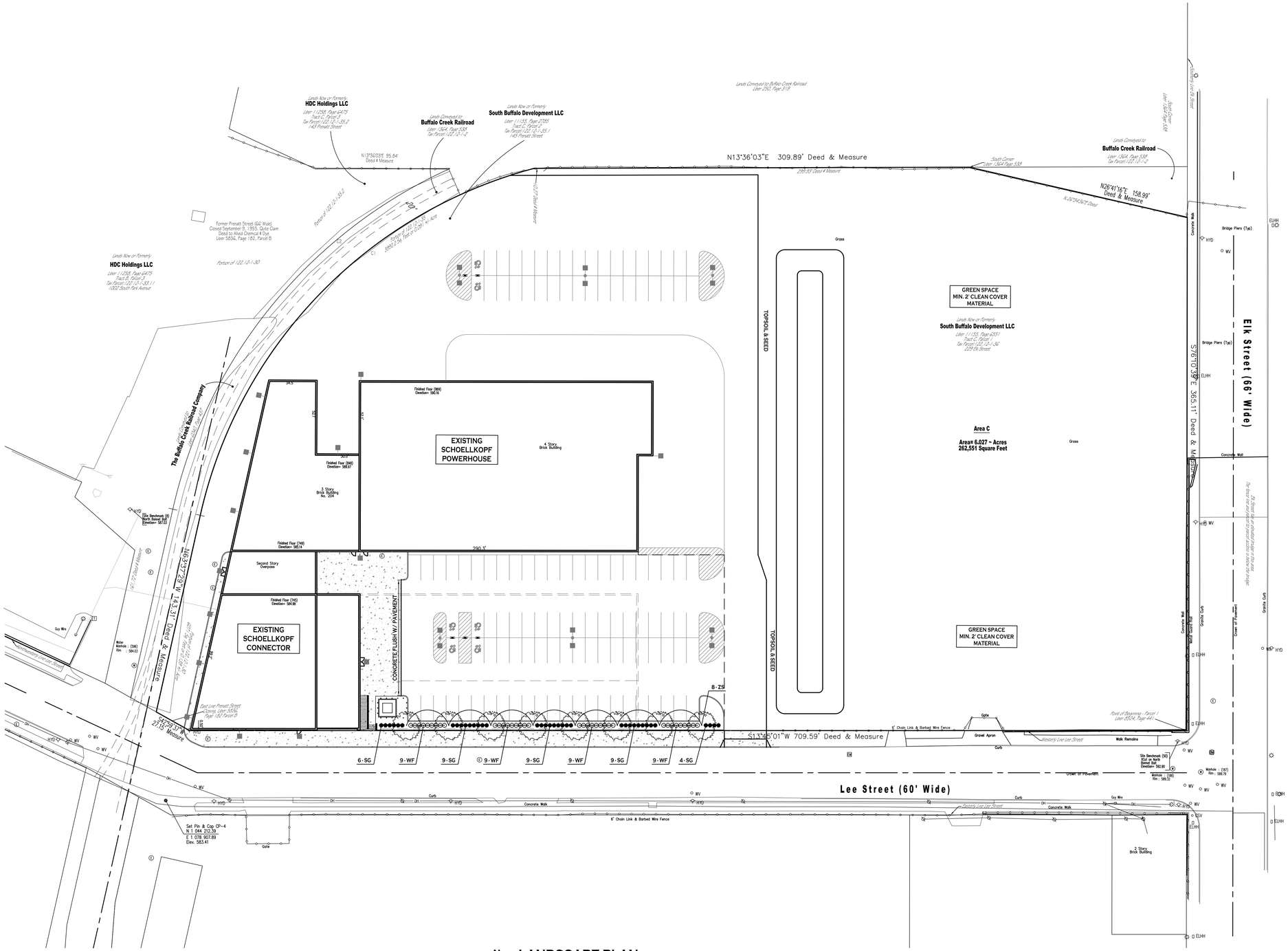
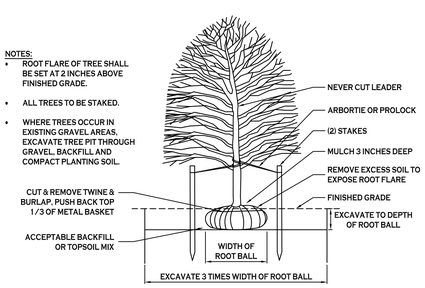


N

LANDSCAPE PLAN

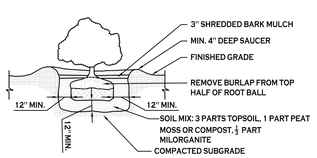
SCALE: 1"=30'

NOTES:
- ROOT FLARE OF TREE SHALL BE SET AT 2 INCHES ABOVE FINISHED GRADE.
- ALL TREES TO BE STAKED.
- WHERE TREES OCCUR IN EXISTING GRAVEL AREAS, EXCAVATE TREE PIT THROUGH GRAVEL, BACKFILL AND COMPACT PLANTING SOIL.



DECIDUOUS TREE PLANTING W/STAKES

(CITY OF BUFFALO TREE PLANTING DETAIL)
N.T.S.



SHRUB PLANTING DETAIL

N.T.S.

PLANTING NOTES:

1. ALL INTERIOR LANDSCAPED AREAS SHALL HAVE A MINIMUM PLANTING SOIL DEPTH OF THREE (3) FEET AND BE FREE FROM ALL FORMS OF CONSTRUCTION DEBRIS AND FOREIGN MATERIAL.
2. ALL TREE PIT SAUCERS, SHRUB BEDS, ORNAMENTAL GRASS BEDS, AND PERENNIAL FLOWER BEDS SHALL RECEIVE THREE (3) INCHES DEPTH OF DARK SHREDDED HARDWOOD BARK MULCH.
3. ALL SEASONAL FLOWER BEDS SHALL BE A MINIMUM OF TWELVE (12) INCHES DEEP WITH A WELL-BLENDED MIXTURE OF 50% PEAT MOSS & 50% SCREENED TOPSOIL. NO MULCH SHALL BE INSTALLED IN THE SEASONAL FLOWER BEDS.
4. ALL DECIDUOUS AND EVERGREEN TREES SHALL BE STAKED WITH TWO (2) TREE STAKES AS PER THE CITY OF BUFFALO TREE PLANTING DETAIL.

PLANTING SCHEDULE

KEY	QTY.	BOTANICAL NAME	COMMON NAME	MIN. SIZE	REMARKS
SG	37	SPIRAEA BUMALDA "GOLD FLAME"	GOLD FLAME SPIREA	NO. 3 CONT.	
WF	36	WEIGELA FLORIDA "ALEXANDRA"	WINE & ROSES WEIGELA	NO. 3 CONT.	
ZS	8	ZELKOVA SERRATA "VILLAGE GREEN"	VILLAGE GREEN ZELKOVA	2 1/2" CAL.	

NOTE: BOUNDARY AND TOPOGRAPHIC INFORMATION PROVIDED BY OTHERS, CARMINA WOOD MORRIS, D.P.C. ASSUMES NO RESPONSIBILITY FOR ITS ACCURACY.

30' 30 0 30 60Ft.

Carmina Wood Morris DPC
467 Main Street Suite 500
Buffalo, New York 14203
P 716.842.3165
F 716.842.0263

REVISIONS:

No.	Description	Date

PROJECT NAME:
Historic Renovation For
Schoellkopf Connector & Powerhouse
Lee and Elk Streets
Buffalo, New York

Issued for Construction: xx.xx.xx
Municipality Submission: xx.xx.xx
Drawn by: jlp
Scale: 1:30

DRAWING NAME:
Landscape Plan

DRAWING NO.
L-100

Project no.: 17.109