

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

## Division of Environmental Remediation, Region 8

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March 17, 2022

Joseph M. Loboizzo II  
690 Portland Avenue Company  
1000 Runabout Lane  
Apt. 304  
Webster, New York 14580

Re: Construction Completion Report  
Vapor Mitigation Systems  
Former JML Optical Site  
Site No. C828151  
Rochester (C), Monroe (C)

Dear Mr. Loboizzo:

The New York State Department of Environmental Conservation (the Department), in conjunction with the New York State Department of Health (NYSDOH), have completed a review of the Construction Completion Report (CCR) Vapor Mitigation Systems dated December 2021 for the Former JML Optical Inc. Brownfield Cleanup Program site (BCP Site) located at 678-690 Portland Avenue in the City of Rochester, Monroe County. Based on the information presented in the December 2021 CCR, the CCR is conditionally approved with the following modifications and clarifications.

1. The Department is unsure why the figure is provided in the CCR as the references or discussion regarding the figure in the CCR are not shown on the figure. The Department understands the following: Lot #1 is 702 Portland Avenue, Lot #2 is 708 Portland Avenue, and Lot #3 is 714 Portland Avenue.
2. In the CCR submitted to the Department provides a list of owners receiving the remedial performance sampling results. A review of the Monroe County Property tax information, the properties were last sold in 2020 and 2009. Please provide the new property owners the remedial performance sampling results as well as a certification and documentation of mailing to the Department **within 7 days of the date of this letter.**
  - 702 and 708 Portland Avenue property:  
Aus & Ang Snead LLC  
185 Kaywood Drive  
Rochester, New York 14626
  - 714 Portland Avenue Property:  
Monroe Rental Properties LLC  
P.O. Box 1006  
Warwick, New York 10990



Department of  
Environmental  
Conservation

3. Based on the data submitted to date, the 702 and 708 Portland Avenue SSDSs are functioning as designed and mitigating potential soil vapor intrusion; therefore, the annual indoor air sampling at these properties can be discontinued.

The conditionally approved SSDS CCR along with this letter will be incorporated into the Site's Remedial Investigation Report as an appendix.

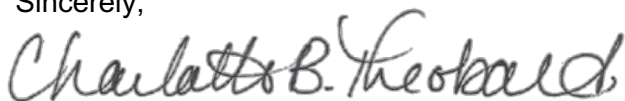
Within fifteen (15) days of the date of this letter, the Applicant must elect in writing (electronic notification is acceptable) one of the following options:

- Option A: Accept the modified ;
- Option B: Invoke dispute resolution as set forth in 6 NYCRR Part 35-1.5(b)(2); or
- Option C: Terminate the Brownfield Cleanup Agreement in accordance with 6 NYCRR Part 375-3.5.

If the Applicant chooses to accept Option A then this letter becomes part of the approved 2021 Construction Completion Report Vapor Mitigation Systems. Also, if Option A is chosen then a copy of the approved 2021 Construction Completion Report Vapor Mitigation Systems with this letter attached must be placed in the document repository within 1 week of accepting Option A. Please provide notification to the Department that the 2021 Construction Completion Report Vapor Mitigation Systems and a copy of this letter attached have been placed in the document repository (electronic notification is acceptable).

The Department seeks to resolve the outstanding differences in a mutually agreeable manner, which addresses the requirements of the Brownfield Cleanup Agreement and associated work plans. If your technical team have any questions, concerns, or need further assistance with the Site, please feel free to contact me at 585-226-5354 or via e-mail at [charlotte.theobald@dec.ny.gov](mailto:charlotte.theobald@dec.ny.gov). If your legal team have any questions, concerns, or need further assistance with the Site, please feel free to contact Mr. Dudley Loew at 585-226-5368 or via e-mail at [dudley.loew@dec.ny.gov](mailto:dudley.loew@dec.ny.gov).

Sincerely,



Charlotte B. Theobald  
Assistant Engineer

ec:

Pete Morton (Ravi)  
Lynn Zicari (Ravi)  
Linda Shaw (Knauf Shaw)  
Rev. Wright (Community Mutual, Inc.)  
Nancy Van Dussen (Ravi)  
Justin Deming (NYS. Dept. of Health – Albany)  
Eamonn O'Neil (NYS Dept. of Health - Albany)  
Jacquelyn Nealon (NYS. Dept. of Health – Albany)  
Scarlett McLaughlin (NYS. Dept. of Health – Albany)  
Mirza Bogovic (Monroe County Health Department)  
Dudley Loew (NYSDEC)  
David Pratt (NYSDEC)  
Todd Caffoe (NYSDEC)

## CERTIFICATION OF MAILING

**Site Name:** Former JML Optical Site

**Site No.:** C828151

I certify that I mailed on \_\_\_\_\_ a copy of all remedial performance data associated with the following property: (insert property address below)

- 

by first class mail to the following entity/person(s): (insert property owner and address below)

- 

by depositing a true copy thereof, securely enclosed in a postpaid wrapper, in the Post Office box at \_\_\_\_\_ the City/Village of \_\_\_\_\_, New York, which box is under the exclusive care and custody of the United States Post Office.

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Signature

---

Date

Former JML Optical, Inc.  
690 Portland Avenue  
Rochester, New York

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Construction Completion Report  
Vapor Mitigation Systems

NYSDEC Site Number: C828151

Prepared for:

690 Portland Avenue Company

Prepared by:

Ravi Engineering & Land Surveying, P.C.  
2110 South Clinton Avenue  
Rochester, New York 14618

JULY 2015  
REVISED December 2021



I, Nancy Styles Van Dussen, certify that I am currently a NYS registered professional engineer. I had primary direct responsibility for the implementation of the subject construction program and I certify that the Interim Remedial Measures Work Plan was implemented and that all construction activities were completed in substantial conformance with the DER-approved Interim Remedial Measures Work Plan.

*Nancy S. Van Dussen*

Signed

12/21/2021

Dated



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## **1. Introduction**

Ravi Engineering and Land Surveying, P.C. (RE&LS) is submitting this Construction Completion Report (CCR) to document remedial action activities implemented on April 13 - 15, 2015 at three Portland Avenue residences adjacent to the Former JML Optical, Inc., (NYSDEC Site #C828151) (the “Site”, Figure 1). The Site is located at 690 Portland Avenue in the City of Rochester, New York. The work consisted of the installation of active sub-slab depressurizations systems (SSDS) at three adjacent residences at 702, 708, & 714 Portland Avenue as indicated on Figure SU-1. SSDS details are presented on the As-built figures in Appendix B.

### **1.1 Background**

690 Portland Avenue Company entered into a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) in December 2008 to investigate and remediate their approximately 1.565-acre property in the City of Rochester, New York.

The Site is almost entirely covered with buildings or paved surfaces, except for a mowed grassy area along the Portland Avenue entrance to the Site and a strip of grass along the eastern Site boundary (rear side of building).

ILEX Optical constructed the original portion of the building for lens manufacturing operations in the 1920s; Ilex constructed an addition to the building circa 1970. 690 Portland Avenue Company purchased the Site in December of 1979, and JML Optical, Inc. operated at the Site until they relocated operations to the Town of Pittsford, New York in November 2005. The Site has remained vacant since 2005.

The Site and neighboring properties are currently located in an industrial (M-1) zoning district with the exception of 76 Fernwood Avenue, the adjacent property to the south that is zoned Low Density Residential (R-1). The Site is located within a New York State “En-Zone” pursuant to Tax Law § 21(b)(6). There are no known easements on the Site, and there are currently no environmental permits associated with the Site.

The Site is bounded by Ilex Place to the north, a residential property at 674 Portland Avenue and a parking lot at 76 Fernwood Avenue to the south, several residential properties (702, 708, 714, and 720 Portland Avenue) to the west, and the Former Vogt Manufacturing Site at 100 Fernwood Avenue to the east (Figure SU-1).

## **1.2 Previous Environmental Work**

### **Phase I Environmental Site Assessment (ESA), Labella Associates, P. C. (Labella), February 2005**

Labella identified several recognized environmental conditions (RECs) as a result of this Phase I ESA;

- An open NYSDEC spill file (spill no. 9870600) was identified, which was associated with subsurface petroleum contamination identified during the removal of a 5,000-gallon No. 2 fuel oil underground storage tank (UST) from the Site. While contaminated soils were reportedly excavated and disposed of offsite, no analytical data had been provided to the NYSDEC to confirm that the release had been addressed to an extent deemed acceptable to the NYSDEC.
- Historical research indicated that the Site had a long history of chlorinated solvent use, particularly trichloroethene (TCE), in association with the manufacturing of specialty optical lenses.
- The on-site building once had a number of individual floor drains and trench drains, and a sump of unknown origin was identified in the storage area of the main manufacturing building.

### **Phase II ESA-Preliminary Site Characterization (PSC), Labella Associates, P.C., June 2005**

Labella performed a Phase II ESA in June 2005 to investigate the RECs that they had previously identified. Soil samples collected in the vicinity of the sump were determined to have elevated levels of TCE above the 6 NYCRR Part 375 Unrestricted Soil Cleanup Objectives (SCO). A groundwater sample collected from existing well MW-3, which was installed in the historic tank pit exhibited levels of chlorinated- and petroleum-related volatile organic compounds (VOC) and semivolatile organic compounds (SVOC) above New York State Part 703 groundwater standards. Two floor drains inside the maintenance shop were determined to discharge to the sump; the discharge location of the sump could not be determined. Labella concluded that the sump was the source of solvent-related soil and groundwater impairment.

### **Phase II Supplemental Site Characterization (SSC), Labella Associates, P.C., June 2006**

Laboratory results of soil samples that Labella collected in the vicinity of the sump indicated that no VOC or SVOC concentrations above Part 375 Unrestricted SCOs were present. They stated that the contamination associated with the former 5,000-gallon UST was limited to petroleum compounds.

Laboratory results of groundwater samples collected in the vicinity of the sump and the former UST indicated that several chlorinated VOCs (CVOCs) were present at levels exceeding Part 703 groundwater standards; however, the concentrations were significantly lower in the sample collected from the former UST area. The results of the former UST sample also indicated that several petroleum-related VOCs and SVOCs were present above Part 703 groundwater standards.

### **1.3 Draft Remedial Investigation Report (RIR), Clough Harbor Associates (CHA), May 2011**

CHA performed a Remedial Investigation (RI) between 2010 and 2011. In their RI report, they identified the following environmental media as sources of contaminants of concern at the Site:

- Subsurface soils in proximity to the sump, the former UST, degreaser areas, and along the southern side of the main building are sources of VOCs, SVOCs, and metals.
- Groundwater throughout the Site is impacted by CVOCs; the highest levels are present in the former sump area and degreaser areas.
- Sub-slab vapor samples indicate that soil vapor is contaminated with several CVOCs in concentrations that exceed New York State Department of Health (NYSDOH) Matrix Specific Sub-Slab concentrations.

### **1.4 RE&LS Sub-Slab Sample Point Installation, Soil Vapor Intrusion (SVI) Sampling, and Laboratory Analysis**

SVI sampling was conducted at 702 and 708 Portland Avenue on September 4 and 5, 2013. Samples were collected at 714 Portland Avenue on November 30, 2015. The SVI sampling was conducted in accordance with the Vapor Mitigation System Interim Remedial Measure Work Plan dated July 15, 2014.

Sampling consisting of one sub-slab vapor sample and one interior indoor air basement sample was conducted over a 24-hour period at each residence. Outdoor ambient air samples were collected to evaluate background air levels.

Samples were submitted to Centek Laboratories, LLC (Centek) in Syracuse, New York for analysis of targeted VOCs by USEPA Method TO-15. TCE was detected in indoor air samples at 702 & 708 Portland Avenue above the NYSDOH Ambient Air Guideline Value of 2.0 µg/m<sup>3</sup>. TCE was detected below the guideline at 714 Portland Avenue. Comparison of the SVI samples results to the NYSDOH Decision Matrices (updated May 2017)

indicated that the NYSDOH recommends mitigation at all three locations based on the concentration of TCE in the sub-slab and/or indoor air samples.

Based on the above, a completed SVI pathway is identified in the three houses. SSDS were recommended to mitigate SVI vapors from entering the residences at 702, 708, & 714 Portland Avenue.

Due to the presence of CVOCs in soil and groundwater at the Site, Mitigation Tech was retained by RE&LS to install SSDS at the three houses. Based on the Mitigation Tech preliminary evaluation, an Interim Remedial Measure Work Plan (IRMWP) dated July 15, 2014 was developed for the installation of the SSDS and approved by NYSDEC with modifications in a letter dated October 7, 2014.

An electronic copy of this CCR is included as Appendix A.

## **1.5 Interim Remedial Measures**

### **Remedial Action Objectives**

The remedial action objective (RAO) of this IRM was to mitigate indoor air levels of contaminants of concern (COCs) to concentrations below NYSDOH Ambient Air Guidelines. The guideline for TCE was previously set at 5 micrograms per meter cubed ( $\mu\text{g}/\text{m}^3$ ), and was lowered to 2  $\mu\text{g}/\text{m}^3$  in August 2015.

### **Remedial Action Implementation Compliance**

- Remedial activities were conducted in accordance with the RE&LS July 15, 2014 *Interim Remedial Measures Work Plan*.
- Samples were analyzed by CENTEK Laboratories, an accredited NYSDOH Environmental Laboratory Accreditation Program (ELAP) laboratory. The samples were analyzed under Analytical Services Protocol (ASP) Category B laboratory data deliverables. Data Usability Summary Reports were prepared by KR Applin & Associates and Environmental Data Usability (EDU) for independent data validation.

## **2. Description of Remedial Action**

### **2.1 SSDS Installation Description**

Sub-slab air communication testing was performed in advance of, and continuously during the construction process. The test procedure included drilling core borings into the concrete at likely suction cavity locations and using small diameter test holes to measure vacuum influence at some distance away. A number of defects in slab integrity that would require sealing were observed and sealed using joint sealant to prevent air leakage.

As an outcome of this assessment, Mitigation Tech installed three independent SSDS, each with two suction points consisting of excavated sub-slab cavities. Work began with an analysis of appropriate locations for fan, suction cavities and other SSDS components. Exterior riser pipes were placed at rear corners by direct drilling through the band joist; interior horizontal pipes were installed as high and out of the way as practicable in the basement.

The location of each riser exhaust was selected so that the effluent from the fans would be discharged at a minimum of ten feet from any air intakes, at least one foot above the surface of the roof, and at least ten feet from any opening that was less than two feet below the rooftop exhaust point. All components were inspected for condition and proper operation after installation.

The completed project consists of three independent SSDS operating independently. Each individual system consists of an exterior sidewall-mounted fan and two extraction points. The systems were constructed using principles and equipment typically used for radon mitigation in buildings as detailed in the United States Environmental Protection Agency (EPA) EPA 402-K-03-007 (May 2006), and the final NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006). Each SSDS was installed as a permanent, integral addition to the structure. The key components of the SSDS are described below and are depicted on as-built drawings provided in Appendix B.

- Suction Points: The suction points consists of a 5-inch core boring into the slab through which 1-2 cubic feet of sub-slab material has been removed. Mechanically suspended 3-inch Schedule 40 PVC pipe was installed into the boring and sealed with urethane sealant.
- Riser Piping: The riser piping consists of 3-inch schedule 40 PVC pipe that follows a route from the extraction point to a manifold, then through a sidewall penetration to an exterior-mounted vacuum fan. Weatherproof sealant was applied to all penetrations. Vent pipes were installed at a pitch that ensures that any rainwater or condensation within the pipes drains downward into the ground beneath the slab. Piping is independently supported, and is not supported from existing building mechanical systems. Piping is labeled at each level as “Sub-Slab Vent.”
- Exhaust Fans: Exhaust fans consist of RADONAWAY GP-501 centrifugal inline fans. The RADONAWAY GP-501 consumes approximately 150 watts of electricity and produces a static pressure differential of up to 4.0 water column inch (wci). Fans are powered from each main breaker panel in the basement of each building, also supplying power to the building occupants. No non-occupant power source is present within the buildings. The GP-501 is 120V single phase. For simplified maintenance, fans have an exterior disconnect switch with a flexible conduit drip loop. Fans are mounted with rubber Fernco couplings.

- Instrumentation and Control: There is no centralized instrumentation or control for the SSDS. Individual fans can be switched on or off from the adjacent switch. Each exhaust fan system is equipped with a “Radon Away” U-tube manometer gauge mounted in a visible location on the riser pipe as shown on the attached document titled “Sub-Slab Depressurization System.” The indicator consists of an oil filled U-tube style manometer. The indicator is inspected by observing the level of colored fluid. This indicator is designed primarily to give a simple visual check that vacuum is present in the riser pipe.
- Monitoring Points: Sub-slab vacuum test points for each system, consist of 3/4-inch drill points through the slab into which a digital micromanometer probe can be inserted. They are semi-permanently closed with closed cell backer rod and polyurethane sealant to aid in original system design and confirmatory testing.
- Sealing measures: Polyurethane sealants and concrete patch were applied to floor cracks, slab penetrations and other openings to enhance the barriers between sub-slab and ambient air, and improve the efficiency of the SSDS. Sealant was applied in the vicinity of suction points. Smoke testing was used to guide sealing operations.

System components are depicted on the As-Built drawings included in Appendix B. Photos of this work are included in Appendix C. Additional photos indicating that the systems are properly labeled will be provided after the next sampling event to be conducted in December 2021.

#### 2.1.1 RE&LS Oversight

RE&LS Environmental Scientist Lynn Zicari reports directly to the Professional Engineer (P.E.) of record, Nancy Van Dussen. Ms. Zicari’s sketches of the “as built” and accompanying field notes are included in Appendix H.

## 2.2 Post Installation Pressure Field Extension Testing

In order to verify system effectiveness and performance evaluation, Mitigation Tech established pressure field extension (PFE) points at various distances from the suction cavities to confirm the creation of a sub-slab pressure differential, suitable to determine that the sub-slab of the entire subject area was being depressurized. The objective of the SSDS is to create and maintain a minimum negative pressure differential of -0.004 wci below the concrete slabs.

Each PFE monitoring point consists of a 0.5-inch diameter hole drilled in the floor slab, through which a digital micro-manometer was utilized to measure the pressure differential between the indoor space and the sub-slab space. These PFE monitoring points were sealed with backer rod and/or caulk subsequent to their use.



As tabulated below, post-construction confirmatory testing indicates that sub-slab depressurization exceeds the objective of maintaining a -0.004 wci differential.

#### **Post-Construction Sub-Slab Depressurization Differentials**

| Location            | Test Point | Vacuum in (-wci) | Distance to Suction Point (feet) |
|---------------------|------------|------------------|----------------------------------|
| 702 Portland Avenue | 1          | 0.082            | 10                               |
|                     | 2          | 0.007            | 15                               |
| 708 Portland Avenue | 1          | 0.064            | 10                               |
|                     | 2          | 0.079            | 10                               |
| 714 Portland Avenue | 1          | 0.071            | 10                               |
|                     | 2          | 0.040            | 15                               |

### **2.3 Remedial Performance Sampling**

Post-mitigation indoor air sampling was conducted on November 30, 2015 at the three residences. Indoor air monitoring was also conducted in 2018, 2019 at the three houses, and at 702 and 708 Portland Avenue in February 2020. Sampling was not conducted at 714 Portland Avenue in 2020, which has a new owner who has not responded to our requests for access.

One indoor air sample was collected in the basement of each of the residences sampled, and one co-located ambient air sample was collected during each of the sampling events. Samples were collected utilizing laboratory-certified clean 1-litre summa canisters equipped with 24-hour calibrated flow controllers and submitted to Centek for analysis of targeted VOCs by USEPA Method TO-15 with a minimum detection limit of 1  $\mu\text{g}/\text{m}^3$  with 0.25  $\mu\text{g}/\text{m}^3$  for TCE and vinyl chloride, respectively. A product inventory was completed prior to sampling. Product inventory field forms are provided in Appendix I.

The laboratory results, summarized in Table 1, indicate that the compounds detected do not exceed the NYSDOH Ambient Air Guidelines Values. The laboratory analytical reports are provided in Appendix D. Tenant notification letters, which include the laboratory results and the NYSDOH Fact Sheets for PERC and TCE in Indoor and Outdoor Air, were sent to property owners, property occupants, and the property management company, as listed at the end of this document.

### **2.4 Data Usability Summary Reports**

Laboratory analyses were conducted in conformance with NYS Department of Health (DOH) Analytical Services Protocol (ASP) methodology with Category B deliverables. The data was submitted for third party Data Usability Summary Report (DUSR) analysis by Dr. Kenneth Applin and Environmental Data Usability (EDU) for independent data validation.

The DUSRs are included as Appendix E and are summarized below:

### **SDG C1512012**

Post-Mitigation Confirmatory Indoor Air Samples AS-702, AS-708, AS-714

- Results for all undiluted samples, 1,2,4-trichlorobenzene and MEK are flagged with a “J” (detects) or a “UJ” (non-detects)
- Results for all undiluted samples, 1,4-dioxane, MBK, and MIK are flagged with a “J” (detects) or “R” (non-detects)
- Results for all undiluted samples, MBK is flagged with a “J” (detects) or a “UJ” (non-detects)
- Twelve undetected results for 1,4-dioxane, MBK, and MIK were rejected, all other results are considered usable.

### **SDG C1804026**

2018 Indoor Air Samples IA-702-20180413, IA-708-20180413, IA-714-20180413

- Detections of 1,2,4-trichlorobenzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, and hexachlorobutadiene were flagged with a “J” in all samples
- Isopropyl alcohol was flagged with a “JN” in all samples
- All results are considered usable

### **SDG C1904041**

2019 Indoor Air Samples 702-20190410, 708-20190410, 714-20190410

- 1,4-Dioxane, MBK, and MIBK were flagged with a “J” (detects) or “UJ” (non-detects)
- Isopropyl Alcohol detections were flagged with a “JN” in all samples
- All results are considered usable

### **SDG C2002057**

2020 Indoor Air Samples IA702-20200226, IA708-20200226

- Acetone was flagged with a “J” (detects) or a “UJ” (non-detects)
- Isopropyl Alcohol detections were flagged with a “JN” in all samples
- 1,2,4-trichlorobenzene and vinyl acetate were flagged with a “J” (detects) or “UJ” (non-detects) in all samples
- All results are considered usable

## **2.5 Deviations from the Work Plan**

Due to initial issues with obtaining an access agreement with the 714 Portland Avenue property owner, the IRMWP outlined work to be completed at 702 and 708 Portland Avenue only. An access agreement was subsequently obtained, and work was completed at 714 Portland Avenue in conformance with the IRMWP.

## **2.6 Governing Documents**

### **IRM Work Plan**

The IRM was conducted in accordance with the RE&LS IRMWP dated July 15, 2014. The IRMWP and Agency approvals are include in Appendix F.

## **2.7 Remedial Program Elements**

### **General Site Controls**

Occupational Safety and Health Administration (OSHA) Hazwoper-trained personnel performed drilling operations, and on-site personnel utilized Level 4 personal protective equipment (PPE).

Concrete floor slab material and sub-slab material removed during construction of the SSDS depressurization points were containerized on site for subsequent waste characterization and appropriate disposal by Mitigation Tech. The houses were occupied during construction of the SSDS.

### **Nuisance Controls**

During installation of the suction points, sub-slab drilling activities were monitored with a photoionizing detector (PID) for releases of VOCs. PID readings ranged from 0.7 parts per million (ppm) to 2.9 ppm above background levels in each of the three houses. Contractors were diligent in their housekeeping and cleanup of the work areas.

### **Health and Safety Plan**

The RE&LS site-specific HASP was updated to reflect the nature of the field work to be performed under the IRMWP. The Contaminants of Concern (COC) for the Site are VOCs, primarily TCE, cis-1,2-dichloroethene, trans-1, 2-dichloroethene, vinyl chloride, and heavier hydrocarbons in the form of medium weight petroleum hydrocarbons.

## **Operation, Maintenance and Monitoring of the SSDS**

The SSDS installed within the off-site residential properties will remain operational until the BCP Volunteer produces data to demonstrate the contamination causing the vapor intrusion issues have been remediated, and the NYSDEC and the NYSDOH grant approval for the shutdown of the systems. Shutdown or elimination of an engineering control must be completed in accordance with Department of Environmental Remediation (DER)-10 and NYSDOH soil vapor intrusion guidance.

The Operations, Maintenance, and Monitoring (OM&M) Plan includes a description of the system, its basic operating principals, and recommendations for routine inspections and monitoring (Appendix G).

Mitigation Tech's *Vapor Intrusion Mitigation System "Operating and Maintenance instructions"* was sent by registered mail to:

Kaylor Properties, Inc.  
361 Shore Acres Drive  
Rochester, New York 14612

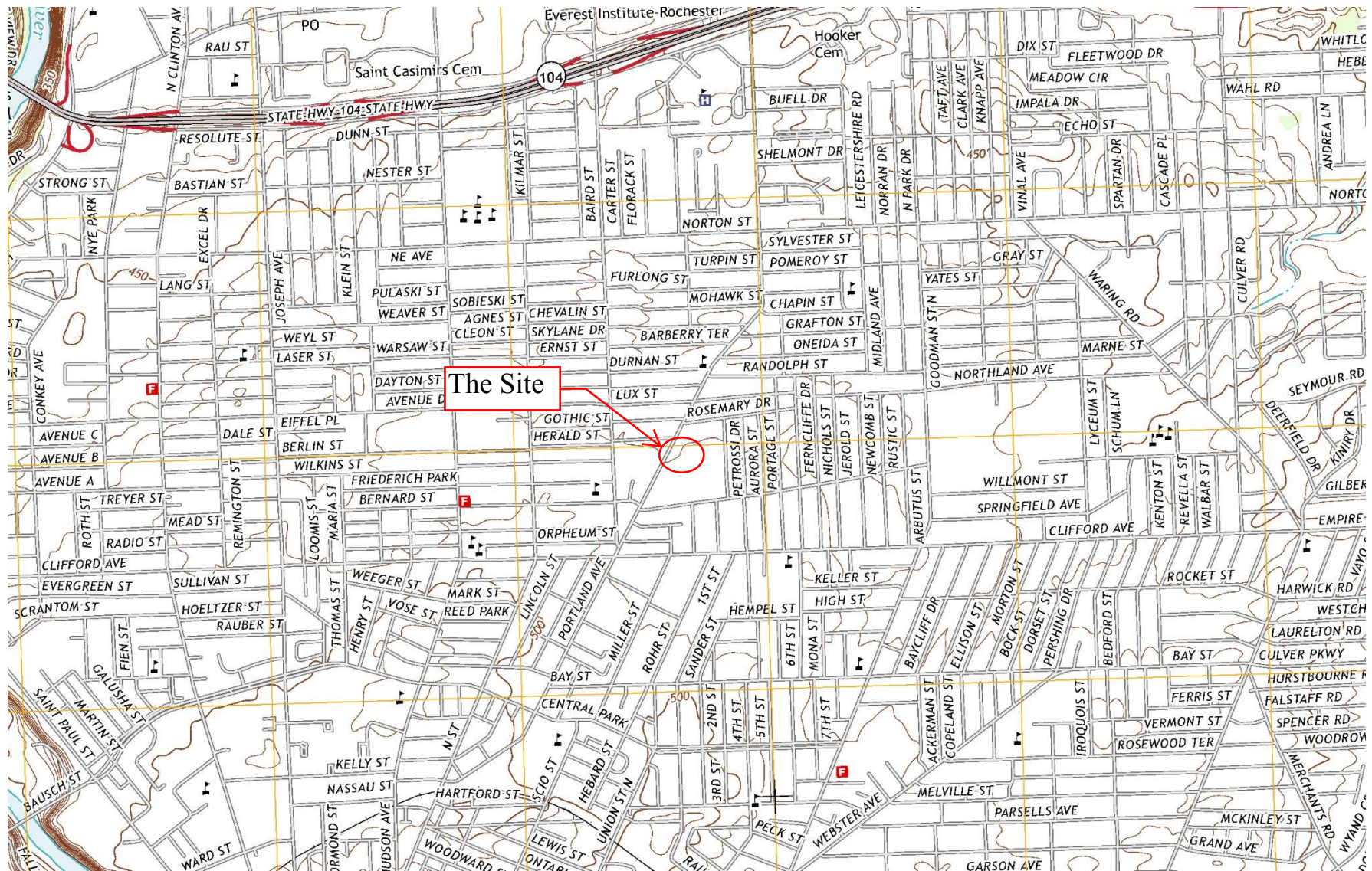
Beth Short  
Gallagher Property Management  
1504 Scottsville Road, Ste. 102  
Rochester, New York 14623

Occupant  
702 Portland Avenue  
Rochester, New York 14621

Occupant  
708 Portland Avenue  
Rochester, New York 14621

Occupant  
714 Portland Avenue  
Rochester, New York 14621





MAP SOURCE:  
USGS 2013 7.5 Quadrangle Map

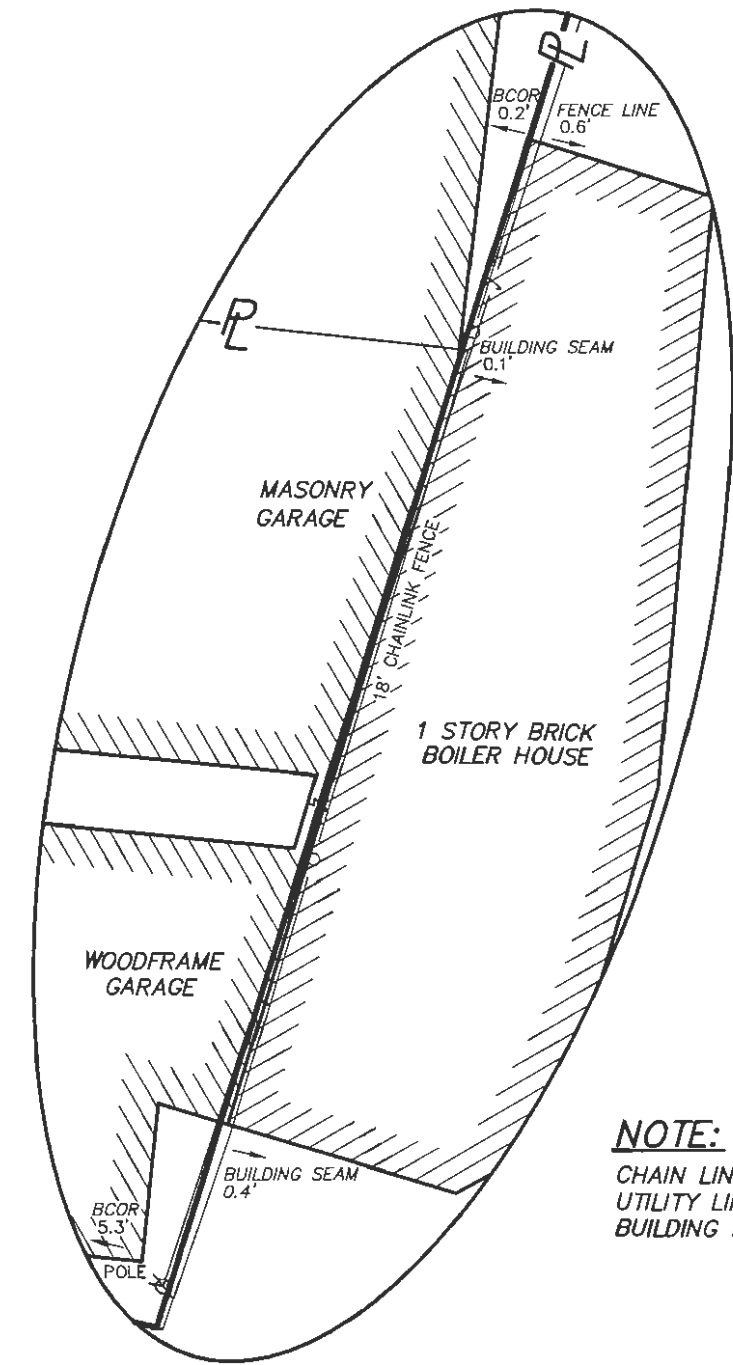
**RAVI ENGINEERING  
& LAND SURVEYING, P.C.**  
2110 S. CLINTON AVENUE, SUITE 1  
ROCHESTER, NEW YORK 14618  
TL: (585) 223-3660 FX (585) 223-4250

Former JML Optical BCP #C828151  
690 Portland Avenue  
Rochester, NY 14621

**FIGURE 1- SITE LOCATION MAP**

|                                    |                                |
|------------------------------------|--------------------------------|
| PROJECT NO.<br><b>45-14-003-0B</b> | DATE:<br><b>January 2017</b>   |
| SCALE:<br><b>NTS</b>               | DRAWING NO:<br><b>Figure 1</b> |





NOTE:  
CHAIN LINK FENCE AND  
UTILITY LINES RUN OVER  
BUILDING ROOF.

I HEREBY CERTIFY TO THE PARTIES LISTED HEREON  
THAT THIS MAP WAS COMPLETED ON 25 JANUARY, 2011 USING  
LISTED REFERENCES AND FIELD NOTES FROM AN ACTUAL  
FIELD INSTRUMENT SURVEY PERFORMED ON OCTOBER 28, 2010

William S. Lucarelli 01/25/11  
WILLIAM S. LUCARELLI NYSPLS. #049477 DATE

[illegible]

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|                                                                                                                                                                                                                                                                                                    |                               |                            |                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|----------------------------|------------------------------|
| <p>  </p> <p> <b>Powers Building, 16 West Main Street, Suite B30</b><br/> <b>Rochester, NY 14614-1807</b><br/> <b>Mail: (585) 232-5260    <a href="http://www.chacompany.com">www.chacompany.com</a></b> </p> | <p> <b>Designed: N/A</b> </p> | <p> <b>Drawn: MLM</b> </p> | <p> <b>Checked: DLS</b> </p> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|----------------------------|------------------------------|

**BOUNDARY SURVEY**  
SHOWING PROPERTY NOW OR FORMERLY OF  
**C.O.M.I.D.A.**  
PERFORMED FOR  
**JML OPTICAL INDUSTRIES, INC.**

BEING PART OF TOWN LOT No. 48, TOWNSHIP 14, RANGE 7  
OF THE PHELPS AND GORHAM PURCHASE  
*City of Rochester ~ Monroe County ~ State of New York*

Issue Date: 01/25/2011      Project No: 17781      Scale: 1" = 30'

**SU-1**  
SHEET 1 OF 1



Table 1  
SSDS Confirmatory Indoor Air Samples  
Construction Completion Report - Vapor Mitigation Systems  
Former JML Optical, Inc. Site #C828151  
Rochester, New York

| Analyte                | Sample Location<br>Sample ID<br>Sample Date<br>NYSDOH Ambient Air<br>Guideline (mcg/m3) | 702 Portland Avenue |              |               |               | 708 Portland Avenue |               |               |               | 714 Portland Avenue |               |               |
|------------------------|-----------------------------------------------------------------------------------------|---------------------|--------------|---------------|---------------|---------------------|---------------|---------------|---------------|---------------------|---------------|---------------|
|                        |                                                                                         | AS-702              | IA-702-      | 702-          | IA702-        | AS-708              | IA-708-       | 708-          | IA708-        | AS-714              | IA-714-       | 714-          |
|                        |                                                                                         | 11/30/2015          | 20180413     | 20190410      | 20200226      | 11/30/2015          | 20180413      | 20190410      | 20200226      | 11/30/2015          | 20180413      | 20190410      |
| 1,1,1-Trichloroethane* | NS                                                                                      | <0.82               | <0.82        | <0.82         | <0.82         | <0.82               | <0.82         | <0.82         | <0.82         | <0.82               | <0.82         | <0.82         |
| 1,1-DCE*               | NS                                                                                      | <0.59               | <0.16        | <0.16         | <0.16         | <0.59               | <0.16         | <0.16         | <0.16         | <0.59               | <0.16         | <0.16         |
| Carbon tetrachloride*  | NS                                                                                      | <b>0.57</b>         | <0.19        | <b>0.50</b>   | <b>0.44</b>   | <b>0.57</b>         | <b>0.63</b>   | <b>0.50</b>   | <b>0.44</b>   | <b>0.57</b>         | <b>0.63</b>   | <b>0.57</b>   |
| cis-1,2-DCE*           | NS                                                                                      | <0.59               | <0.16        | <0.16         | <0.16         | <0.59               | <0.16         | <0.16         | <0.16         | <0.59               | <0.16         | <0.16         |
| Methylene chloride*    | 60                                                                                      | <b>0.49 J</b>       | <0.52        | <b>1.9</b>    | <b>0.45 J</b> | <b>0.56</b>         | <b>2.7</b>    | <b>0.94</b>   | <b>0.49 J</b> | <b>0.52</b>         | <b>4.3</b>    | <b>0.83</b>   |
| Tetrachloroethene*     | 30                                                                                      | <1.0                | <1.0         | <1.0          | <1.0          | <1.0                | <1.0          | <1.0          | <1.0          | <1.0                | <1.0          | <1.0          |
| Trichloroethene*       | 2                                                                                       | <0.21               | <0.16        | <0.16         | <0.16         | <0.21               | <b>0.27</b>   | <0.16         | <0.16         | <0.21               | <0.16         | <0.16         |
| Vinyl chloride*        | NS                                                                                      | <0.10               | <0.10        | <0.10         | <0.10         | <0.10               | <0.10         | <0.10         | <0.10         | <0.10               | <0.10         | <0.10         |
| 1,2,4-Trimethylbenzene | NS                                                                                      | <b>0.54 J</b>       | <b>33</b>    | <b>0.64 J</b> | <0.74         | <b>0.84</b>         | <b>1.1</b>    | <0.74         | <0.74         | <b>2.9</b>          | <0.74         | <b>0.54 J</b> |
| 1,3,5-Trimethylbenzene | NS                                                                                      | <0.74               | <b>12</b>    | <0.74         | <0.74         | <0.74               | <b>0.74</b>   | <0.74         | <0.74         | <b>0.93</b>         | <0.74         | <0.74         |
| 1,4-Dioxane            | NS                                                                                      | <1.1 R              | <1.1         | <1.1 UJ       | <1.1          | <1.1 R              | <1.1          | <1.1 UJ       | <1.1          | <1.1 R              | <1.1          | <1.1 UJ       |
| 2,2,4-trimethylpentane | NS                                                                                      | <0.70               | <b>130</b>   | <0.70         | <0.70         | <0.70               | <b>0.51 J</b> | <0.70         | <0.70         | <b>1.6</b>          | <0.70         | <0.70         |
| 4-ethyltoluene         | NS                                                                                      | <0.74               | <b>13</b>    | <0.74         | <0.74         | <0.74               | <0.74         | <0.74         | <0.74         | <0.74               | <0.74         | <0.74         |
| Acetone                | NS                                                                                      | <b>18</b>           | <b>17</b>    | <b>27</b>     | <b>21</b>     | <b>20</b>           | <b>27</b>     | <b>19</b>     | <b>7.8 J</b>  | <b>12</b>           | <b>64</b>     | <b>22</b>     |
| Benzene                | NS                                                                                      | <b>0.96</b>         | <b>65</b>    | <b>1.1</b>    | <b>1.1</b>    | <b>0.93</b>         | <b>0.96</b>   | <b>0.61</b>   | <b>0.57</b>   | <b>0.96</b>         | <b>0.70</b>   | <b>0.64</b>   |
| Carbon disulfide       | NS                                                                                      | <b>0.40 J</b>       | <0.47        | <0.47         | <0.47         | <0.47               | <0.41         | <0.47         | <0.47         | <0.47               | <0.47         | <0.47         |
| Chloroform             | NS                                                                                      | <b>0.73</b>         | <b>21</b>    | <b>1.5</b>    | <b>1.5</b>    | <b>0.63 J</b>       | <b>0.68 J</b> | <b>0.54 J</b> | <0.73         | <b>4.2</b>          | <b>0.83</b>   | <b>0.73</b>   |
| Chloromethane          | NS                                                                                      | <0.31               | <b>1.1</b>   | <b>0.97</b>   | <b>1.1</b>    | <b>1.1</b>          | <b>0.99</b>   | <b>0.87</b>   | <b>1.1</b>    | <b>1.1</b>          | <b>1.1</b>    | <b>0.91</b>   |
| Cyclohexane            | NS                                                                                      | <0.52               | <b>51</b>    | <b>1.8</b>    | <b>0.86</b>   | <0.52               | <0.52         | <b>2.3</b>    | <b>0.79</b>   | <0.52               | <0.52         | <b>2.1</b>    |
| Ethyl acetate          | NS                                                                                      | <0.90               | <0.54        | <b>1.5</b>    | <b>1.7</b>    | <b>0.47 J</b>       | <b>1.8</b>    | <b>1.2</b>    | <0.54         | <0.90               | <b>1.4</b>    | <b>1.5</b>    |
| Ethylbenzene           | NS                                                                                      | <0.65               | <b>59</b>    | <b>0.65</b>   | <b>0.52 J</b> | <b>0.43 J</b>       | <b>0.61 J</b> | <0.65         | <0.65         | <b>0.65</b>         | <b>0.52 J</b> | <0.65         |
| Freon 11               | NS                                                                                      | <b>1.5</b>          | <b>13</b>    | <b>1.3</b>    | <b>1.1</b>    | <b>1.6</b>          | <b>1.3</b>    | <b>1.3</b>    | <b>1.2</b>    | <b>1.6</b>          | <b>1.3</b>    | <b>1.5</b>    |
| Freon 12               | NS                                                                                      | <b>2.9</b>          | <b>2.2</b>   | <b>2.4</b>    | <b>2.4</b>    | <b>2.9</b>          | <b>2.4</b>    | <b>2.4</b>    | <b>2.5</b>    | <b>2.8</b>          | <b>2.5</b>    | <b>2.6</b>    |
| Freon 113              | NS                                                                                      | <1.1                | <1.1         | <1.1          | <1.1          | <1.1                | <1.1          | <1.1          | <1.1          | <1.1                | <1.1          | <b>0.84 J</b> |
| Heptane                | NS                                                                                      | <0.61               | <b>85</b>    | <b>0.86</b>   | <b>0.78</b>   | <0.61               | <b>1.6</b>    | <0.61         | <0.61         | <b>1.2</b>          | <b>0.9</b>    | <0.61         |
| Hexane                 | NS                                                                                      | <0.53               | <b>120</b>   | <b>1.3</b>    | <b>1.0</b>    | <b>0.85</b>         | <b>0.63</b>   | <b>0.39 J</b> | <0.53         | <b>0.85</b>         | <b>0.49 J</b> | <b>0.49 J</b> |
| Isopropyl alcohol      | NS                                                                                      | <b>16</b>           | <b>32 JN</b> | <b>27 JN</b>  | <b>1.9 JN</b> | <b>5.4</b>          | <b>2.7 JN</b> | <b>4.1 JN</b> | <b>1.5 JN</b> | <b>3.6</b>          | <b>13 JN</b>  | <b>4.7 JN</b> |
| m&p-Xylene             | NS                                                                                      | <b>1.0 J</b>        | <b>180</b>   | <b>2.3</b>    | <b>1.5</b>    | <b>1.3 J</b>        | <b>2.1</b>    | <b>0.69 J</b> | <1.3          | <b>2.2</b>          | <b>1.5</b>    | <b>0.87 J</b> |
| Methyl Butyl Ketone    | NS                                                                                      | <1.2 R              | <1.2         | <1.2 UJ       | <b>0.82 J</b> | <1.2 R              | <1.2          | <1.2 UJ       | <1.2          | <1.2 R              | <1.2          | <1.2 UJ       |
| Methyl Ethyl Ketone    | NS                                                                                      | <b>3.4 J</b>        | <b>4.4</b>   | <b>1.1</b>    | <b>6.5 J</b>  | <b>1.9 J</b>        | <b>2.1</b>    | <b>1.1</b>    | <b>0.71 J</b> | <b>1.2 J</b>        | <b>1.3</b>    | <b>1.2</b>    |
| Methyl Isobutyl Ketone | NS                                                                                      | <1.2 R              | <1.2         | <1.2 UJ       | <1.2          | <1.2 R              | <1.2          | <1.2 UJ       | <1.2          | <b>0.49 R</b>       | <1.2          | <1.2 UJ       |
| o-Xylene               | NS                                                                                      | <0.65               | <b>73</b>    | <b>0.87</b>   | <b>0.56 J</b> | <0.65               | <b>0.91</b>   | <0.65         | <0.65         | <b>0.82</b>         | <b>0.65</b>   | <0.65         |
| Styrene                | NS                                                                                      | <0.64               | <b>3.0</b>   | <b>3.6</b>    | <b>0.98</b>   | <0.64               | <0.64         | <0.64         | <0.64         | <0.64               | <0.64         | <0.64         |
| Tetrahydrofuran        | NS                                                                                      | <b>0.91</b>         | <0.44        | <0.44         | <b>5.3</b>    | <0.44               | <0.44         | <0.44         | <0.44         | <0.44               | <0.44         | <0.44         |
| Toluene                | NS                                                                                      | <b>1.9</b>          | <b>350</b>   | <b>5.9</b>    | <b>5.2</b>    | <b>3.3</b>          | <b>2.3</b>    | <b>1.6</b>    | <b>0.79</b>   | <b>3.0</b>          | <b>1.5</b>    | <b>1.7</b>    |

Bold value indicates a detection of the associated analyte

J=value is estimated

NS= no ambient standard for the associated analyte

\*Indicates that the analyte is a NYSDOH decision matrix compound

JN = Non-routine analyte, Quantitation estimated.

Table 1  
SSDS Confirmatory Indoor Air Samples  
Construction Completion Report - Vapor Mitigation Systems  
Former JML Optical, Inc. Site #C828151  
Rochester, New York

| Analyte                | Sample Location                       | Outdoor Air   |               |               |               |
|------------------------|---------------------------------------|---------------|---------------|---------------|---------------|
|                        | Sample ID                             | AS-OUT        | OA-           | OA-           | OA1-          |
|                        | Sample Date                           | 11/30/2015    | 20180413      | 20190410      | 20200226      |
|                        | NYSDOH Ambient Air Guideline (mcg/m3) |               |               |               |               |
| 1,1,1-Trichloroethane* | NS                                    | <0.82         | <0.82         | <0.82         | <0.82         |
| 1,1-DCE*               | NS                                    | <0.59         | <0.16         | <0.16         | <0.16         |
| Carbon tetrachloride*  | NS                                    | <b>0.57</b>   | <b>0.69</b>   | <b>0.50</b>   | <b>0.5</b>    |
| cis-1,2-DCE*           | NS                                    | <0.59         | <0.16         | <0.16         | <0.16         |
| Methylene chloride*    | 60                                    | <b>0.38 J</b> | <b>2.8</b>    | <b>0.80</b>   | <b>0.42 J</b> |
| Tetrachloroethene*     | 30                                    | <1.0          | <1.0          | <1.0          | <1.0          |
| Trichloroethene*       | 2                                     | <0.21         | <b>0.43</b>   | <0.16         | <0.16         |
| Vinyl chloride*        | NS                                    | <0.10         | <0.10         | <0.10         | <0.10         |
| 1,2,4-Trimethylbenzene | NS                                    | <0.74         | <0.74         | <0.74         | <0.74         |
| 1,3,5-Trimethylbenzene | NS                                    | <0.74         | <0.74         | <0.74         | <0.74         |
| 1,4-Dioxane            | NS                                    | <1.1 R        | <1.1          | <1.1 UJ       | <1.1          |
| 2,2,4-trimethylpentane | NS                                    | <0.70         | <0.70         | <0.70         | <0.70         |
| 4-ethyltoluene         | NS                                    | <0.74         | <0.74         | <0.74         | <0.74         |
| Acetone                | NS                                    | <b>11</b>     | <b>15</b>     | <b>17</b>     | <b>8.1 J</b>  |
| Benzene                | NS                                    | <b>0.73</b>   | <b>0.70</b>   | <b>0.45 J</b> | <b>0.54</b>   |
| Carbon disulfide       | NS                                    | <0.47         | <0.47         | <0.47         | <0.47         |
| Chloroform             | NS                                    | <0.73         | <0.73         | <0.73         | <0.73         |
| Chloromethane          | NS                                    | <b>0.97</b>   | <b>0.81</b>   | <b>1.0</b>    | <b>0.97</b>   |
| Cyclohexane            | NS                                    | <0.52         | <0.52         | <b>0.89</b>   | <b>0.38 J</b> |
| Ethyl acetate          | NS                                    | <0.90         | <0.54         | <0.54         | <0.54         |
| Ethylbenzene           | NS                                    | <0.65         | <0.65         | <0.65         | <0.65         |
| Freon 11               | NS                                    | <b>1.6</b>    | <b>1.4</b>    | <b>1.4</b>    | <b>1.2</b>    |
| Freon 12               | NS                                    | <b>2.9</b>    | <b>2.5</b>    | <b>2.6</b>    | <b>2.5</b>    |
| Freon 113              | NS                                    | <1.1          | <1.1          | <1.1          | <1.1          |
| Heptane                | NS                                    | <0.61         | <b>0.45 J</b> | <0.61         | <0.61         |
| Hexane                 | NS                                    | <b>0.56</b>   | <b>0.53</b>   | <0.53         | <0.53         |
| Isopropyl alcohol      | NS                                    | <b>2.8</b>    | <b>2.9 JN</b> | <b>1.7 JN</b> | <b>2.1 JN</b> |
| m&p-Xylene             | NS                                    | <b>0.82 J</b> | <b>0.82 J</b> | <b>0.48 J</b> | <1.3          |
| Methyl Butyl Ketone    | NS                                    | <1.2 R        | <1.2          | <1.2 UJ       | <1.2          |
| Methyl Ethyl Ketone    | NS                                    | <b>0.88 J</b> | <b>0.94</b>   | <b>0.80 J</b> | <b>0.62 J</b> |
| Methyl Isobutyl Ketone | NS                                    | <b>0.41 R</b> | <1.2          | <1.2 UJ       | <1.2          |
| o-Xylene               | NS                                    | <0.65         | <0.65         | <0.65         | <0.65         |
| Styrene                | NS                                    | <0.64         | <0.64         | <0.64         | <0.64         |
| Tetrahydrofuran        | NS                                    | <0.44         | <0.44         | <0.44         | <0.44         |
| Toluene                | NS                                    | <b>2.1</b>    | <b>1.2</b>    | <b>0.87</b>   | <b>0.79</b>   |

Bold value indicates a detection of the associated analyte  
J=value is estimated  
NS= no ambient standard for the associated analyte  
\*Indicates that the analyte is a NYSDOH decision matrix  
JN = Non-routine analyte, Quantitation estimated.

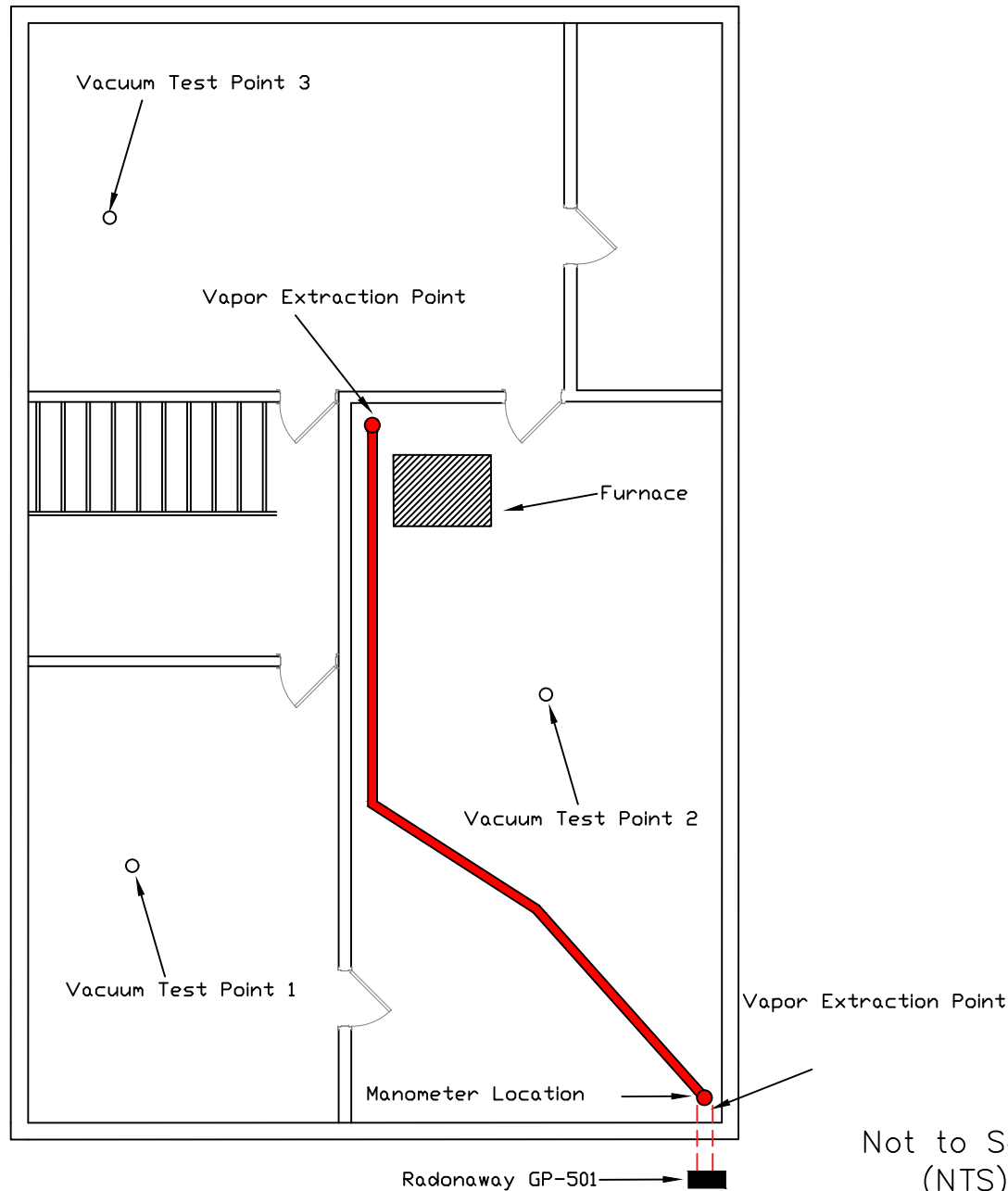


# **APPENDIX A**

## **CONSTRUCTION COMPLETION REPORT (ON CD)**

## **APPENDIX B**

# **AS-BUILT DRAWINGS**

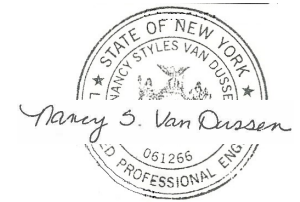


Not to Scale  
(NTS)

**RAVI ENGINEERING  
& LAND SURVEYING, P.C.**  
2110 SOUTH CLINTON AVENUE, SUITE 1  
ROCHESTER, NEW YORK 14618  
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FX: (585) 697-1764

**BROWNFIELD CLEANUP PROGRAM #C828151**

**FORMER JML OPTICAL, INC.**  
690 PORTLAND AVENUE  
ROCHESTER, NEW YORK 14621



It is a violation of New York Education Law Article 145 Sec. 7209, for any person, unless he is acting under the direction of a licensed professional engineer or land surveyor, to alter an item in any way. If an item bearing the seal of an engineer or land surveyor is altered, the altering engineer or land surveyor shall affix to the item his seal and notation "altered by" followed by his signature and the date of such alteration, and a specific description of the alteration.

REVISIONS:  
NO. DATE

100% CONSTRUCTION DOCUMENTS

DRAWING TITLE:

**CONSTRUCTION COMPLETION  
REPORT: SUB-SLAB DEPRESSURIZED  
SYSTEM AS-BUILT FOR 702 PORTLAND  
AVENUE**

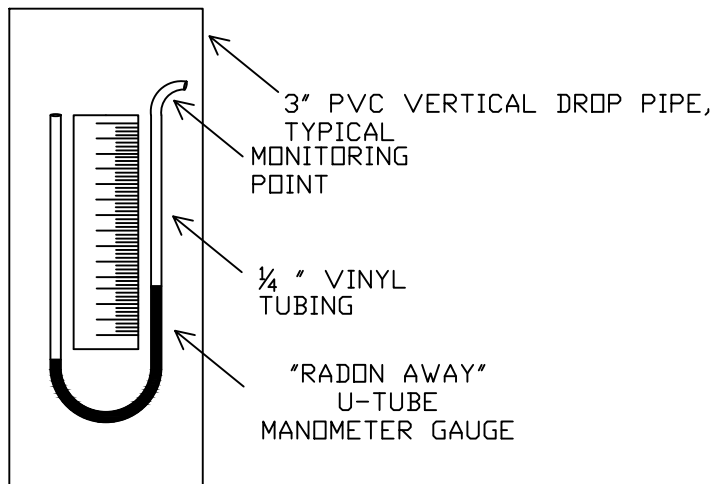
DRAWN BY: OH

CHECKED BY: LZ

DATE: 2/26/21

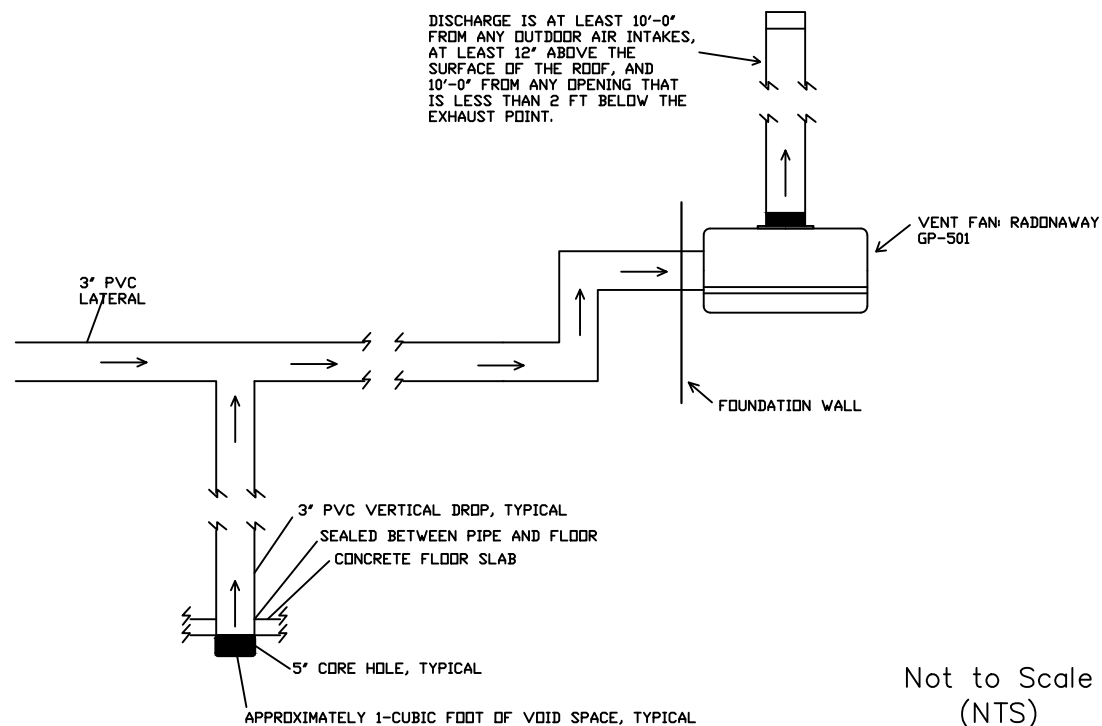
DRAWING NO.

**1A**



## DETAIL 1

U-TUBE MANOMETER GAUGE DETAIL

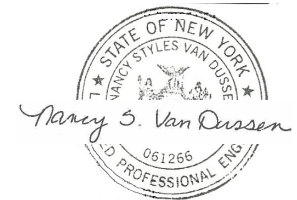


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REVISIONS:  
NO. DATE

100% CONSTRUCTION DOCUMENTS

DRAWING TITLE:

**CONSTRUCTION COMPLETION  
REPORT: SUB-SLAB DEPRESSURIZED  
SYSTEM AS-BUILT FOR 702 PORTLAND  
AVENUE**

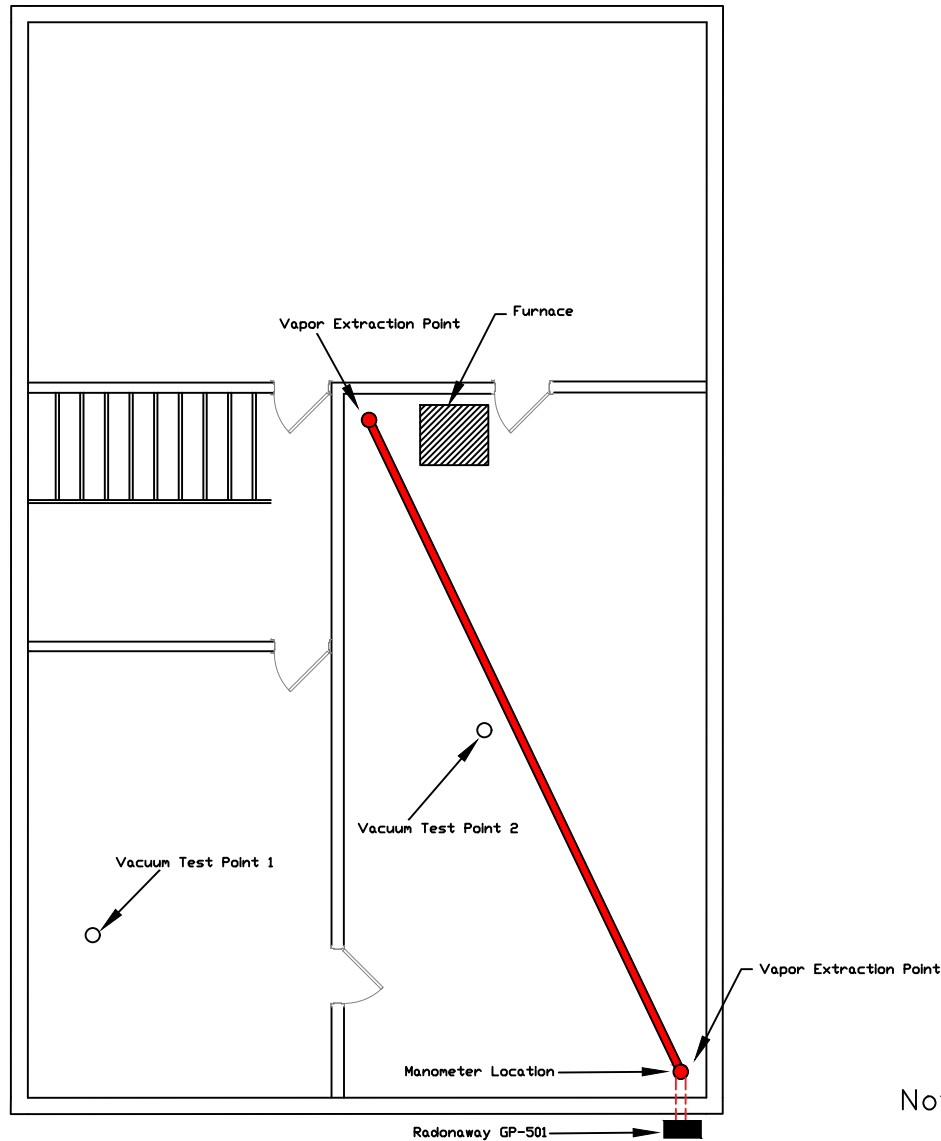
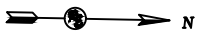
DRAWN BY: OH

CHECKED BY: LZ

DATE: 2/26/21

DRAWING NO.

**1B**

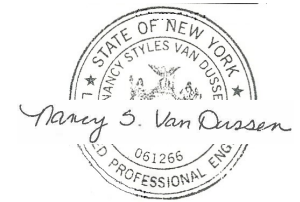


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690 PORTLAND AVENUE  
ROCHESTER, NEW YORK 14621



It is a violation of New York Education Law Article 145 Sec. 7209, for any person, unless he is acting under the direction of a licensed professional engineer or land surveyor, to alter an item in any way. If an item bearing the seal of an engineer or land surveyor is altered, the altering engineer or land surveyor shall affix to the item his seal and notation "altered by" followed by his signature and the date of such alteration, and a specific description of the alteration.

| REVISIONS: |      |
|------------|------|
| NO.        | DATE |
|            |      |
|            |      |
|            |      |

100% CONSTRUCTION DOCUMENTS

DRAWING TITLE:

**CONSTRUCTION COMPLETION  
REPORT: SUB-SLAB DEPRESSURIZED  
SYSTEM AS-BUILT FOR 708 PORTLAND  
AVENUE**

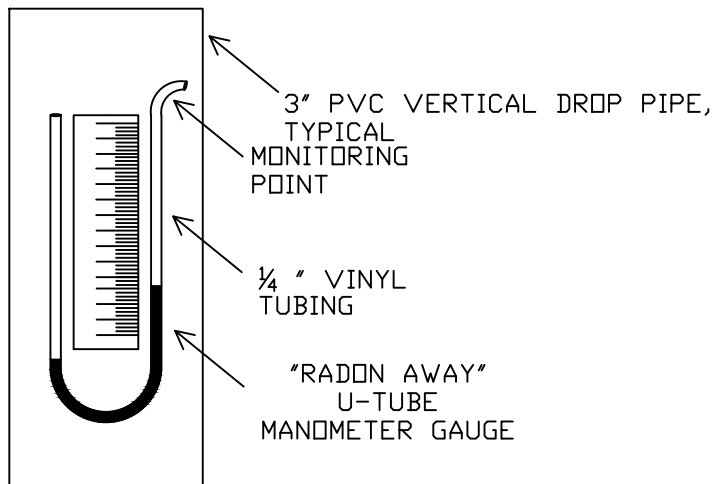
DRAWN BY: OH

CHECKED BY: LZ

DATE: 2/26/21

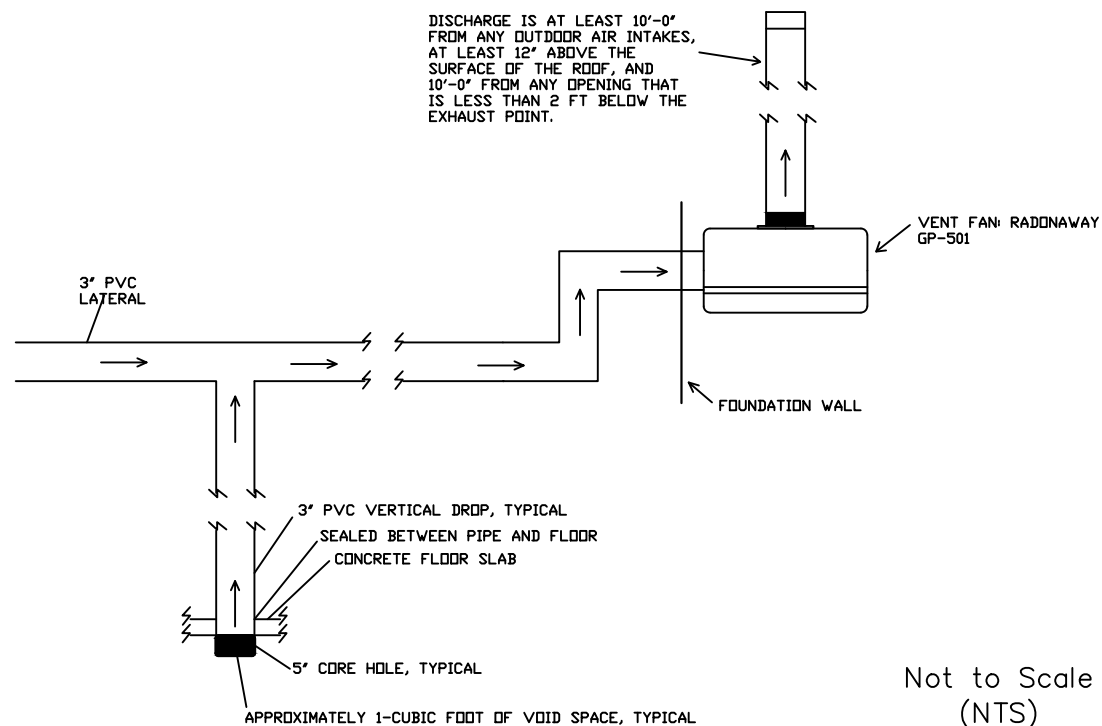
DRAWING NO.

**2A**



DETAIL 1

U-TUBE MANOMETER GAUGE DETAIL

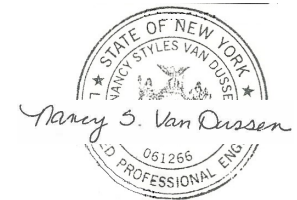


Not to Scale  
(NTS)

**RAVI ENGINEERING  
& LAND SURVEYING, P.C.**  
2110 SOUTH CLINTON AVENUE, SUITE 1  
ROCHESTER, NEW YORK 14618  
TL: (585) 223-3660  
FX: (585) 697-1764

**BROWNFIELD CLEANUP PROGRAM #C828151**

**FORMER JML OPTICAL, INC.**  
690 PORTLAND AVENUE  
ROCHESTER, NEW YORK 14621



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REVISIONS:  
NO. DATE

100% CONSTRUCTION DOCUMENTS

DRAWING TITLE:

**CONSTRUCTION COMPLETION  
REPORT: SUB-SLAB DEPRESSURIZED  
SYSTEM AS-BUILT FOR 708 PORTLAND  
AVENUE**

DRAWN BY: OH

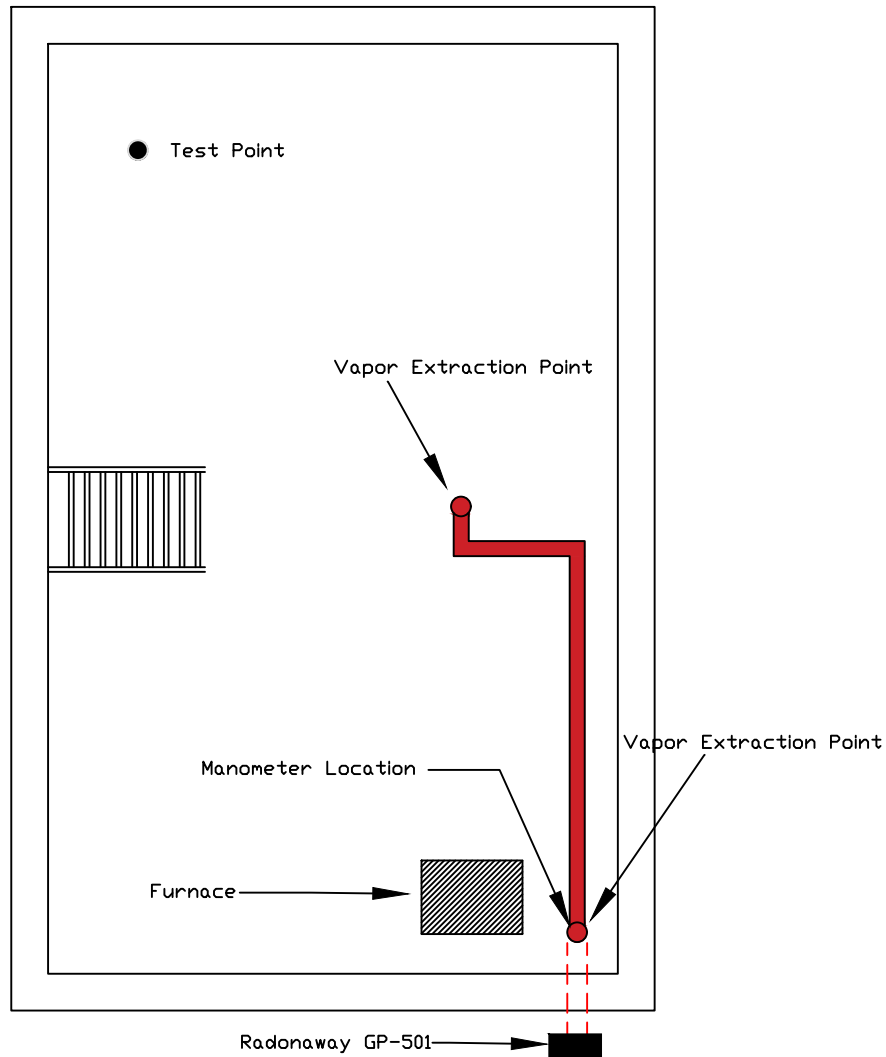
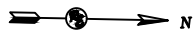
CHECKED BY: LZ

DATE: 2/26/21

DRAWING NO.

**2B**



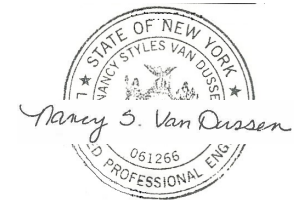


Not to Scale  
(NTS)

**RAVI ENGINEERING  
& LAND SURVEYING, P.C.**  
2110 SOUTH CLINTON AVENUE, SUITE 1  
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REVISIONS:  
NO. DATE

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100% CONSTRUCTION DOCUMENTS

DRAWING TITLE:

**CONSTRUCTION COMPLETION  
REPORT: SUB-SLAB DEPRESSURIZED  
SYSTEM AS-BUILT FOR 714 PORTLAND  
AVENUE**

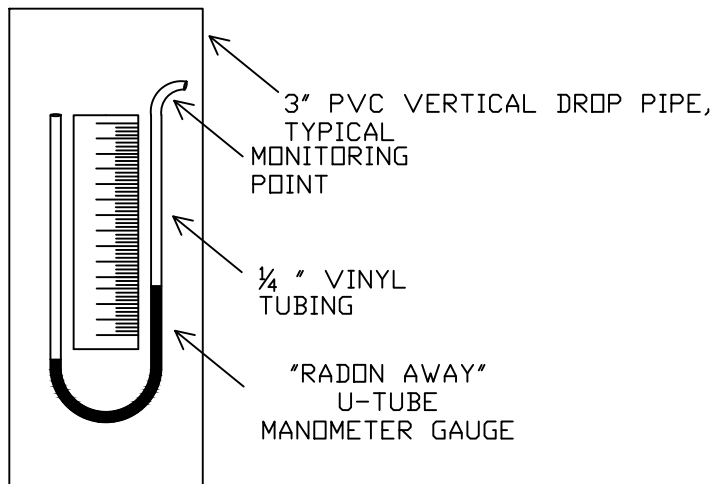
DRAWN BY: OH

CHECKED BY: LZ

DATE: 2/26/21

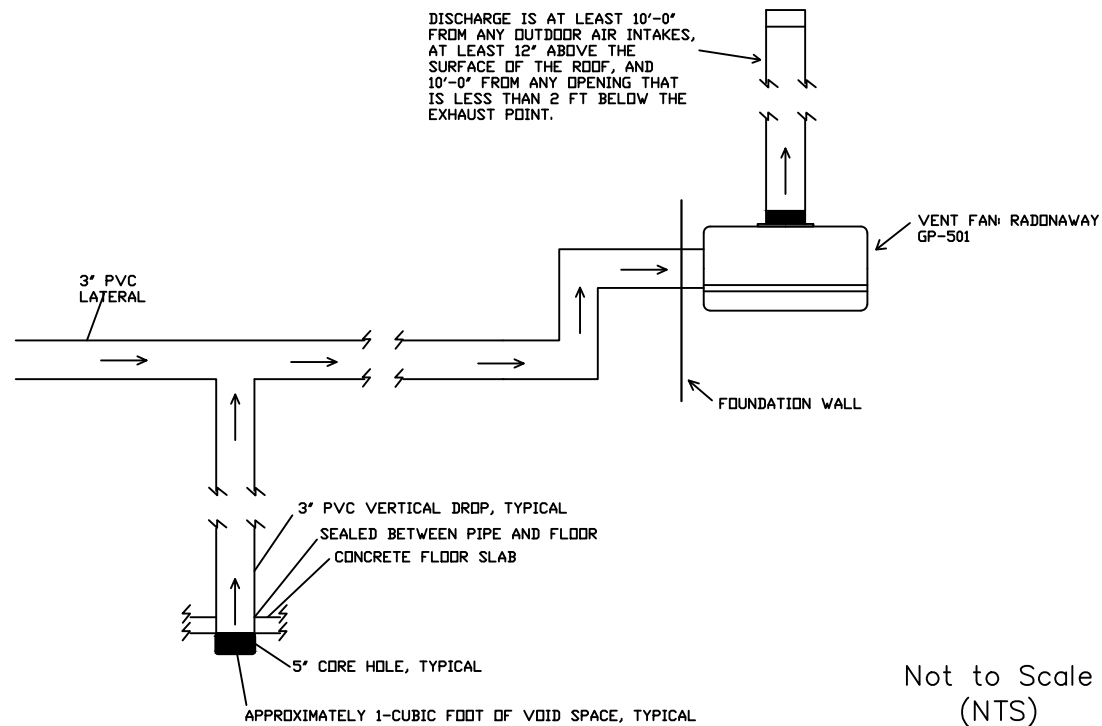
DRAWING NO.

**3A**



DETAIL 1

U-TUBE MANOMETER GAUGE DETAIL

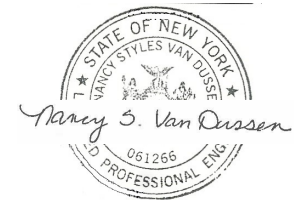


Not to Scale  
(NTS)

**RAVI ENGINEERING  
& LAND SURVEYING, P.C.**  
2110 SOUTH CLINTON AVENUE, SUITE 1  
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REVISIONS:  
NO. DATE

100% CONSTRUCTION DOCUMENTS

DRAWING TITLE:

**CONSTRUCTION COMPLETION  
REPORT: SUB-SLAB DEPRESSURIZED  
SYSTEM AS-BUILT FOR 714 PORTLAND  
AVENUE**

DRAWN BY: OH

CHECKED BY: LZ

DATE: 2/26/21

DRAWING NO.

**3B**

## **APPENDIX C**

# **PROJECT PHOTO LOG**



*Typical exterior SSD system including vent pipe, roof exhaust, and exterior fan*





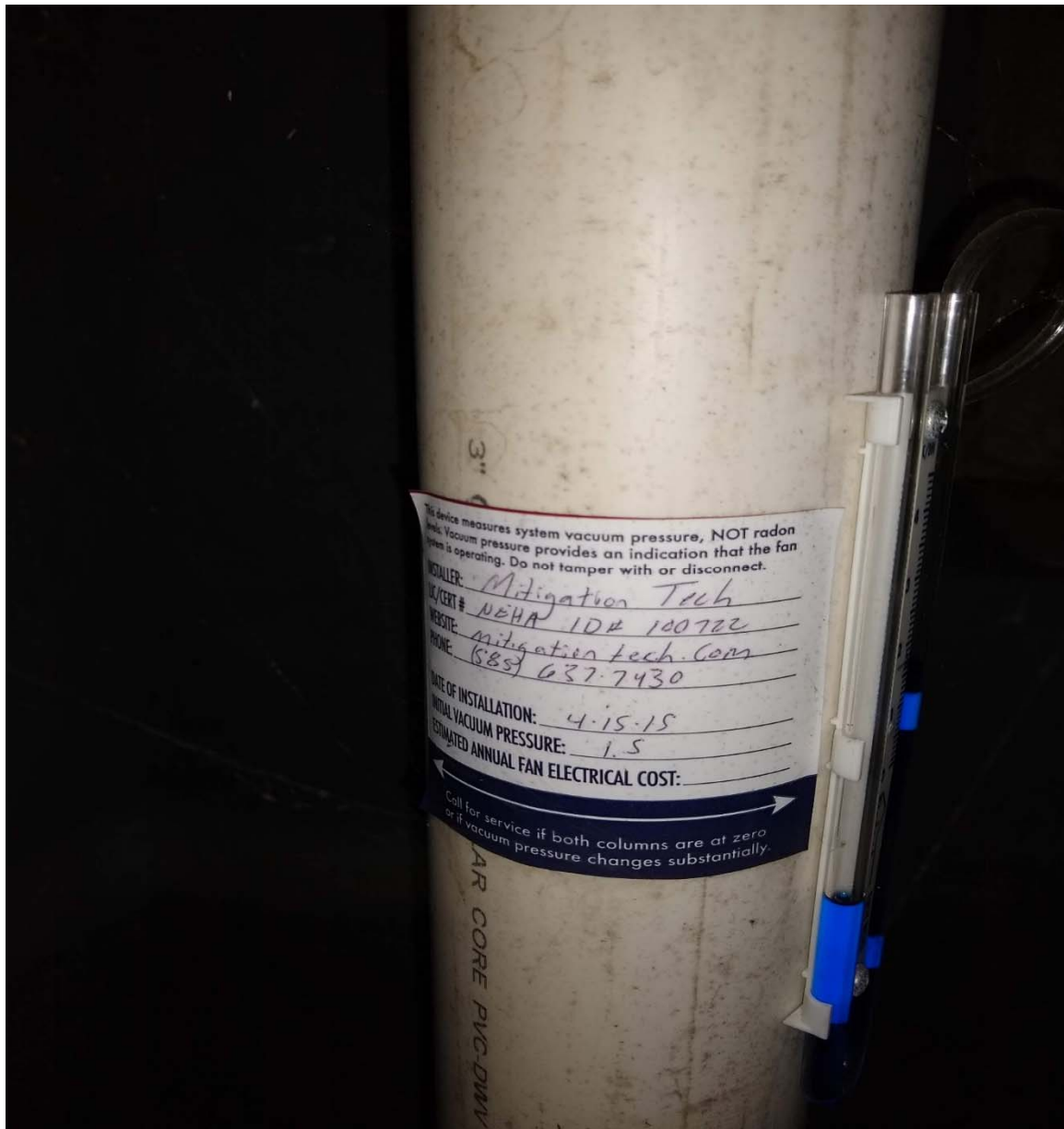
*Typical SSD system fan*



*Typical interior SSD system vent pipe and suction point*



*Digital micromanometer test point pressure differential measurement*



*Vacuum indicator on labeled interior vent pipe*



## **APPENDIX D**

# **LABORATORY ANALYTICAL REPORTs (ON CD)**

# Centek Laboratories, LLC

Date: 09-Dec-15

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1512012  
**Project:** 702-714 Portland Ave  
**Lab ID:** C1512012-001A

**Client Sample ID:** AS-702  
**Tag Number:** 1179.434  
**Collection Date:** 11/30/2015  
**Matrix:** AIR

| Analyses                             | Result | **Limit      | Qual | Units               | DF | Date Analyzed        |
|--------------------------------------|--------|--------------|------|---------------------|----|----------------------|
| <b>FIELD PARAMETERS</b>              |        | <b>FLD</b>   |      | Analyst:            |    |                      |
| Lab Vacuum In                        | -4     |              |      | "Hg                 |    | 12/3/2015            |
| Lab Vacuum Out                       | -30    |              |      | "Hg                 |    | 12/3/2015            |
| <b>1UG/M3 W/ 0.25UG/M3 CT-TCE-VC</b> |        | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| 1,1,1-Trichloroethane                | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 1:36:00 AM |
| 1,1,2,2-Tetrachloroethane            | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 1:36:00 AM |
| 1,1,2-Trichloroethane                | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 1:36:00 AM |
| 1,1-Dichloroethane                   | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 1:36:00 AM |
| 1,1-Dichloroethene                   | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 1:36:00 AM |
| 1,2,4-Trichlorobenzene               | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 1:36:00 AM |
| 1,2,4-Trimethylbenzene               | 0.11   | 0.15         | J    | ppbV                | 1  | 12/4/2015 1:36:00 AM |
| 1,2-Dibromoethane                    | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 1:36:00 AM |
| 1,2-Dichlorobenzene                  | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 1:36:00 AM |
| 1,2-Dichloroethane                   | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 1:36:00 AM |
| 1,2-Dichloropropane                  | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 1:36:00 AM |
| 1,3,5-Trimethylbenzene               | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 1:36:00 AM |
| 1,3-butadiene                        | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 1:36:00 AM |
| 1,3-Dichlorobenzene                  | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 1:36:00 AM |
| 1,4-Dichlorobenzene                  | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 1:36:00 AM |
| 1,4-Dioxane                          | < 0.30 | 0.30         |      | ppbV                | 1  | 12/4/2015 1:36:00 AM |
| 2,2,4-trimethylpentane               | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 1:36:00 AM |
| 4-ethyltoluene                       | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 1:36:00 AM |
| Acetone                              | 7.5    | 3.0          |      | ppbV                | 10 | 12/4/2015 5:25:00 PM |
| Allyl chloride                       | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 1:36:00 AM |
| Benzene                              | 0.30   | 0.15         |      | ppbV                | 1  | 12/4/2015 1:36:00 AM |
| Benzyl chloride                      | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 1:36:00 AM |
| Bromodichloromethane                 | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 1:36:00 AM |
| Bromoform                            | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 1:36:00 AM |
| Bromomethane                         | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 1:36:00 AM |
| Carbon disulfide                     | 0.13   | 0.15         | J    | ppbV                | 1  | 12/4/2015 1:36:00 AM |
| Carbon tetrachloride                 | 0.090  | 0.040        |      | ppbV                | 1  | 12/4/2015 1:36:00 AM |
| Chlorobenzene                        | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 1:36:00 AM |
| Chloroethane                         | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 1:36:00 AM |
| Chloroform                           | 0.15   | 0.15         |      | ppbV                | 1  | 12/4/2015 1:36:00 AM |
| Chloromethane                        | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 1:36:00 AM |
| cis-1,2-Dichloroethene               | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 1:36:00 AM |
| cis-1,3-Dichloropropene              | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 1:36:00 AM |
| Cyclohexane                          | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 1:36:00 AM |
| Dibromochloromethane                 | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 1:36:00 AM |
| Ethyl acetate                        | < 0.25 | 0.25         |      | ppbV                | 1  | 12/4/2015 1:36:00 AM |

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

# Centek Laboratories, LLC

Date: 09-Dec-15

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1512012  
**Project:** 702-714 Portland Ave  
**Lab ID:** C1512012-001A

**Client Sample ID:** AS-702  
**Tag Number:** 1179.434  
**Collection Date:** 11/30/2015  
**Matrix:** AIR

| Analyses                             | Result  | **Limit | Qual         | Units | DF | Date Analyzed        |
|--------------------------------------|---------|---------|--------------|-------|----|----------------------|
| <b>1UG/M3 W/ 0.25UG/M3 CT-TCE-VC</b> |         |         | <b>TO-15</b> |       |    | Analyst: <b>RJP</b>  |
| Ethylbenzene                         | < 0.15  | 0.15    |              | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Freon 11                             | 0.27    | 0.15    |              | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Freon 113                            | < 0.15  | 0.15    |              | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Freon 114                            | < 0.15  | 0.15    |              | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Freon 12                             | 0.58    | 0.15    |              | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Heptane                              | < 0.15  | 0.15    |              | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Hexachloro-1,3-butadiene             | < 0.15  | 0.15    |              | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Hexane                               | < 0.15  | 0.15    |              | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Isopropyl alcohol                    | 6.5     | 1.5     |              | ppbV  | 10 | 12/4/2015 5:25:00 PM |
| m&p-Xylene                           | 0.24    | 0.30    | J            | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Methyl Butyl Ketone                  | < 0.30  | 0.30    |              | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Methyl Ethyl Ketone                  | 1.2     | 0.30    |              | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Methyl Isobutyl Ketone               | < 0.30  | 0.30    |              | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Methyl tert-butyl ether              | < 0.15  | 0.15    |              | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Methylene chloride                   | 0.14    | 0.15    | J            | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| o-Xylene                             | < 0.15  | 0.15    |              | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Propylene                            | < 0.15  | 0.15    |              | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Styrene                              | < 0.15  | 0.15    |              | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Tetrachloroethylene                  | < 0.15  | 0.15    |              | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Tetrahydrofuran                      | 0.31    | 0.15    |              | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Toluene                              | 0.50    | 0.15    |              | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| trans-1,2-Dichloroethene             | < 0.15  | 0.15    |              | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| trans-1,3-Dichloropropene            | < 0.15  | 0.15    |              | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Trichloroethene                      | < 0.040 | 0.040   |              | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Vinyl acetate                        | < 0.15  | 0.15    |              | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Vinyl Bromide                        | < 0.15  | 0.15    |              | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Vinyl chloride                       | < 0.040 | 0.040   |              | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Surr: Bromofluorobenzene             | 83.0    | 70-130  |              | %REC  | 1  | 12/4/2015 1:36:00 AM |

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

# Centek Laboratories, LLC

Date: 09-Dec-15

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1512012  
**Project:** 702-714 Portland Ave  
**Lab ID:** C1512012-002A

**Client Sample ID:** AS-708  
**Tag Number:** 556.373  
**Collection Date:** 11/30/2015  
**Matrix:** AIR

| Analyses                             | Result | **Limit      | Qual | Units               | DF | Date Analyzed        |
|--------------------------------------|--------|--------------|------|---------------------|----|----------------------|
| <b>FIELD PARAMETERS</b>              |        | <b>FLD</b>   |      | Analyst:            |    |                      |
| Lab Vacuum In                        | -7     |              |      | "Hg                 |    | 12/3/2015            |
| Lab Vacuum Out                       | -30    |              |      | "Hg                 |    | 12/3/2015            |
| <b>1UG/M3 W/ 0.25UG/M3 CT-TCE-VC</b> |        | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| 1,1,1-Trichloroethane                | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| 1,1,2,2-Tetrachloroethane            | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| 1,1,2-Trichloroethane                | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| 1,1-Dichloroethane                   | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| 1,1-Dichloroethene                   | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| 1,2,4-Trichlorobenzene               | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| 1,2,4-Trimethylbenzene               | 0.17   | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| 1,2-Dibromoethane                    | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| 1,2-Dichlorobenzene                  | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| 1,2-Dichloroethane                   | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| 1,2-Dichloropropane                  | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| 1,3,5-Trimethylbenzene               | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| 1,3-butadiene                        | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| 1,3-Dichlorobenzene                  | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| 1,4-Dichlorobenzene                  | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| 1,4-Dioxane                          | < 0.30 | 0.30         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| 2,2,4-trimethylpentane               | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| 4-ethyltoluene                       | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Acetone                              | 8.6    | 3.0          |      | ppbV                | 10 | 12/4/2015 6:01:00 PM |
| Allyl chloride                       | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Benzene                              | 0.29   | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Benzyl chloride                      | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Bromodichloromethane                 | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Bromoform                            | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Bromomethane                         | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Carbon disulfide                     | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Carbon tetrachloride                 | 0.090  | 0.040        |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Chlorobenzene                        | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Chloroethane                         | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Chloroform                           | 0.13   | 0.15         | J    | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Chloromethane                        | 0.51   | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| cis-1,2-Dichloroethene               | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| cis-1,3-Dichloropropene              | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Cyclohexane                          | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Dibromochloromethane                 | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Ethyl acetate                        | 0.13   | 0.25         | J    | ppbV                | 1  | 12/4/2015 2:14:00 AM |

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

# Centek Laboratories, LLC

Date: 09-Dec-15

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1512012  
**Project:** 702-714 Portland Ave  
**Lab ID:** C1512012-002A

**Client Sample ID:** AS-708  
**Tag Number:** 556.373  
**Collection Date:** 11/30/2015  
**Matrix:** AIR

| Analyses                             | Result  | **Limit      | Qual | Units               | DF | Date Analyzed        |
|--------------------------------------|---------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.25UG/M3 CT-TCE-VC</b> |         | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| Ethylbenzene                         | 0.10    | 0.15         | J    | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Freon 11                             | 0.28    | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Freon 113                            | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Freon 114                            | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Freon 12                             | 0.58    | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Heptane                              | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Hexachloro-1,3-butadiene             | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Hexane                               | 0.24    | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Isopropyl alcohol                    | 2.2     | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| m&p-Xylene                           | 0.29    | 0.30         | J    | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Methyl Butyl Ketone                  | < 0.30  | 0.30         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Methyl Ethyl Ketone                  | 0.65    | 0.30         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Methyl Isobutyl Ketone               | < 0.30  | 0.30         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Methyl tert-butyl ether              | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Methylene chloride                   | 0.16    | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| o-Xylene                             | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Propylene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Styrene                              | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Tetrachloroethylene                  | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Tetrahydrofuran                      | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Toluene                              | 0.88    | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| trans-1,2-Dichloroethene             | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| trans-1,3-Dichloropropene            | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Trichloroethene                      | < 0.040 | 0.040        |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Vinyl acetate                        | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Vinyl Bromide                        | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Vinyl chloride                       | < 0.040 | 0.040        |      | ppbV                | 1  | 12/4/2015 2:14:00 AM |
| Surr: Bromofluorobenzene             | 80.0    | 70-130       |      | %REC                | 1  | 12/4/2015 2:14:00 AM |

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

# Centek Laboratories, LLC

Date: 09-Dec-15

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1512012  
**Project:** 702-714 Portland Ave  
**Lab ID:** C1512012-003A

**Client Sample ID:** AS-714  
**Tag Number:** 496.454  
**Collection Date:** 11/30/2015  
**Matrix:** AIR

| Analyses                             | Result | **Limit      | Qual | Units               | DF | Date Analyzed        |
|--------------------------------------|--------|--------------|------|---------------------|----|----------------------|
| <b>FIELD PARAMETERS</b>              |        | <b>FLD</b>   |      | Analyst:            |    |                      |
| Lab Vacuum In                        | -7     |              |      | "Hg                 |    | 12/3/2015            |
| Lab Vacuum Out                       | -30    |              |      | "Hg                 |    | 12/3/2015            |
| <b>1UG/M3 W/ 0.25UG/M3 CT-TCE-VC</b> |        | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| 1,1,1-Trichloroethane                | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| 1,1,2,2-Tetrachloroethane            | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| 1,1,2-Trichloroethane                | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| 1,1-Dichloroethane                   | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| 1,1-Dichloroethene                   | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| 1,2,4-Trichlorobenzene               | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| 1,2,4-Trimethylbenzene               | 0.59   | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| 1,2-Dibromoethane                    | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| 1,2-Dichlorobenzene                  | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| 1,2-Dichloroethane                   | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| 1,2-Dichloropropane                  | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| 1,3,5-Trimethylbenzene               | 0.19   | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| 1,3-butadiene                        | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| 1,3-Dichlorobenzene                  | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| 1,4-Dichlorobenzene                  | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| 1,4-Dioxane                          | < 0.30 | 0.30         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| 2,2,4-trimethylpentane               | 0.34   | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| 4-ethyltoluene                       | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Acetone                              | 5.0    | 1.5          |      | ppbV                | 5  | 12/4/2015 6:37:00 PM |
| Allyl chloride                       | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Benzene                              | 0.30   | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Benzyl chloride                      | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Bromodichloromethane                 | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Bromoform                            | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Bromomethane                         | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Carbon disulfide                     | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Carbon tetrachloride                 | 0.090  | 0.040        |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Chlorobenzene                        | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Chloroethane                         | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Chloroform                           | 0.87   | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Chloromethane                        | 0.53   | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| cis-1,2-Dichloroethene               | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| cis-1,3-Dichloropropene              | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Cyclohexane                          | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Dibromochloromethane                 | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Ethyl acetate                        | < 0.25 | 0.25         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |

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



# Centek Laboratories, LLC

Date: 09-Dec-15

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1512012  
**Project:** 702-714 Portland Ave  
**Lab ID:** C1512012-003A

**Client Sample ID:** AS-714  
**Tag Number:** 496.454  
**Collection Date:** 11/30/2015  
**Matrix:** AIR

| Analyses                             | Result  | **Limit      | Qual | Units               | DF | Date Analyzed        |
|--------------------------------------|---------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.25UG/M3 CT-TCE-VC</b> |         | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| Ethylbenzene                         | 0.15    | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Freon 11                             | 0.28    | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Freon 113                            | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Freon 114                            | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Freon 12                             | 0.57    | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Heptane                              | 0.29    | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Hexachloro-1,3-butadiene             | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Hexane                               | 0.24    | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Isopropyl alcohol                    | 1.5     | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| m&p-Xylene                           | 0.50    | 0.30         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Methyl Butyl Ketone                  | < 0.30  | 0.30         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Methyl Ethyl Ketone                  | 0.40    | 0.30         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Methyl Isobutyl Ketone               | 0.12    | 0.30         | J    | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Methyl tert-butyl ether              | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Methylene chloride                   | 0.15    | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| o-Xylene                             | 0.19    | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Propylene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Styrene                              | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Tetrachloroethylene                  | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Tetrahydrofuran                      | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Toluene                              | 0.79    | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| trans-1,2-Dichloroethene             | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| trans-1,3-Dichloropropene            | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Trichloroethene                      | < 0.040 | 0.040        |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Vinyl acetate                        | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Vinyl Bromide                        | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Vinyl chloride                       | < 0.040 | 0.040        |      | ppbV                | 1  | 12/4/2015 2:53:00 AM |
| Surr: Bromofluorobenzene             | 92.0    | 70-130       |      | %REC                | 1  | 12/4/2015 2:53:00 AM |

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

# Centek Laboratories, LLC

Date: 09-Dec-15

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1512012  
**Project:** 702-714 Portland Ave  
**Lab ID:** C1512012-004A

**Client Sample ID:** AS-OUT  
**Tag Number:** 107.344  
**Collection Date:** 11/30/2015  
**Matrix:** AIR

| Analyses                             | Result | **Limit      | Qual | Units               | DF | Date Analyzed        |
|--------------------------------------|--------|--------------|------|---------------------|----|----------------------|
| <b>FIELD PARAMETERS</b>              |        | <b>FLD</b>   |      | Analyst:            |    |                      |
| Lab Vacuum In                        | -4     |              |      | "Hg                 |    | 12/3/2015            |
| Lab Vacuum Out                       | -30    |              |      | "Hg                 |    | 12/3/2015            |
| <b>1UG/M3 W/ 0.25UG/M3 CT-TCE-VC</b> |        | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| 1,1,1-Trichloroethane                | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| 1,1,2,2-Tetrachloroethane            | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| 1,1,2-Trichloroethane                | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| 1,1-Dichloroethane                   | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| 1,1-Dichloroethene                   | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| 1,2,4-Trichlorobenzene               | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| 1,2,4-Trimethylbenzene               | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| 1,2-Dibromoethane                    | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| 1,2-Dichlorobenzene                  | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| 1,2-Dichloroethane                   | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| 1,2-Dichloropropane                  | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| 1,3,5-Trimethylbenzene               | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| 1,3-butadiene                        | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| 1,3-Dichlorobenzene                  | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| 1,4-Dichlorobenzene                  | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| 1,4-Dioxane                          | < 0.30 | 0.30         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| 2,2,4-trimethylpentane               | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| 4-ethyltoluene                       | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Acetone                              | 4.8    | 1.5          |      | ppbV                | 5  | 12/4/2015 7:13:00 PM |
| Allyl chloride                       | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Benzene                              | 0.23   | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Benzyl chloride                      | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Bromodichloromethane                 | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Bromoform                            | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Bromomethane                         | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Carbon disulfide                     | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Carbon tetrachloride                 | 0.090  | 0.040        |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Chlorobenzene                        | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Chloroethane                         | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Chloroform                           | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Chloromethane                        | 0.47   | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| cis-1,2-Dichloroethene               | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| cis-1,3-Dichloropropene              | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Cyclohexane                          | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Dibromochloromethane                 | < 0.15 | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Ethyl acetate                        | < 0.25 | 0.25         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |

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

# Centek Laboratories, LLC

Date: 09-Dec-15

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1512012  
**Project:** 702-714 Portland Ave  
**Lab ID:** C1512012-004A

**Client Sample ID:** AS-OUT  
**Tag Number:** 107.344  
**Collection Date:** 11/30/2015  
**Matrix:** AIR

| Analyses                             | Result  | **Limit      | Qual | Units               | DF | Date Analyzed        |
|--------------------------------------|---------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.25UG/M3 CT-TCE-VC</b> |         | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| Ethylbenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Freon 11                             | 0.28    | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Freon 113                            | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Freon 114                            | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Freon 12                             | 0.59    | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Heptane                              | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Hexachloro-1,3-butadiene             | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Hexane                               | 0.16    | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Isopropyl alcohol                    | 1.2     | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| m&p-Xylene                           | 0.19    | 0.30         | J    | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Methyl Butyl Ketone                  | < 0.30  | 0.30         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Methyl Ethyl Ketone                  | 0.30    | 0.30         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Methyl Isobutyl Ketone               | 0.10    | 0.30         | J    | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Methyl tert-butyl ether              | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Methylene chloride                   | 0.11    | 0.15         | J    | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| o-Xylene                             | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Propylene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Styrene                              | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Tetrachloroethylene                  | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Tetrahydrofuran                      | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Toluene                              | 0.55    | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| trans-1,2-Dichloroethene             | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| trans-1,3-Dichloropropene            | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Trichloroethene                      | < 0.040 | 0.040        |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Vinyl acetate                        | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Vinyl Bromide                        | < 0.15  | 0.15         |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Vinyl chloride                       | < 0.040 | 0.040        |      | ppbV                | 1  | 12/4/2015 3:31:00 AM |
| Surr: Bromofluorobenzene             | 77.0    | 70-130       |      | %REC                | 1  | 12/4/2015 3:31:00 AM |

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

# Centek Laboratories, LLC

Date: 09-Dec-15

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1512012  
**Project:** 702-714 Portland Ave  
**Lab ID:** C1512012-001A

**Client Sample ID:** AS-702  
**Tag Number:** 1179.434  
**Collection Date:** 11/30/2015  
**Matrix:** AIR

| Analyses                             | Result | **Limit      | Qual | Units               | DF | Date Analyzed        |
|--------------------------------------|--------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.25UG/M3 CT-TCE-VC</b> |        | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| 1,1,1-Trichloroethane                | < 0.82 | 0.82         |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| 1,1,2,2-Tetrachloroethane            | < 1.0  | 1.0          |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| 1,1,2-Trichloroethane                | < 0.82 | 0.82         |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| 1,1-Dichloroethane                   | < 0.61 | 0.61         |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| 1,1-Dichloroethene                   | < 0.59 | 0.59         |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| 1,2,4-Trichlorobenzene               | < 1.1  | 1.1          |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| 1,2,4-Trimethylbenzene               | 0.54   | 0.74         | J    | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| 1,2-Dibromoethane                    | < 1.2  | 1.2          |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| 1,2-Dichlorobenzene                  | < 0.90 | 0.90         |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| 1,2-Dichloroethane                   | < 0.61 | 0.61         |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| 1,2-Dichloropropane                  | < 0.69 | 0.69         |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| 1,3,5-Trimethylbenzene               | < 0.74 | 0.74         |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| 1,3-butadiene                        | < 0.33 | 0.33         |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| 1,3-Dichlorobenzene                  | < 0.90 | 0.90         |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| 1,4-Dichlorobenzene                  | < 0.90 | 0.90         |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| 1,4-Dioxane                          | < 1.1  | 1.1          |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| 2,2,4-trimethylpentane               | < 0.70 | 0.70         |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| 4-ethyltoluene                       | < 0.74 | 0.74         |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| Acetone                              | 18     | 7.1          |      | ug/m3               | 10 | 12/4/2015 5:25:00 PM |
| Allyl chloride                       | < 0.47 | 0.47         |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| Benzene                              | 0.96   | 0.48         |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| Benzyl chloride                      | < 0.86 | 0.86         |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| Bromodichloromethane                 | < 1.0  | 1.0          |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| Bromoform                            | < 1.6  | 1.6          |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| Bromomethane                         | < 0.58 | 0.58         |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| Carbon disulfide                     | 0.40   | 0.47         | J    | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| Carbon tetrachloride                 | 0.57   | 0.25         |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| Chlorobenzene                        | < 0.69 | 0.69         |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| Chloroethane                         | < 0.40 | 0.40         |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| Chloroform                           | 0.73   | 0.73         |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| Chloromethane                        | < 0.31 | 0.31         |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| cis-1,2-Dichloroethene               | < 0.59 | 0.59         |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| cis-1,3-Dichloropropene              | < 0.68 | 0.68         |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| Cyclohexane                          | < 0.52 | 0.52         |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| Dibromochloromethane                 | < 1.3  | 1.3          |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| Ethyl acetate                        | < 0.90 | 0.90         |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| Ethylbenzene                         | < 0.65 | 0.65         |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| Freon 11                             | 1.5    | 0.84         |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| Freon 113                            | < 1.1  | 1.1          |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |
| Freon 114                            | < 1.0  | 1.0          |      | ug/m3               | 1  | 12/4/2015 1:36:00 AM |

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

# Centek Laboratories, LLC

Date: 09-Dec-15

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1512012  
**Project:** 702-714 Portland Ave  
**Lab ID:** C1512012-001A

**Client Sample ID:** AS-702  
**Tag Number:** 1179.434  
**Collection Date:** 11/30/2015  
**Matrix:** AIR

| Analyses                             | Result | **Limit | Qual         | Units | DF | Date Analyzed        |
|--------------------------------------|--------|---------|--------------|-------|----|----------------------|
| <b>1UG/M3 W/ 0.25UG/M3 CT-TCE-VC</b> |        |         | <b>TO-15</b> |       |    | Analyst: <b>RJP</b>  |
| Freon 12                             | 2.9    | 0.74    |              | ug/m3 | 1  | 12/4/2015 1:36:00 AM |
| Heptane                              | < 0.61 | 0.61    |              | ug/m3 | 1  | 12/4/2015 1:36:00 AM |
| Hexachloro-1,3-butadiene             | < 1.6  | 1.6     |              | ug/m3 | 1  | 12/4/2015 1:36:00 AM |
| Hexane                               | < 0.53 | 0.53    |              | ug/m3 | 1  | 12/4/2015 1:36:00 AM |
| Isopropyl alcohol                    | 16     | 3.7     |              | ug/m3 | 10 | 12/4/2015 5:25:00 PM |
| m&p-Xylene                           | 1.0    | 1.3     | J            | ug/m3 | 1  | 12/4/2015 1:36:00 AM |
| Methyl Butyl Ketone                  | < 1.2  | 1.2     |              | ug/m3 | 1  | 12/4/2015 1:36:00 AM |
| Methyl Ethyl Ketone                  | 3.4    | 0.88    |              | ug/m3 | 1  | 12/4/2015 1:36:00 AM |
| Methyl Isobutyl Ketone               | < 1.2  | 1.2     |              | ug/m3 | 1  | 12/4/2015 1:36:00 AM |
| Methyl tert-butyl ether              | < 0.54 | 0.54    |              | ug/m3 | 1  | 12/4/2015 1:36:00 AM |
| Methylene chloride                   | 0.49   | 0.52    | J            | ug/m3 | 1  | 12/4/2015 1:36:00 AM |
| o-Xylene                             | < 0.65 | 0.65    |              | ug/m3 | 1  | 12/4/2015 1:36:00 AM |
| Propylene                            | < 0.26 | 0.26    |              | ug/m3 | 1  | 12/4/2015 1:36:00 AM |
| Styrene                              | < 0.64 | 0.64    |              | ug/m3 | 1  | 12/4/2015 1:36:00 AM |
| Tetrachloroethylene                  | < 1.0  | 1.0     |              | ug/m3 | 1  | 12/4/2015 1:36:00 AM |
| Tetrahydrofuran                      | 0.91   | 0.44    |              | ug/m3 | 1  | 12/4/2015 1:36:00 AM |
| Toluene                              | 1.9    | 0.57    |              | ug/m3 | 1  | 12/4/2015 1:36:00 AM |
| trans-1,2-Dichloroethene             | < 0.59 | 0.59    |              | ug/m3 | 1  | 12/4/2015 1:36:00 AM |
| trans-1,3-Dichloropropene            | < 0.68 | 0.68    |              | ug/m3 | 1  | 12/4/2015 1:36:00 AM |
| Trichloroethene                      | < 0.21 | 0.21    |              | ug/m3 | 1  | 12/4/2015 1:36:00 AM |
| Vinyl acetate                        | < 0.53 | 0.53    |              | ug/m3 | 1  | 12/4/2015 1:36:00 AM |
| Vinyl Bromide                        | < 0.66 | 0.66    |              | ug/m3 | 1  | 12/4/2015 1:36:00 AM |
| Vinyl chloride                       | < 0.10 | 0.10    |              | ug/m3 | 1  | 12/4/2015 1:36:00 AM |

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

# Centek Laboratories, LLC

Date: 09-Dec-15

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1512012  
**Project:** 702-714 Portland Ave  
**Lab ID:** C1512012-002A

**Client Sample ID:** AS-708  
**Tag Number:** 556.373  
**Collection Date:** 11/30/2015  
**Matrix:** AIR

| Analyses                             | Result | **Limit | Qual         | Units | DF                  | Date Analyzed        |
|--------------------------------------|--------|---------|--------------|-------|---------------------|----------------------|
| <b>1UG/M3 W/ 0.25UG/M3 CT-TCE-VC</b> |        |         | <b>TO-15</b> |       | Analyst: <b>RJP</b> |                      |
| 1,1,1-Trichloroethane                | < 0.82 | 0.82    |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| 1,1,2,2-Tetrachloroethane            | < 1.0  | 1.0     |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| 1,1,2-Trichloroethane                | < 0.82 | 0.82    |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| 1,1-Dichloroethane                   | < 0.61 | 0.61    |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| 1,1-Dichloroethene                   | < 0.59 | 0.59    |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| 1,2,4-Trichlorobenzene               | < 1.1  | 1.1     |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| 1,2,4-Trimethylbenzene               | 0.84   | 0.74    |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| 1,2-Dibromoethane                    | < 1.2  | 1.2     |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| 1,2-Dichlorobenzene                  | < 0.90 | 0.90    |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| 1,2-Dichloroethane                   | < 0.61 | 0.61    |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| 1,2-Dichloropropane                  | < 0.69 | 0.69    |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| 1,3,5-Trimethylbenzene               | < 0.74 | 0.74    |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| 1,3-butadiene                        | < 0.33 | 0.33    |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| 1,3-Dichlorobenzene                  | < 0.90 | 0.90    |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| 1,4-Dichlorobenzene                  | < 0.90 | 0.90    |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| 1,4-Dioxane                          | < 1.1  | 1.1     |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| 2,2,4-trimethylpentane               | < 0.70 | 0.70    |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| 4-ethyltoluene                       | < 0.74 | 0.74    |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| Acetone                              | 20     | 7.1     |              | ug/m3 | 10                  | 12/4/2015 6:01:00 PM |
| Allyl chloride                       | < 0.47 | 0.47    |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| Benzene                              | 0.93   | 0.48    |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| Benzyl chloride                      | < 0.86 | 0.86    |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| Bromodichloromethane                 | < 1.0  | 1.0     |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| Bromoform                            | < 1.6  | 1.6     |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| Bromomethane                         | < 0.58 | 0.58    |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| Carbon disulfide                     | < 0.47 | 0.47    |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| Carbon tetrachloride                 | 0.57   | 0.25    |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| Chlorobenzene                        | < 0.69 | 0.69    |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| Chloroethane                         | < 0.40 | 0.40    |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| Chloroform                           | 0.63   | 0.73    | J            | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| Chloromethane                        | 1.1    | 0.31    |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| cis-1,2-Dichloroethene               | < 0.59 | 0.59    |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| cis-1,3-Dichloropropene              | < 0.68 | 0.68    |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| Cyclohexane                          | < 0.52 | 0.52    |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| Dibromochloromethane                 | < 1.3  | 1.3     |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| Ethyl acetate                        | 0.47   | 0.90    | J            | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| Ethylbenzene                         | 0.43   | 0.65    | J            | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| Freon 11                             | 1.6    | 0.84    |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| Freon 113                            | < 1.1  | 1.1     |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |
| Freon 114                            | < 1.0  | 1.0     |              | ug/m3 | 1                   | 12/4/2015 2:14:00 AM |

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

# Centek Laboratories, LLC

Date: 09-Dec-15

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1512012  
**Project:** 702-714 Portland Ave  
**Lab ID:** C1512012-002A

**Client Sample ID:** AS-708  
**Tag Number:** 556.373  
**Collection Date:** 11/30/2015  
**Matrix:** AIR

| Analyses                             | Result | **Limit | Qual         | Units | DF | Date Analyzed        |
|--------------------------------------|--------|---------|--------------|-------|----|----------------------|
| <b>1UG/M3 W/ 0.25UG/M3 CT-TCE-VC</b> |        |         | <b>TO-15</b> |       |    | Analyst: <b>RJP</b>  |
| Freon 12                             | 2.9    | 0.74    |              | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Heptane                              | < 0.61 | 0.61    |              | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Hexachloro-1,3-butadiene             | < 1.6  | 1.6     |              | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Hexane                               | 0.85   | 0.53    |              | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Isopropyl alcohol                    | 5.4    | 0.37    |              | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| m&p-Xylene                           | 1.3    | 1.3     | J            | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Methyl Butyl Ketone                  | < 1.2  | 1.2     |              | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Methyl Ethyl Ketone                  | 1.9    | 0.88    |              | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Methyl Isobutyl Ketone               | < 1.2  | 1.2     |              | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Methyl tert-butyl ether              | < 0.54 | 0.54    |              | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Methylene chloride                   | 0.56   | 0.52    |              | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| o-Xylene                             | < 0.65 | 0.65    |              | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Propylene                            | < 0.26 | 0.26    |              | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Styrene                              | < 0.64 | 0.64    |              | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Tetrachloroethylene                  | < 1.0  | 1.0     |              | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Tetrahydrofuran                      | < 0.44 | 0.44    |              | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Toluene                              | 3.3    | 0.57    |              | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| trans-1,2-Dichloroethene             | < 0.59 | 0.59    |              | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| trans-1,3-Dichloropropene            | < 0.68 | 0.68    |              | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Trichloroethene                      | < 0.21 | 0.21    |              | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Vinyl acetate                        | < 0.53 | 0.53    |              | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Vinyl Bromide                        | < 0.66 | 0.66    |              | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Vinyl chloride                       | < 0.10 | 0.10    |              | ug/m3 | 1  | 12/4/2015 2:14:00 AM |

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



# Centek Laboratories, LLC

Date: 09-Dec-15

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1512012  
**Project:** 702-714 Portland Ave  
**Lab ID:** C1512012-003A

**Client Sample ID:** AS-714  
**Tag Number:** 496.454  
**Collection Date:** 11/30/2015  
**Matrix:** AIR

| Analyses                             | Result | **Limit      | Qual | Units               | DF | Date Analyzed        |
|--------------------------------------|--------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.25UG/M3 CT-TCE-VC</b> |        | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| 1,1,1-Trichloroethane                | < 0.82 | 0.82         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| 1,1,2,2-Tetrachloroethane            | < 1.0  | 1.0          |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| 1,1,2-Trichloroethane                | < 0.82 | 0.82         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| 1,1-Dichloroethane                   | < 0.61 | 0.61         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| 1,1-Dichloroethene                   | < 0.59 | 0.59         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| 1,2,4-Trichlorobenzene               | < 1.1  | 1.1          |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| 1,2,4-Trimethylbenzene               | 2.9    | 0.74         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| 1,2-Dibromoethane                    | < 1.2  | 1.2          |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| 1,2-Dichlorobenzene                  | < 0.90 | 0.90         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| 1,2-Dichloroethane                   | < 0.61 | 0.61         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| 1,2-Dichloropropane                  | < 0.69 | 0.69         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| 1,3,5-Trimethylbenzene               | 0.93   | 0.74         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| 1,3-butadiene                        | < 0.33 | 0.33         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| 1,3-Dichlorobenzene                  | < 0.90 | 0.90         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| 1,4-Dichlorobenzene                  | < 0.90 | 0.90         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| 1,4-Dioxane                          | < 1.1  | 1.1          |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| 2,2,4-trimethylpentane               | 1.6    | 0.70         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| 4-ethyltoluene                       | < 0.74 | 0.74         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Acetone                              | 12     | 3.6          |      | ug/m3               | 5  | 12/4/2015 6:37:00 PM |
| Allyl chloride                       | < 0.47 | 0.47         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Benzene                              | 0.96   | 0.48         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Benzyl chloride                      | < 0.86 | 0.86         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Bromodichloromethane                 | < 1.0  | 1.0          |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Bromoform                            | < 1.6  | 1.6          |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Bromomethane                         | < 0.58 | 0.58         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Carbon disulfide                     | < 0.47 | 0.47         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Carbon tetrachloride                 | 0.57   | 0.25         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Chlorobenzene                        | < 0.69 | 0.69         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Chloroethane                         | < 0.40 | 0.40         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Chloroform                           | 4.2    | 0.73         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Chloromethane                        | 1.1    | 0.31         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| cis-1,2-Dichloroethene               | < 0.59 | 0.59         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| cis-1,3-Dichloropropene              | < 0.68 | 0.68         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Cyclohexane                          | < 0.52 | 0.52         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Dibromochloromethane                 | < 1.3  | 1.3          |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Ethyl acetate                        | < 0.90 | 0.90         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Ethylbenzene                         | 0.65   | 0.65         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Freon 11                             | 1.6    | 0.84         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Freon 113                            | < 1.1  | 1.1          |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Freon 114                            | < 1.0  | 1.0          |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |

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

# Centek Laboratories, LLC

Date: 09-Dec-15

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1512012  
**Project:** 702-714 Portland Ave  
**Lab ID:** C1512012-003A

**Client Sample ID:** AS-714  
**Tag Number:** 496.454  
**Collection Date:** 11/30/2015  
**Matrix:** AIR

| Analyses                             | Result | **Limit      | Qual | Units               | DF | Date Analyzed        |
|--------------------------------------|--------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.25UG/M3 CT-TCE-VC</b> |        | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| Freon 12                             | 2.8    | 0.74         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Heptane                              | 1.2    | 0.61         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Hexachloro-1,3-butadiene             | < 1.6  | 1.6          |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Hexane                               | 0.85   | 0.53         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Isopropyl alcohol                    | 3.6    | 0.37         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| m&p-Xylene                           | 2.2    | 1.3          |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Methyl Butyl Ketone                  | < 1.2  | 1.2          |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Methyl Ethyl Ketone                  | 1.2    | 0.88         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Methyl Isobutyl Ketone               | 0.49   | 1.2          | J    | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Methyl tert-butyl ether              | < 0.54 | 0.54         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Methylene chloride                   | 0.52   | 0.52         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| o-Xylene                             | 0.82   | 0.65         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Propylene                            | < 0.26 | 0.26         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Styrene                              | < 0.64 | 0.64         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Tetrachloroethylene                  | < 1.0  | 1.0          |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Tetrahydrofuran                      | < 0.44 | 0.44         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Toluene                              | 3.0    | 0.57         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| trans-1,2-Dichloroethene             | < 0.59 | 0.59         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| trans-1,3-Dichloropropene            | < 0.68 | 0.68         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Trichloroethene                      | < 0.21 | 0.21         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Vinyl acetate                        | < 0.53 | 0.53         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Vinyl Bromide                        | < 0.66 | 0.66         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |
| Vinyl chloride                       | < 0.10 | 0.10         |      | ug/m3               | 1  | 12/4/2015 2:53:00 AM |

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

# Centek Laboratories, LLC

Date: 09-Dec-15

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1512012  
**Project:** 702-714 Portland Ave  
**Lab ID:** C1512012-004A

**Client Sample ID:** AS-OUT  
**Tag Number:** 107.344  
**Collection Date:** 11/30/2015  
**Matrix:** AIR

| Analyses                             | Result | **Limit | Qual         | Units | DF | Date Analyzed        |
|--------------------------------------|--------|---------|--------------|-------|----|----------------------|
| <b>1UG/M3 W/ 0.25UG/M3 CT-TCE-VC</b> |        |         | <b>TO-15</b> |       |    | Analyst: <b>RJP</b>  |
| 1,1,1-Trichloroethane                | < 0.82 | 0.82    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| 1,1,2,2-Tetrachloroethane            | < 1.0  | 1.0     |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| 1,1,2-Trichloroethane                | < 0.82 | 0.82    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| 1,1-Dichloroethane                   | < 0.61 | 0.61    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| 1,1-Dichloroethene                   | < 0.59 | 0.59    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| 1,2,4-Trichlorobenzene               | < 1.1  | 1.1     |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| 1,2,4-Trimethylbenzene               | < 0.74 | 0.74    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| 1,2-Dibromoethane                    | < 1.2  | 1.2     |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| 1,2-Dichlorobenzene                  | < 0.90 | 0.90    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| 1,2-Dichloroethane                   | < 0.61 | 0.61    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| 1,2-Dichloropropane                  | < 0.69 | 0.69    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| 1,3,5-Trimethylbenzene               | < 0.74 | 0.74    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| 1,3-butadiene                        | < 0.33 | 0.33    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| 1,3-Dichlorobenzene                  | < 0.90 | 0.90    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| 1,4-Dichlorobenzene                  | < 0.90 | 0.90    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| 1,4-Dioxane                          | < 1.1  | 1.1     |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| 2,2,4-trimethylpentane               | < 0.70 | 0.70    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| 4-ethyltoluene                       | < 0.74 | 0.74    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Acetone                              | 11     | 3.6     |              | ug/m3 | 5  | 12/4/2015 7:13:00 PM |
| Allyl chloride                       | < 0.47 | 0.47    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Benzene                              | 0.73   | 0.48    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Benzyl chloride                      | < 0.86 | 0.86    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Bromodichloromethane                 | < 1.0  | 1.0     |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Bromoform                            | < 1.6  | 1.6     |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Bromomethane                         | < 0.58 | 0.58    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Carbon disulfide                     | < 0.47 | 0.47    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Carbon tetrachloride                 | 0.57   | 0.25    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Chlorobenzene                        | < 0.69 | 0.69    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Chloroethane                         | < 0.40 | 0.40    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Chloroform                           | < 0.73 | 0.73    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Chloromethane                        | 0.97   | 0.31    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| cis-1,2-Dichloroethene               | < 0.59 | 0.59    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| cis-1,3-Dichloropropene              | < 0.68 | 0.68    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Cyclohexane                          | < 0.52 | 0.52    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Dibromochloromethane                 | < 1.3  | 1.3     |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Ethyl acetate                        | < 0.90 | 0.90    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Ethylbenzene                         | < 0.65 | 0.65    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Freon 11                             | 1.6    | 0.84    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Freon 113                            | < 1.1  | 1.1     |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Freon 114                            | < 1.0  | 1.0     |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |

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

# Centek Laboratories, LLC

Date: 09-Dec-15

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1512012  
**Project:** 702-714 Portland Ave  
**Lab ID:** C1512012-004A

**Client Sample ID:** AS-OUT  
**Tag Number:** 107.344  
**Collection Date:** 11/30/2015  
**Matrix:** AIR

| Analyses                             | Result | **Limit | Qual         | Units | DF | Date Analyzed        |
|--------------------------------------|--------|---------|--------------|-------|----|----------------------|
| <b>1UG/M3 W/ 0.25UG/M3 CT-TCE-VC</b> |        |         | <b>TO-15</b> |       |    | Analyst: <b>RJP</b>  |
| Freon 12                             | 2.9    | 0.74    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Heptane                              | < 0.61 | 0.61    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Hexachloro-1,3-butadiene             | < 1.6  | 1.6     |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Hexane                               | 0.56   | 0.53    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Isopropyl alcohol                    | 2.8    | 0.37    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| m&p-Xylene                           | 0.82   | 1.3     | J            | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Methyl Butyl Ketone                  | < 1.2  | 1.2     |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Methyl Ethyl Ketone                  | 0.88   | 0.88    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Methyl Isobutyl Ketone               | 0.41   | 1.2     | J            | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Methyl tert-butyl ether              | < 0.54 | 0.54    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Methylene chloride                   | 0.38   | 0.52    | J            | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| o-Xylene                             | < 0.65 | 0.65    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Propylene                            | < 0.26 | 0.26    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Styrene                              | < 0.64 | 0.64    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Tetrachloroethylene                  | < 1.0  | 1.0     |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Tetrahydrofuran                      | < 0.44 | 0.44    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Toluene                              | 2.1    | 0.57    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| trans-1,2-Dichloroethene             | < 0.59 | 0.59    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| trans-1,3-Dichloropropene            | < 0.68 | 0.68    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Trichloroethene                      | < 0.21 | 0.21    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Vinyl acetate                        | < 0.53 | 0.53    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Vinyl Bromide                        | < 0.66 | 0.66    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Vinyl chloride                       | < 0.10 | 0.10    |              | ug/m3 | 1  | 12/4/2015 3:31:00 AM |

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



# Centek Laboratories, LLC

Date: 23-Apr-18

|                   |                                         |                          |                 |
|-------------------|-----------------------------------------|--------------------------|-----------------|
| <b>CLIENT:</b>    | Ravi Engineering & Land Surveying, P.C. | <b>Client Sample ID:</b> | IA-702-20180413 |
| <b>Lab Order:</b> | C1804026                                | <b>Tag Number:</b>       | 101.385         |
| <b>Project:</b>   | 690 Portland Ave                        | <b>Collection Date:</b>  | 4/12/2018       |
| <b>Lab ID:</b>    | C1804026-001A                           | <b>Matrix:</b>           | AIR             |

| Analyses                                       | Result  | **Limit      | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|---------|--------------|------|---------------------|----|----------------------|
| <b>FIELD PARAMETERS</b>                        |         | <b>FLD</b>   |      | Analyst:            |    |                      |
| Lab Vacuum In                                  | -1      |              |      | "Hg                 |    | 4/16/2018            |
| Lab Vacuum Out                                 | -30     |              |      | "Hg                 |    | 4/16/2018            |
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |         | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| 1,1,1-Trichloroethane                          | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| 1,1,2,2-Tetrachloroethane                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| 1,1,2-Trichloroethane                          | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| 1,1-Dichloroethane                             | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| 1,1-Dichloroethene                             | < 0.040 | 0.040        |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| 1,2,4-Trichlorobenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| 1,2,4-Trimethylbenzene                         | 6.7     | 1.5          |      | ppbV                | 10 | 4/18/2018 2:38:00 PM |
| 1,2-Dibromoethane                              | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| 1,2-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| 1,2-Dichloroethane                             | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| 1,2-Dichloropropane                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| 1,3,5-Trimethylbenzene                         | 2.5     | 1.5          |      | ppbV                | 10 | 4/18/2018 2:38:00 PM |
| 1,3-butadiene                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| 1,3-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| 1,4-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| 1,4-Dioxane                                    | < 0.30  | 0.30         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| 2,2,4-trimethylpentane                         | 28      | 6.0          |      | ppbV                | 40 | 4/20/2018 4:01:00 PM |
| 4-ethyltoluene                                 | 2.6     | 1.5          |      | ppbV                | 10 | 4/18/2018 2:38:00 PM |
| Acetone                                        | 7.0     | 3.0          |      | ppbV                | 10 | 4/18/2018 2:38:00 PM |
| Allyl chloride                                 | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Benzene                                        | 20      | 1.5          |      | ppbV                | 10 | 4/18/2018 2:38:00 PM |
| Benzyl chloride                                | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Bromodichloromethane                           | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Bromoform                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Bromomethane                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Carbon disulfide                               | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Carbon tetrachloride                           | < 0.030 | 0.030        |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Chlorobenzene                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Chloroethane                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Chloroform                                     | 0.44    | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Chloromethane                                  | 0.55    | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| cis-1,2-Dichloroethene                         | < 0.040 | 0.040        |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| cis-1,3-Dichloropropene                        | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Cyclohexane                                    | 15      | 1.5          |      | ppbV                | 10 | 4/18/2018 2:38:00 PM |
| Dibromochloromethane                           | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Ethyl acetate                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | ** | 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    |    |                                           |

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Date: 23-Apr-18

|                   |                                         |                          |                 |
|-------------------|-----------------------------------------|--------------------------|-----------------|
| <b>CLIENT:</b>    | Ravi Engineering & Land Surveying, P.C. | <b>Client Sample ID:</b> | IA-702-20180413 |
| <b>Lab Order:</b> | C1804026                                | <b>Tag Number:</b>       | 101.385         |
| <b>Project:</b>   | 690 Portland Ave                        | <b>Collection Date:</b>  | 4/12/2018       |
| <b>Lab ID:</b>    | C1804026-001A                           | <b>Matrix:</b>           | AIR             |

| Analyses                                       | Result  | **Limit      | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|---------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |         | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| Ethylbenzene                                   | 14      | 1.5          |      | ppbV                | 10 | 4/18/2018 2:38:00 PM |
| Freon 11                                       | 0.24    | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Freon 113                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Freon 114                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Freon 12                                       | 0.44    | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Heptane                                        | 21      | 1.5          |      | ppbV                | 10 | 4/18/2018 2:38:00 PM |
| Hexachloro-1,3-butadiene                       | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Hexane                                         | 35      | 6.0          |      | ppbV                | 40 | 4/20/2018 4:01:00 PM |
| Isopropyl alcohol                              | 13      | 1.5          |      | ppbV                | 10 | 4/18/2018 2:38:00 PM |
| m&p-Xylene                                     | 42      | 12           |      | ppbV                | 40 | 4/20/2018 4:01:00 PM |
| Methyl Butyl Ketone                            | < 0.30  | 0.30         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Methyl Ethyl Ketone                            | 1.5     | 0.30         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Methyl Isobutyl Ketone                         | < 0.30  | 0.30         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Methyl tert-butyl ether                        | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Methylene chloride                             | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| o-Xylene                                       | 17      | 1.5          |      | ppbV                | 10 | 4/18/2018 2:38:00 PM |
| Propylene                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Styrene                                        | 0.71    | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Tetrachloroethylene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Tetrahydrofuran                                | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Toluene                                        | 94      | 6.0          |      | ppbV                | 40 | 4/20/2018 4:01:00 PM |
| trans-1,2-Dichloroethene                       | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| trans-1,3-Dichloropropene                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Trichloroethene                                | < 0.030 | 0.030        |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Vinyl acetate                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Vinyl Bromide                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Vinyl chloride                                 | < 0.040 | 0.040        |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Surr: Bromofluorobenzene                       | 102     | 70-130       |      | %REC                | 1  | 4/20/2018 3:09:00 PM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | ** | 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    |    |                                           |



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Date: 23-Apr-18

|                   |                                         |                          |                 |
|-------------------|-----------------------------------------|--------------------------|-----------------|
| <b>CLIENT:</b>    | Ravi Engineering & Land Surveying, P.C. | <b>Client Sample ID:</b> | IA-708-20180413 |
| <b>Lab Order:</b> | C1804026                                | <b>Tag Number:</b>       | 367.396         |
| <b>Project:</b>   | 690 Portland Ave                        | <b>Collection Date:</b>  | 4/12/2018       |
| <b>Lab ID:</b>    | C1804026-002A                           | <b>Matrix:</b>           | AIR             |

| Analyses                                       | Result  | **Limit      | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|---------|--------------|------|---------------------|----|----------------------|
| <b>FIELD PARAMETERS</b>                        |         | <b>FLD</b>   |      | Analyst:            |    |                      |
| Lab Vacuum In                                  | -3      |              |      | "Hg                 |    | 4/16/2018            |
| Lab Vacuum Out                                 | -30     |              |      | "Hg                 |    | 4/16/2018            |
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |         | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| 1,1,1-Trichloroethane                          | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| 1,1,2,2-Tetrachloroethane                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| 1,1,2-Trichloroethane                          | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| 1,1-Dichloroethane                             | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| 1,1-Dichloroethene                             | < 0.040 | 0.040        |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| 1,2,4-Trichlorobenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| 1,2,4-Trimethylbenzene                         | 0.22    | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| 1,2-Dibromoethane                              | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| 1,2-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| 1,2-Dichloroethane                             | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| 1,2-Dichloropropane                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| 1,3,5-Trimethylbenzene                         | 0.15    | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| 1,3-butadiene                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| 1,3-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| 1,4-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| 1,4-Dioxane                                    | < 0.30  | 0.30         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| 2,2,4-trimethylpentane                         | 0.11    | 0.15         | J    | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| 4-ethyltoluene                                 | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Acetone                                        | 11      | 3.0          |      | ppbV                | 10 | 4/18/2018 3:15:00 PM |
| Allyl chloride                                 | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Benzene                                        | 0.30    | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Benzyl chloride                                | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Bromodichloromethane                           | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Bromoform                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Bromomethane                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Carbon disulfide                               | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Carbon tetrachloride                           | 0.10    | 0.030        |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Chlorobenzene                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Chloroethane                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Chloroform                                     | 0.14    | 0.15         | J    | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Chloromethane                                  | 0.48    | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| cis-1,2-Dichloroethene                         | < 0.040 | 0.040        |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| cis-1,3-Dichloropropene                        | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Cyclohexane                                    | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Dibromochloromethane                           | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Ethyl acetate                                  | 0.49    | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | ** | 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    |    |                                           |

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Date: 23-Apr-18

|                   |                                         |                          |                 |
|-------------------|-----------------------------------------|--------------------------|-----------------|
| <b>CLIENT:</b>    | Ravi Engineering & Land Surveying, P.C. | <b>Client Sample ID:</b> | IA-708-20180413 |
| <b>Lab Order:</b> | C1804026                                | <b>Tag Number:</b>       | 367.396         |
| <b>Project:</b>   | 690 Portland Ave                        | <b>Collection Date:</b>  | 4/12/2018       |
| <b>Lab ID:</b>    | C1804026-002A                           | <b>Matrix:</b>           | AIR             |

| Analyses                                       | Result  | **Limit      | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|---------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |         | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| Ethylbenzene                                   | 0.14    | 0.15         | J    | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Freon 11                                       | 0.23    | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Freon 113                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Freon 114                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Freon 12                                       | 0.48    | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Heptane                                        | 0.39    | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Hexachloro-1,3-butadiene                       | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Hexane                                         | 0.18    | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Isopropyl alcohol                              | 1.1     | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| m&p-Xylene                                     | 0.48    | 0.30         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Methyl Butyl Ketone                            | < 0.30  | 0.30         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Methyl Ethyl Ketone                            | 0.70    | 0.30         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Methyl Isobutyl Ketone                         | < 0.30  | 0.30         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Methyl tert-butyl ether                        | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Methylene chloride                             | 0.79    | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| o-Xylene                                       | 0.21    | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Propylene                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Styrene                                        | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Tetrachloroethylene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Tetrahydrofuran                                | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Toluene                                        | 0.61    | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| trans-1,2-Dichloroethene                       | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| trans-1,3-Dichloropropene                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Trichloroethene                                | 0.050   | 0.030        |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Vinyl acetate                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Vinyl Bromide                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Vinyl chloride                                 | < 0.040 | 0.040        |      | ppbV                | 1  | 4/20/2018 4:45:00 PM |
| Surr: Bromofluorobenzene                       | 95.0    | 70-130       |      | %REC                | 1  | 4/20/2018 4:45:00 PM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | ** | 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: 23-Apr-18

|                   |                                         |                          |                 |
|-------------------|-----------------------------------------|--------------------------|-----------------|
| <b>CLIENT:</b>    | Ravi Engineering & Land Surveying, P.C. | <b>Client Sample ID:</b> | IA-714-20180413 |
| <b>Lab Order:</b> | C1804026                                | <b>Tag Number:</b>       | 327.453         |
| <b>Project:</b>   | 690 Portland Ave                        | <b>Collection Date:</b>  | 4/12/2018       |
| <b>Lab ID:</b>    | C1804026-003A                           | <b>Matrix:</b>           | AIR             |

| Analyses                                       | Result  | **Limit      | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|---------|--------------|------|---------------------|----|----------------------|
| <b>FIELD PARAMETERS</b>                        |         | <b>FLD</b>   |      | Analyst:            |    |                      |
| Lab Vacuum In                                  | -2      |              |      | "Hg                 |    | 4/16/2018            |
| Lab Vacuum Out                                 | -30     |              |      | "Hg                 |    | 4/16/2018            |
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |         | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| 1,1,1-Trichloroethane                          | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| 1,1,2,2-Tetrachloroethane                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| 1,1,2-Trichloroethane                          | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| 1,1-Dichloroethane                             | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| 1,1-Dichloroethene                             | < 0.040 | 0.040        |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| 1,2,4-Trichlorobenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| 1,2,4-Trimethylbenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| 1,2-Dibromoethane                              | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| 1,2-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| 1,2-Dichloroethane                             | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| 1,2-Dichloropropane                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| 1,3,5-Trimethylbenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| 1,3-butadiene                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| 1,3-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| 1,4-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| 1,4-Dioxane                                    | < 0.30  | 0.30         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| 2,2,4-trimethylpentane                         | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| 4-ethyltoluene                                 | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Acetone                                        | 26      | 6.0          |      | ppbV                | 20 | 4/20/2018 6:13:00 PM |
| Allyl chloride                                 | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Benzene                                        | 0.22    | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Benzyl chloride                                | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Bromodichloromethane                           | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Bromoform                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Bromomethane                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Carbon disulfide                               | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Carbon tetrachloride                           | 0.10    | 0.030        |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Chlorobenzene                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Chloroethane                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Chloroform                                     | 0.17    | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Chloromethane                                  | 0.52    | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| cis-1,2-Dichloroethene                         | < 0.040 | 0.040        |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| cis-1,3-Dichloropropene                        | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Cyclohexane                                    | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Dibromochloromethane                           | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Ethyl acetate                                  | 0.39    | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | ** | 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: 23-Apr-18

|                   |                                         |                          |                 |
|-------------------|-----------------------------------------|--------------------------|-----------------|
| <b>CLIENT:</b>    | Ravi Engineering & Land Surveying, P.C. | <b>Client Sample ID:</b> | IA-714-20180413 |
| <b>Lab Order:</b> | C1804026                                | <b>Tag Number:</b>       | 327.453         |
| <b>Project:</b>   | 690 Portland Ave                        | <b>Collection Date:</b>  | 4/12/2018       |
| <b>Lab ID:</b>    | C1804026-003A                           | <b>Matrix:</b>           | AIR             |

| Analyses                                       | Result  | **Limit      | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|---------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |         | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| Ethylbenzene                                   | 0.12    | 0.15         | J    | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Freon 11                                       | 0.24    | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Freon 113                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Freon 114                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Freon 12                                       | 0.50    | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Heptane                                        | 0.22    | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Hexachloro-1,3-butadiene                       | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Hexane                                         | 0.14    | 0.15         | J    | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Isopropyl alcohol                              | 5.2     | 3.0          |      | ppbV                | 20 | 4/20/2018 6:13:00 PM |
| m&p-Xylene                                     | 0.35    | 0.30         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Methyl Butyl Ketone                            | < 0.30  | 0.30         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Methyl Ethyl Ketone                            | 0.43    | 0.30         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Methyl Isobutyl Ketone                         | < 0.30  | 0.30         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Methyl tert-butyl ether                        | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Methylene chloride                             | 1.2     | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| o-Xylene                                       | 0.15    | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Propylene                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Styrene                                        | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Tetrachloroethylene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Tetrahydrofuran                                | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Toluene                                        | 0.41    | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| trans-1,2-Dichloroethene                       | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| trans-1,3-Dichloropropene                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Trichloroethene                                | < 0.030 | 0.030        |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Vinyl acetate                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Vinyl Bromide                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Vinyl chloride                                 | < 0.040 | 0.040        |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Surr: Bromofluorobenzene                       | 87.0    | 70-130       |      | %REC                | 1  | 4/20/2018 5:36:00 PM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | ** | 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: 23-Apr-18

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1804026  
**Project:** 690 Portland Ave  
**Lab ID:** C1804026-004A

**Client Sample ID:** OA-20180413  
**Tag Number:** 1182.432  
**Collection Date:** 4/12/2018  
**Matrix:** AIR

| Analyses                                       | Result  | **Limit      | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|---------|--------------|------|---------------------|----|----------------------|
| <b>FIELD PARAMETERS</b>                        |         | <b>FLD</b>   |      | Analyst:            |    |                      |
| Lab Vacuum In                                  | -1      |              |      | "Hg                 |    | 4/16/2018            |
| Lab Vacuum Out                                 | -30     |              |      | "Hg                 |    | 4/16/2018            |
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |         | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| 1,1,1-Trichloroethane                          | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| 1,1,2,2-Tetrachloroethane                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| 1,1,2-Trichloroethane                          | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| 1,1-Dichloroethane                             | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| 1,1-Dichloroethene                             | < 0.040 | 0.040        |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| 1,2,4-Trichlorobenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| 1,2,4-Trimethylbenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| 1,2-Dibromoethane                              | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| 1,2-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| 1,2-Dichloroethane                             | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| 1,2-Dichloropropane                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| 1,3,5-Trimethylbenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| 1,3-butadiene                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| 1,3-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| 1,4-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| 1,4-Dioxane                                    | < 0.30  | 0.30         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| 2,2,4-trimethylpentane                         | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| 4-ethyltoluene                                 | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Acetone                                        | 6.3     | 3.0          |      | ppbV                | 10 | 4/18/2018 4:28:00 PM |
| Allyl chloride                                 | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Benzene                                        | 0.22    | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Benzyl chloride                                | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Bromodichloromethane                           | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Bromoform                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Bromomethane                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Carbon disulfide                               | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Carbon tetrachloride                           | 0.11    | 0.030        |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Chlorobenzene                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Chloroethane                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Chloroform                                     | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Chloromethane                                  | 0.39    | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| cis-1,2-Dichloroethene                         | < 0.040 | 0.040        |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| cis-1,3-Dichloropropene                        | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Cyclohexane                                    | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Dibromochloromethane                           | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Ethyl acetate                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | ** | 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: 23-Apr-18

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1804026  
**Project:** 690 Portland Ave  
**Lab ID:** C1804026-004A

**Client Sample ID:** OA-20180413  
**Tag Number:** 1182.432  
**Collection Date:** 4/12/2018  
**Matrix:** AIR

| Analyses                                       | Result  | **Limit      | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|---------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |         | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| Ethylbenzene                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Freon 11                                       | 0.25    | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Freon 113                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Freon 114                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Freon 12                                       | 0.50    | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Heptane                                        | 0.11    | 0.15         | J    | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Hexachloro-1,3-butadiene                       | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Hexane                                         | 0.15    | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Isopropyl alcohol                              | 1.2     | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| m&p-Xylene                                     | 0.19    | 0.30         | J    | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Methyl Butyl Ketone                            | < 0.30  | 0.30         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Methyl Ethyl Ketone                            | 0.32    | 0.30         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Methyl Isobutyl Ketone                         | < 0.30  | 0.30         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Methyl tert-butyl ether                        | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Methylene chloride                             | 0.82    | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| o-Xylene                                       | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Propylene                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Styrene                                        | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Tetrachloroethylene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Tetrahydrofuran                                | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Toluene                                        | 0.31    | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| trans-1,2-Dichloroethene                       | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| trans-1,3-Dichloropropene                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Trichloroethene                                | 0.080   | 0.030        |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Vinyl acetate                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Vinyl Bromide                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Vinyl chloride                                 | < 0.040 | 0.040        |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Surr: Bromofluorobenzene                       | 83.0    | 70-130       |      | %REC                | 1  | 4/20/2018 7:30:00 PM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | ** | 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: 23-Apr-18

|                   |                                         |                          |                 |
|-------------------|-----------------------------------------|--------------------------|-----------------|
| <b>CLIENT:</b>    | Ravi Engineering & Land Surveying, P.C. | <b>Client Sample ID:</b> | IA-702-20180413 |
| <b>Lab Order:</b> | C1804026                                | <b>Tag Number:</b>       | 101.385         |
| <b>Project:</b>   | 690 Portland Ave                        | <b>Collection Date:</b>  | 4/12/2018       |
| <b>Lab ID:</b>    | C1804026-001A                           | <b>Matrix:</b>           | AIR             |

| Analyses                                       | Result | **Limit      | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|--------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |        | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| 1,1,1-Trichloroethane                          | < 0.82 | 0.82         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| 1,1,2,2-Tetrachloroethane                      | < 1.0  | 1.0          |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| 1,1,2-Trichloroethane                          | < 0.82 | 0.82         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| 1,1-Dichloroethane                             | < 0.61 | 0.61         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| 1,1-Dichloroethene                             | < 0.16 | 0.16         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| 1,2,4-Trichlorobenzene                         | < 1.1  | 1.1          |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| 1,2,4-Trimethylbenzene                         | 33     | 7.4          |      | ug/m3               | 10 | 4/18/2018 2:38:00 PM |
| 1,2-Dibromoethane                              | < 1.2  | 1.2          |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| 1,2-Dichlorobenzene                            | < 0.90 | 0.90         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| 1,2-Dichloroethane                             | < 0.61 | 0.61         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| 1,2-Dichloropropane                            | < 0.69 | 0.69         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| 1,3,5-Trimethylbenzene                         | 12     | 7.4          |      | ug/m3               | 10 | 4/18/2018 2:38:00 PM |
| 1,3-butadiene                                  | < 0.33 | 0.33         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| 1,3-Dichlorobenzene                            | < 0.90 | 0.90         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| 1,4-Dichlorobenzene                            | < 0.90 | 0.90         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| 1,4-Dioxane                                    | < 1.1  | 1.1          |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| 2,2,4-trimethylpentane                         | 130    | 28           |      | ug/m3               | 40 | 4/20/2018 4:01:00 PM |
| 4-ethyltoluene                                 | 13     | 7.4          |      | ug/m3               | 10 | 4/18/2018 2:38:00 PM |
| Acetone                                        | 17     | 7.1          |      | ug/m3               | 10 | 4/18/2018 2:38:00 PM |
| Allyl chloride                                 | < 0.47 | 0.47         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| Benzene                                        | 65     | 4.8          |      | ug/m3               | 10 | 4/18/2018 2:38:00 PM |
| Benzyl chloride                                | < 0.86 | 0.86         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| Bromodichloromethane                           | < 1.0  | 1.0          |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| Bromoform                                      | < 1.6  | 1.6          |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| Bromomethane                                   | < 0.58 | 0.58         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| Carbon disulfide                               | < 0.47 | 0.47         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| Carbon tetrachloride                           | < 0.19 | 0.19         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| Chlorobenzene                                  | < 0.69 | 0.69         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| Chloroethane                                   | < 0.40 | 0.40         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| Chloroform                                     | 2.1    | 0.73         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| Chloromethane                                  | 1.1    | 0.31         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| cis-1,2-Dichloroethene                         | < 0.16 | 0.16         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| cis-1,3-Dichloropropene                        | < 0.68 | 0.68         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| Cyclohexane                                    | 51     | 5.2          |      | ug/m3               | 10 | 4/18/2018 2:38:00 PM |
| Dibromochloromethane                           | < 1.3  | 1.3          |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| Ethyl acetate                                  | < 0.54 | 0.54         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| Ethylbenzene                                   | 59     | 6.5          |      | ug/m3               | 10 | 4/18/2018 2:38:00 PM |
| Freon 11                                       | 1.3    | 0.84         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| Freon 113                                      | < 1.1  | 1.1          |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| Freon 114                                      | < 1.0  | 1.0          |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | ** | 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: 23-Apr-18

|                   |                                         |                          |                 |
|-------------------|-----------------------------------------|--------------------------|-----------------|
| <b>CLIENT:</b>    | Ravi Engineering & Land Surveying, P.C. | <b>Client Sample ID:</b> | IA-702-20180413 |
| <b>Lab Order:</b> | C1804026                                | <b>Tag Number:</b>       | 101.385         |
| <b>Project:</b>   | 690 Portland Ave                        | <b>Collection Date:</b>  | 4/12/2018       |
| <b>Lab ID:</b>    | C1804026-001A                           | <b>Matrix:</b>           | AIR             |

| Analyses                                       | Result | **Limit      | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|--------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |        | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| Freon 12                                       | 2.2    | 0.74         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| Heptane                                        | 85     | 6.1          |      | ug/m3               | 10 | 4/18/2018 2:38:00 PM |
| Hexachloro-1,3-butadiene                       | < 1.6  | 1.6          |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| Hexane                                         | 120    | 21           |      | ug/m3               | 40 | 4/20/2018 4:01:00 PM |
| Isopropyl alcohol                              | 32     | 3.7          |      | ug/m3               | 10 | 4/18/2018 2:38:00 PM |
| m&p-Xylene                                     | 180    | 52           |      | ug/m3               | 40 | 4/20/2018 4:01:00 PM |
| Methyl Butyl Ketone                            | < 1.2  | 1.2          |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| Methyl Ethyl Ketone                            | 4.4    | 0.88         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| Methyl Isobutyl Ketone                         | < 1.2  | 1.2          |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| Methyl tert-butyl ether                        | < 0.54 | 0.54         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| Methylene chloride                             | < 0.52 | 0.52         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| o-Xylene                                       | 73     | 6.5          |      | ug/m3               | 10 | 4/18/2018 2:38:00 PM |
| Propylene                                      | < 0.26 | 0.26         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| Styrene                                        | 3.0    | 0.64         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| Tetrachloroethylene                            | < 1.0  | 1.0          |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| Tetrahydrofuran                                | < 0.44 | 0.44         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| Toluene                                        | 350    | 23           |      | ug/m3               | 40 | 4/20/2018 4:01:00 PM |
| trans-1,2-Dichloroethene                       | < 0.59 | 0.59         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| trans-1,3-Dichloropropene                      | < 0.68 | 0.68         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| Trichloroethene                                | < 0.16 | 0.16         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| Vinyl acetate                                  | < 0.53 | 0.53         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| Vinyl Bromide                                  | < 0.66 | 0.66         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |
| Vinyl chloride                                 | < 0.10 | 0.10         |      | ug/m3               | 1  | 4/20/2018 3:09:00 PM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | ** | 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: 23-Apr-18

|                   |                                         |                          |                 |
|-------------------|-----------------------------------------|--------------------------|-----------------|
| <b>CLIENT:</b>    | Ravi Engineering & Land Surveying, P.C. | <b>Client Sample ID:</b> | IA-708-20180413 |
| <b>Lab Order:</b> | C1804026                                | <b>Tag Number:</b>       | 367.396         |
| <b>Project:</b>   | 690 Portland Ave                        | <b>Collection Date:</b>  | 4/12/2018       |
| <b>Lab ID:</b>    | C1804026-002A                           | <b>Matrix:</b>           | AIR             |

| Analyses                                       | Result | **Limit      | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|--------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |        | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| 1,1,1-Trichloroethane                          | < 0.82 | 0.82         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| 1,1,2,2-Tetrachloroethane                      | < 1.0  | 1.0          |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| 1,1,2-Trichloroethane                          | < 0.82 | 0.82         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| 1,1-Dichloroethane                             | < 0.61 | 0.61         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| 1,1-Dichloroethene                             | < 0.16 | 0.16         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| 1,2,4-Trichlorobenzene                         | < 1.1  | 1.1          |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| 1,2,4-Trimethylbenzene                         | 1.1    | 0.74         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| 1,2-Dibromoethane                              | < 1.2  | 1.2          |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| 1,2-Dichlorobenzene                            | < 0.90 | 0.90         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| 1,2-Dichloroethane                             | < 0.61 | 0.61         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| 1,2-Dichloropropane                            | < 0.69 | 0.69         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| 1,3,5-Trimethylbenzene                         | 0.74   | 0.74         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| 1,3-butadiene                                  | < 0.33 | 0.33         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| 1,3-Dichlorobenzene                            | < 0.90 | 0.90         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| 1,4-Dichlorobenzene                            | < 0.90 | 0.90         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| 1,4-Dioxane                                    | < 1.1  | 1.1          |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| 2,2,4-trimethylpentane                         | 0.51   | 0.70         | J    | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| 4-ethyltoluene                                 | < 0.74 | 0.74         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Acetone                                        | 27     | 7.1          |      | ug/m3               | 10 | 4/18/2018 3:15:00 PM |
| Allyl chloride                                 | < 0.47 | 0.47         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Benzene                                        | 0.96   | 0.48         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Benzyl chloride                                | < 0.86 | 0.86         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Bromodichloromethane                           | < 1.0  | 1.0          |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Bromoform                                      | < 1.6  | 1.6          |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Bromomethane                                   | < 0.58 | 0.58         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Carbon disulfide                               | < 0.47 | 0.47         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Carbon tetrachloride                           | 0.63   | 0.19         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Chlorobenzene                                  | < 0.69 | 0.69         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Chloroethane                                   | < 0.40 | 0.40         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Chloroform                                     | 0.68   | 0.73         | J    | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Chloromethane                                  | 0.99   | 0.31         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| cis-1,2-Dichloroethene                         | < 0.16 | 0.16         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| cis-1,3-Dichloropropene                        | < 0.68 | 0.68         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Cyclohexane                                    | < 0.52 | 0.52         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Dibromochloromethane                           | < 1.3  | 1.3          |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Ethyl acetate                                  | 1.8    | 0.54         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Ethylbenzene                                   | 0.61   | 0.65         | J    | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Freon 11                                       | 1.3    | 0.84         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Freon 113                                      | < 1.1  | 1.1          |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Freon 114                                      | < 1.0  | 1.0          |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | ** | 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:** 23-Apr-18

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1804026  
**Project:** 690 Portland Ave  
**Lab ID:** C1804026-002A

**Client Sample ID:** IA-708-20180413  
**Tag Number:** 367.396  
**Collection Date:** 4/12/2018  
**Matrix:** AIR

| Analyses                                       | Result | **Limit      | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|--------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |        | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| Freon 12                                       | 2.4    | 0.74         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Heptane                                        | 1.6    | 0.61         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Hexachloro-1,3-butadiene                       | < 1.6  | 1.6          |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Hexane                                         | 0.63   | 0.53         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Isopropyl alcohol                              | 2.7    | 0.37         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| m&p-Xylene                                     | 2.1    | 1.3          |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Methyl Butyl Ketone                            | < 1.2  | 1.2          |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Methyl Ethyl Ketone                            | 2.1    | 0.88         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Methyl Isobutyl Ketone                         | < 1.2  | 1.2          |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Methyl tert-butyl ether                        | < 0.54 | 0.54         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Methylene chloride                             | 2.7    | 0.52         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| o-Xylene                                       | 0.91   | 0.65         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Propylene                                      | < 0.26 | 0.26         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Styrene                                        | < 0.64 | 0.64         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Tetrachloroethylene                            | < 1.0  | 1.0          |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Tetrahydrofuran                                | < 0.44 | 0.44         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Toluene                                        | 2.3    | 0.57         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| trans-1,2-Dichloroethene                       | < 0.59 | 0.59         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| trans-1,3-Dichloropropene                      | < 0.68 | 0.68         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Trichloroethene                                | 0.27   | 0.16         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Vinyl acetate                                  | < 0.53 | 0.53         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Vinyl Bromide                                  | < 0.66 | 0.66         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |
| Vinyl chloride                                 | < 0.10 | 0.10         |      | ug/m3               | 1  | 4/20/2018 4:45:00 PM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | ** | 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: 23-Apr-18

|                   |                                         |                          |                 |
|-------------------|-----------------------------------------|--------------------------|-----------------|
| <b>CLIENT:</b>    | Ravi Engineering & Land Surveying, P.C. | <b>Client Sample ID:</b> | IA-714-20180413 |
| <b>Lab Order:</b> | C1804026                                | <b>Tag Number:</b>       | 327.453         |
| <b>Project:</b>   | 690 Portland Ave                        | <b>Collection Date:</b>  | 4/12/2018       |
| <b>Lab ID:</b>    | C1804026-003A                           | <b>Matrix:</b>           | AIR             |

| Analyses                                       | Result | **Limit      | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|--------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |        | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| 1,1,1-Trichloroethane                          | < 0.82 | 0.82         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| 1,1,2,2-Tetrachloroethane                      | < 1.0  | 1.0          |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| 1,1,2-Trichloroethane                          | < 0.82 | 0.82         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| 1,1-Dichloroethane                             | < 0.61 | 0.61         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| 1,1-Dichloroethene                             | < 0.16 | 0.16         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| 1,2,4-Trichlorobenzene                         | < 1.1  | 1.1          |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| 1,2,4-Trimethylbenzene                         | < 0.74 | 0.74         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| 1,2-Dibromoethane                              | < 1.2  | 1.2          |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| 1,2-Dichlorobenzene                            | < 0.90 | 0.90         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| 1,2-Dichloroethane                             | < 0.61 | 0.61         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| 1,2-Dichloropropane                            | < 0.69 | 0.69         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| 1,3,5-Trimethylbenzene                         | < 0.74 | 0.74         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| 1,3-butadiene                                  | < 0.33 | 0.33         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| 1,3-Dichlorobenzene                            | < 0.90 | 0.90         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| 1,4-Dichlorobenzene                            | < 0.90 | 0.90         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| 1,4-Dioxane                                    | < 1.1  | 1.1          |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| 2,2,4-trimethylpentane                         | < 0.70 | 0.70         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| 4-ethyltoluene                                 | < 0.74 | 0.74         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Acetone                                        | 62     | 14           |      | ug/m3               | 20 | 4/20/2018 6:13:00 PM |
| Allyl chloride                                 | < 0.47 | 0.47         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Benzene                                        | 0.70   | 0.48         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Benzyl chloride                                | < 0.86 | 0.86         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Bromodichloromethane                           | < 1.0  | 1.0          |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Bromoform                                      | < 1.6  | 1.6          |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Bromomethane                                   | < 0.58 | 0.58         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Carbon disulfide                               | < 0.47 | 0.47         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Carbon tetrachloride                           | 0.63   | 0.19         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Chlorobenzene                                  | < 0.69 | 0.69         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Chloroethane                                   | < 0.40 | 0.40         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Chloroform                                     | 0.83   | 0.73         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Chloromethane                                  | 1.1    | 0.31         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| cis-1,2-Dichloroethene                         | < 0.16 | 0.16         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| cis-1,3-Dichloropropene                        | < 0.68 | 0.68         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Cyclohexane                                    | < 0.52 | 0.52         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Dibromochloromethane                           | < 1.3  | 1.3          |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Ethyl acetate                                  | 1.4    | 0.54         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Ethylbenzene                                   | 0.52   | 0.65         | J    | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Freon 11                                       | 1.3    | 0.84         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Freon 113                                      | < 1.1  | 1.1          |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Freon 114                                      | < 1.0  | 1.0          |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | ** | 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: 23-Apr-18

|                   |                                         |                          |                 |
|-------------------|-----------------------------------------|--------------------------|-----------------|
| <b>CLIENT:</b>    | Ravi Engineering & Land Surveying, P.C. | <b>Client Sample ID:</b> | IA-714-20180413 |
| <b>Lab Order:</b> | C1804026                                | <b>Tag Number:</b>       | 327.453         |
| <b>Project:</b>   | 690 Portland Ave                        | <b>Collection Date:</b>  | 4/12/2018       |
| <b>Lab ID:</b>    | C1804026-003A                           | <b>Matrix:</b>           | AIR             |

| Analyses                                       | Result | **Limit      | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|--------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |        | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| Freon 12                                       | 2.5    | 0.74         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Heptane                                        | 0.90   | 0.61         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Hexachloro-1,3-butadiene                       | < 1.6  | 1.6          |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Hexane                                         | 0.49   | 0.53         | J    | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Isopropyl alcohol                              | 13     | 7.4          |      | ug/m3               | 20 | 4/20/2018 6:13:00 PM |
| m&p-Xylene                                     | 1.5    | 1.3          |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Methyl Butyl Ketone                            | < 1.2  | 1.2          |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Methyl Ethyl Ketone                            | 1.3    | 0.88         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Methyl Isobutyl Ketone                         | < 1.2  | 1.2          |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Methyl tert-butyl ether                        | < 0.54 | 0.54         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Methylene chloride                             | 4.3    | 0.52         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| o-Xylene                                       | 0.65   | 0.65         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Propylene                                      | < 0.26 | 0.26         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Styrene                                        | < 0.64 | 0.64         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Tetrachloroethylene                            | < 1.0  | 1.0          |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Tetrahydrofuran                                | < 0.44 | 0.44         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Toluene                                        | 1.5    | 0.57         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| trans-1,2-Dichloroethene                       | < 0.59 | 0.59         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| trans-1,3-Dichloropropene                      | < 0.68 | 0.68         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Trichloroethene                                | < 0.16 | 0.16         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Vinyl acetate                                  | < 0.53 | 0.53         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Vinyl Bromide                                  | < 0.66 | 0.66         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |
| Vinyl chloride                                 | < 0.10 | 0.10         |      | ug/m3               | 1  | 4/20/2018 5:36:00 PM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | ** | 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: 23-Apr-18

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1804026  
**Project:** 690 Portland Ave  
**Lab ID:** C1804026-004A

**Client Sample ID:** OA-20180413  
**Tag Number:** 1182.432  
**Collection Date:** 4/12/2018  
**Matrix:** AIR

| Analyses                                       | Result | **Limit      | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|--------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |        | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| 1,1,1-Trichloroethane                          | < 0.82 | 0.82         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| 1,1,2,2-Tetrachloroethane                      | < 1.0  | 1.0          |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| 1,1,2-Trichloroethane                          | < 0.82 | 0.82         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| 1,1-Dichloroethane                             | < 0.61 | 0.61         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| 1,1-Dichloroethene                             | < 0.16 | 0.16         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| 1,2,4-Trichlorobenzene                         | < 1.1  | 1.1          |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| 1,2,4-Trimethylbenzene                         | < 0.74 | 0.74         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| 1,2-Dibromoethane                              | < 1.2  | 1.2          |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| 1,2-Dichlorobenzene                            | < 0.90 | 0.90         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| 1,2-Dichloroethane                             | < 0.61 | 0.61         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| 1,2-Dichloropropane                            | < 0.69 | 0.69         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| 1,3,5-Trimethylbenzene                         | < 0.74 | 0.74         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| 1,3-butadiene                                  | < 0.33 | 0.33         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| 1,3-Dichlorobenzene                            | < 0.90 | 0.90         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| 1,4-Dichlorobenzene                            | < 0.90 | 0.90         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| 1,4-Dioxane                                    | < 1.1  | 1.1          |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| 2,2,4-trimethylpentane                         | < 0.70 | 0.70         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| 4-ethyltoluene                                 | < 0.74 | 0.74         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Acetone                                        | 15     | 7.1          |      | ug/m3               | 10 | 4/18/2018 4:28:00 PM |
| Allyl chloride                                 | < 0.47 | 0.47         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Benzene                                        | 0.70   | 0.48         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Benzyl chloride                                | < 0.86 | 0.86         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Bromodichloromethane                           | < 1.0  | 1.0          |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Bromoform                                      | < 1.6  | 1.6          |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Bromomethane                                   | < 0.58 | 0.58         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Carbon disulfide                               | < 0.47 | 0.47         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Carbon tetrachloride                           | 0.69   | 0.19         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Chlorobenzene                                  | < 0.69 | 0.69         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Chloroethane                                   | < 0.40 | 0.40         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Chloroform                                     | < 0.73 | 0.73         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Chloromethane                                  | 0.81   | 0.31         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| cis-1,2-Dichloroethene                         | < 0.16 | 0.16         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| cis-1,3-Dichloropropene                        | < 0.68 | 0.68         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Cyclohexane                                    | < 0.52 | 0.52         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Dibromochloromethane                           | < 1.3  | 1.3          |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Ethyl acetate                                  | < 0.54 | 0.54         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Ethylbenzene                                   | < 0.65 | 0.65         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Freon 11                                       | 1.4    | 0.84         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Freon 113                                      | < 1.1  | 1.1          |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Freon 114                                      | < 1.0  | 1.0          |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | ** | 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: 23-Apr-18

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1804026  
**Project:** 690 Portland Ave  
**Lab ID:** C1804026-004A

**Client Sample ID:** OA-20180413  
**Tag Number:** 1182.432  
**Collection Date:** 4/12/2018  
**Matrix:** AIR

| Analyses                                       | Result | **Limit      | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|--------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |        | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| Freon 12                                       | 2.5    | 0.74         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Heptane                                        | 0.45   | 0.61         | J    | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Hexachloro-1,3-butadiene                       | < 1.6  | 1.6          |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Hexane                                         | 0.53   | 0.53         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Isopropyl alcohol                              | 2.9    | 0.37         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| m&p-Xylene                                     | 0.82   | 1.3          | J    | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Methyl Butyl Ketone                            | < 1.2  | 1.2          |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Methyl Ethyl Ketone                            | 0.94   | 0.88         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Methyl Isobutyl Ketone                         | < 1.2  | 1.2          |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Methyl tert-butyl ether                        | < 0.54 | 0.54         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Methylene chloride                             | 2.8    | 0.52         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| o-Xylene                                       | < 0.65 | 0.65         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Propylene                                      | < 0.26 | 0.26         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Styrene                                        | < 0.64 | 0.64         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Tetrachloroethylene                            | < 1.0  | 1.0          |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Tetrahydrofuran                                | < 0.44 | 0.44         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Toluene                                        | 1.2    | 0.57         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| trans-1,2-Dichloroethene                       | < 0.59 | 0.59         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| trans-1,3-Dichloropropene                      | < 0.68 | 0.68         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Trichloroethene                                | 0.43   | 0.16         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Vinyl acetate                                  | < 0.53 | 0.53         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Vinyl Bromide                                  | < 0.66 | 0.66         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |
| Vinyl chloride                                 | < 0.10 | 0.10         |      | ug/m3               | 1  | 4/20/2018 7:30:00 PM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | ** | 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: 19-Apr-19

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1904041  
**Project:** 690 Portand Ave  
**Lab ID:** C1904041-001A

**Client Sample ID:** 702-20190410  
**Tag Number:** 595,434  
**Collection Date:** 4/10/2019  
**Matrix:** AIR

| Analyses                                       | Result  | **Limit      | Qual | Units               | DF | Date Analyzed         |
|------------------------------------------------|---------|--------------|------|---------------------|----|-----------------------|
| <b>FIELD PARAMETERS</b>                        |         | <b>FLD</b>   |      | Analyst:            |    |                       |
| Lab Vacuum In                                  | -2      |              |      | "Hg                 |    | 4/12/2019             |
| Lab Vacuum Out                                 | -30     |              |      | "Hg                 |    | 4/12/2019             |
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |         | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                       |
| 1,1,1-Trichloroethane                          | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| 1,1,2,2-Tetrachloroethane                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| 1,1,2-Trichloroethane                          | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| 1,1-Dichloroethane                             | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| 1,1-Dichloroethene                             | < 0.040 | 0.040        |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| 1,2,4-Trichlorobenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| 1,2,4-Trimethylbenzene                         | 0.13    | 0.15         | J    | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| 1,2-Dibromoethane                              | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| 1,2-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| 1,2-Dichloroethane                             | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| 1,2-Dichloropropane                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| 1,3,5-Trimethylbenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| 1,3-butadiene                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| 1,3-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| 1,4-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| 1,4-Dioxane                                    | < 0.30  | 0.30         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| 2,2,4-trimethylpentane                         | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| 4-ethyltoluene                                 | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Acetone                                        | 11      | 1.5          |      | ppbV                | 5  | 4/18/2019 12:16:00 AM |
| Allyl chloride                                 | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Benzene                                        | 0.33    | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Benzyl chloride                                | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Bromodichloromethane                           | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Bromoform                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Bromomethane                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Carbon disulfide                               | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Carbon tetrachloride                           | 0.080   | 0.030        |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Chlorobenzene                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Chloroethane                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Chloroform                                     | 0.31    | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Chloromethane                                  | 0.47    | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| cis-1,2-Dichloroethene                         | < 0.040 | 0.040        |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| cis-1,3-Dichloropropene                        | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Cyclohexane                                    | 0.52    | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Dibromochloromethane                           | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Ethyl acetate                                  | 0.43    | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | ** | 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: 19-Apr-19

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1904041  
**Project:** 690 Portand Ave  
**Lab ID:** C1904041-001A

**Client Sample ID:** 702-20190410  
**Tag Number:** 595,434  
**Collection Date:** 4/10/2019  
**Matrix:** AIR

| Analyses                                       | Result  | **Limit      | Qual | Units               | DF | Date Analyzed         |
|------------------------------------------------|---------|--------------|------|---------------------|----|-----------------------|
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |         | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                       |
| Ethylbenzene                                   | 0.15    | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Freon 11                                       | 0.23    | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Freon 113                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Freon 114                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Freon 12                                       | 0.49    | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Heptane                                        | 0.21    | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Hexachloro-1,3-butadiene                       | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Hexane                                         | 0.36    | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Isopropyl alcohol                              | 11      | 0.75         |      | ppbV                | 5  | 4/18/2019 12:16:00 AM |
| m&p-Xylene                                     | 0.53    | 0.30         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Methyl Butyl Ketone                            | < 0.30  | 0.30         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Methyl Ethyl Ketone                            | 0.38    | 0.30         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Methyl Isobutyl Ketone                         | < 0.30  | 0.30         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Methyl tert-butyl ether                        | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Methylene chloride                             | 0.56    | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| o-Xylene                                       | 0.20    | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Propylene                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Styrene                                        | 0.84    | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Tetrachloroethylene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Tetrahydrofuran                                | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Toluene                                        | 1.6     | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| trans-1,2-Dichloroethene                       | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| trans-1,3-Dichloropropene                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Trichloroethene                                | < 0.030 | 0.030        |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Vinyl acetate                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Vinyl Bromide                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Vinyl chloride                                 | < 0.040 | 0.040        |      | ppbV                | 1  | 4/17/2019 6:00:00 AM  |
| Surr: Bromofluorobenzene                       | 95.0    | 70-130       |      | %REC                | 1  | 4/17/2019 6:00:00 AM  |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | ** | 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: 19-Apr-19

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1904041  
**Project:** 690 Portland Ave  
**Lab ID:** C1904041-002A

**Client Sample ID:** 708-20190410  
**Tag Number:** 589,450  
**Collection Date:** 4/10/2019  
**Matrix:** AIR

| Analyses                                       | Result  | **Limit      | Qual | Units               | DF | Date Analyzed         |
|------------------------------------------------|---------|--------------|------|---------------------|----|-----------------------|
| <b>FIELD PARAMETERS</b>                        |         | <b>FLD</b>   |      | Analyst:            |    |                       |
| Lab Vacuum In                                  | -3      |              |      | "Hg                 |    | 4/12/2019             |
| Lab Vacuum Out                                 | -30     |              |      | "Hg                 |    | 4/12/2019             |
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |         | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                       |
| 1,1,1-Trichloroethane                          | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM  |
| 1,1,2,2-Tetrachloroethane                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM  |
| 1,1,2-Trichloroethane                          | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM  |
| 1,1-Dichloroethane                             | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM  |
| 1,1-Dichloroethene                             | < 0.040 | 0.040        |      | ppbV                | 1  | 4/17/2019 6:40:00 AM  |
| 1,2,4-Trichlorobenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM  |
| 1,2,4-Trimethylbenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM  |
| 1,2-Dibromoethane                              | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM  |
| 1,2-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM  |
| 1,2-Dichloroethane                             | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM  |
| 1,2-Dichloropropane                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM  |
| 1,3,5-Trimethylbenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM  |
| 1,3-butadiene                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM  |
| 1,3-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM  |
| 1,4-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM  |
| 1,4-Dioxane                                    | < 0.30  | 0.30         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM  |
| 2,2,4-trimethylpentane                         | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM  |
| 4-ethyltoluene                                 | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM  |
| Acetone                                        | 7.8     | 1.5          |      | ppbV                | 5  | 4/18/2019 12:54:00 AM |
| Allyl chloride                                 | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM  |
| Benzene                                        | 0.19    | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM  |
| Benzyl chloride                                | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM  |
| Bromodichloromethane                           | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM  |
| Bromoform                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM  |
| Bromomethane                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM  |
| Carbon disulfide                               | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM  |
| Carbon tetrachloride                           | 0.080   | 0.030        |      | ppbV                | 1  | 4/17/2019 6:40:00 AM  |
| Chlorobenzene                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM  |
| Chloroethane                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM  |
| Chloroform                                     | 0.11    | 0.15         | J    | ppbV                | 1  | 4/17/2019 6:40:00 AM  |
| Chloromethane                                  | 0.42    | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM  |
| cis-1,2-Dichloroethene                         | < 0.040 | 0.040        |      | ppbV                | 1  | 4/17/2019 6:40:00 AM  |
| cis-1,3-Dichloropropene                        | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM  |
| Cyclohexane                                    | 0.67    | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM  |
| Dibromochloromethane                           | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM  |
| Ethyl acetate                                  | 0.34    | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM  |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | ** | 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: 19-Apr-19

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1904041  
**Project:** 690 Portand Ave  
**Lab ID:** C1904041-002A

**Client Sample ID:** 708-20190410  
**Tag Number:** 589,450  
**Collection Date:** 4/10/2019  
**Matrix:** AIR

| Analyses                                       | Result  | **Limit      | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|---------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |         | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| Ethylbenzene                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM |
| Freon 11                                       | 0.24    | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM |
| Freon 113                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM |
| Freon 114                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM |
| Freon 12                                       | 0.49    | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM |
| Heptane                                        | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM |
| Hexachloro-1,3-butadiene                       | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM |
| Hexane                                         | 0.11    | 0.15         | J    | ppbV                | 1  | 4/17/2019 6:40:00 AM |
| Isopropyl alcohol                              | 1.7     | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM |
| m&p-Xylene                                     | 0.16    | 0.30         | J    | ppbV                | 1  | 4/17/2019 6:40:00 AM |
| Methyl Butyl Ketone                            | < 0.30  | 0.30         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM |
| Methyl Ethyl Ketone                            | 0.37    | 0.30         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM |
| Methyl Isobutyl Ketone                         | < 0.30  | 0.30         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM |
| Methyl tert-butyl ether                        | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM |
| Methylene chloride                             | 0.27    | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM |
| o-Xylene                                       | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM |
| Propylene                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM |
| Styrene                                        | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM |
| Tetrachloroethylene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM |
| Tetrahydrofuran                                | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM |
| Toluene                                        | 0.42    | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM |
| trans-1,2-Dichloroethene                       | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM |
| trans-1,3-Dichloropropene                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM |
| Trichloroethene                                | < 0.030 | 0.030        |      | ppbV                | 1  | 4/17/2019 6:40:00 AM |
| Vinyl acetate                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM |
| Vinyl Bromide                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 6:40:00 AM |
| Vinyl chloride                                 | < 0.040 | 0.040        |      | ppbV                | 1  | 4/17/2019 6:40:00 AM |
| Surr: Bromofluorobenzene                       | 94.0    | 70-130       |      | %REC                | 1  | 4/17/2019 6:40:00 AM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | ** | 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: 19-Apr-19

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1904041  
**Project:** 690 Portand Ave  
**Lab ID:** C1904041-003A

**Client Sample ID:** 714-20190410  
**Tag Number:** 603,396  
**Collection Date:** 4/10/2019  
**Matrix:** AIR

| Analyses                                       | Result  | **Limit      | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|---------|--------------|------|---------------------|----|----------------------|
| <b>FIELD PARAMETERS</b>                        |         | <b>FLD</b>   |      | Analyst:            |    |                      |
| Lab Vacuum In                                  | -2      |              |      | "Hg                 |    | 4/12/2019            |
| Lab Vacuum Out                                 | -30     |              |      | "Hg                 |    | 4/12/2019            |
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |         | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| 1,1,1-Trichloroethane                          | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| 1,1,2,2-Tetrachloroethane                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| 1,1,2-Trichloroethane                          | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| 1,1-Dichloroethane                             | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| 1,1-Dichloroethene                             | < 0.040 | 0.040        |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| 1,2,4-Trichlorobenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| 1,2,4-Trimethylbenzene                         | 0.11    | 0.15         | J    | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| 1,2-Dibromoethane                              | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| 1,2-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| 1,2-Dichloroethane                             | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| 1,2-Dichloropropane                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| 1,3,5-Trimethylbenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| 1,3-butadiene                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| 1,3-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| 1,4-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| 1,4-Dioxane                                    | < 0.30  | 0.30         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| 2,2,4-trimethylpentane                         | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| 4-ethyltoluene                                 | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Acetone                                        | 9.2     | 1.5          |      | ppbV                | 5  | 4/18/2019 1:32:00 AM |
| Allyl chloride                                 | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Benzene                                        | 0.20    | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Benzyl chloride                                | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Bromodichloromethane                           | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Bromoform                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Bromomethane                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Carbon disulfide                               | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Carbon tetrachloride                           | 0.090   | 0.030        |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Chlorobenzene                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Chloroethane                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Chloroform                                     | 0.15    | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Chloromethane                                  | 0.44    | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| cis-1,2-Dichloroethene                         | < 0.040 | 0.040        |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| cis-1,3-Dichloropropene                        | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Cyclohexane                                    | 0.60    | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Dibromochloromethane                           | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Ethyl acetate                                  | 0.41    | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | ** | 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: 19-Apr-19

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1904041  
**Project:** 690 Portland Ave  
**Lab ID:** C1904041-003A

**Client Sample ID:** 714-20190410  
**Tag Number:** 603,396  
**Collection Date:** 4/10/2019  
**Matrix:** AIR

| Analyses                                       | Result  | **Limit      | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|---------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |         | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| Ethylbenzene                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Freon 11                                       | 0.26    | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Freon 113                                      | 0.11    | 0.15         | J    | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Freon 114                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Freon 12                                       | 0.52    | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Heptane                                        | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Hexachloro-1,3-butadiene                       | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Hexane                                         | 0.14    | 0.15         | J    | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Isopropyl alcohol                              | 1.9     | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| m&p-Xylene                                     | 0.20    | 0.30         | J    | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Methyl Butyl Ketone                            | < 0.30  | 0.30         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Methyl Ethyl Ketone                            | 0.41    | 0.30         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Methyl Isobutyl Ketone                         | < 0.30  | 0.30         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Methyl tert-butyl ether                        | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Methylene chloride                             | 0.24    | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| o-Xylene                                       | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Propylene                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Styrene                                        | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Tetrachloroethylene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Tetrahydrofuran                                | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Toluene                                        | 0.45    | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| trans-1,2-Dichloroethene                       | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| trans-1,3-Dichloropropene                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Trichloroethene                                | < 0.030 | 0.030        |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Vinyl acetate                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Vinyl Bromide                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Vinyl chloride                                 | < 0.040 | 0.040        |      | ppbV                | 1  | 4/17/2019 7:20:00 AM |
| Surr: Bromofluorobenzene                       | 96.0    | 70-130       |      | %REC                | 1  | 4/17/2019 7:20:00 AM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | ** | 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: 19-Apr-19

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1904041  
**Project:** 690 Portand Ave  
**Lab ID:** C1904041-004A

**Client Sample ID:** OA-20190410  
**Tag Number:** 641,388  
**Collection Date:** 4/10/2019  
**Matrix:** AIR

| Analyses                                       | Result  | **Limit      | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|---------|--------------|------|---------------------|----|----------------------|
| <b>FIELD PARAMETERS</b>                        |         | <b>FLD</b>   |      | Analyst:            |    |                      |
| Lab Vacuum In                                  | -1      |              |      | "Hg                 |    | 4/12/2019            |
| Lab Vacuum Out                                 | -30     |              |      | "Hg                 |    | 4/12/2019            |
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |         | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| 1,1,1-Trichloroethane                          | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| 1,1,2,2-Tetrachloroethane                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| 1,1,2-Trichloroethane                          | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| 1,1-Dichloroethane                             | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| 1,1-Dichloroethene                             | < 0.040 | 0.040        |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| 1,2,4-Trichlorobenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| 1,2,4-Trimethylbenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| 1,2-Dibromoethane                              | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| 1,2-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| 1,2-Dichloroethane                             | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| 1,2-Dichloropropane                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| 1,3,5-Trimethylbenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| 1,3-butadiene                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| 1,3-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| 1,4-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| 1,4-Dioxane                                    | < 0.30  | 0.30         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| 2,2,4-trimethylpentane                         | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| 4-ethyltoluene                                 | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Acetone                                        | 7.0     | 1.5          |      | ppbV                | 5  | 4/18/2019 2:10:00 AM |
| Allyl chloride                                 | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Benzene                                        | 0.14    | 0.15         | J    | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Benzyl chloride                                | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Bromodichloromethane                           | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Bromoform                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Bromomethane                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Carbon disulfide                               | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Carbon tetrachloride                           | 0.080   | 0.030        |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Chlorobenzene                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Chloroethane                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Chloroform                                     | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Chloromethane                                  | 0.50    | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| cis-1,2-Dichloroethene                         | < 0.040 | 0.040        |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| cis-1,3-Dichloropropene                        | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Cyclohexane                                    | 0.26    | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Dibromochloromethane                           | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Ethyl acetate                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | ** | 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: 19-Apr-19

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1904041  
**Project:** 690 Portland Ave  
**Lab ID:** C1904041-004A

**Client Sample ID:** OA-20190410  
**Tag Number:** 641,388  
**Collection Date:** 4/10/2019  
**Matrix:** AIR

| Analyses                                       | Result  | **Limit      | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|---------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |         | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| Ethylbenzene                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Freon 11                                       | 0.25    | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Freon 113                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Freon 114                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Freon 12                                       | 0.53    | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Heptane                                        | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Hexachloro-1,3-butadiene                       | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Hexane                                         | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Isopropyl alcohol                              | 0.68    | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| m&p-Xylene                                     | 0.11    | 0.30         | J    | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Methyl Butyl Ketone                            | < 0.30  | 0.30         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Methyl Ethyl Ketone                            | 0.27    | 0.30         | J    | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Methyl Isobutyl Ketone                         | < 0.30  | 0.30         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Methyl tert-butyl ether                        | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Methylene chloride                             | 0.23    | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| o-Xylene                                       | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Propylene                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Styrene                                        | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Tetrachloroethylene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Tetrahydrofuran                                | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Toluene                                        | 0.23    | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| trans-1,2-Dichloroethene                       | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| trans-1,3-Dichloropropene                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Trichloroethene                                | < 0.030 | 0.030        |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Vinyl acetate                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Vinyl Bromide                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Vinyl chloride                                 | < 0.040 | 0.040        |      | ppbV                | 1  | 4/17/2019 8:00:00 AM |
| Surr: Bromofluorobenzene                       | 91.0    | 70-130       |      | %REC                | 1  | 4/17/2019 8:00:00 AM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | ** | 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: 19-Apr-19

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1904041  
**Project:** 690 Portland Ave  
**Lab ID:** C1904041-001A

**Client Sample ID:** 702-20190410  
**Tag Number:** 595,434  
**Collection Date:** 4/10/2019  
**Matrix:** AIR

| Analyses                                       | Result | **Limit      | Qual | Units               | DF | Date Analyzed         |
|------------------------------------------------|--------|--------------|------|---------------------|----|-----------------------|
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |        | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                       |
| 1,1,1-Trichloroethane                          | < 0.82 | 0.82         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| 1,1,2,2-Tetrachloroethane                      | < 1.0  | 1.0          |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| 1,1,2-Trichloroethane                          | < 0.82 | 0.82         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| 1,1-Dichloroethane                             | < 0.61 | 0.61         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| 1,1-Dichloroethene                             | < 0.16 | 0.16         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| 1,2,4-Trichlorobenzene                         | < 1.1  | 1.1          |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| 1,2,4-Trimethylbenzene                         | 0.64   | 0.74         | J    | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| 1,2-Dibromoethane                              | < 1.2  | 1.2          |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| 1,2-Dichlorobenzene                            | < 0.90 | 0.90         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| 1,2-Dichloroethane                             | < 0.61 | 0.61         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| 1,2-Dichloropropane                            | < 0.69 | 0.69         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| 1,3,5-Trimethylbenzene                         | < 0.74 | 0.74         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| 1,3-butadiene                                  | < 0.33 | 0.33         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| 1,3-Dichlorobenzene                            | < 0.90 | 0.90         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| 1,4-Dichlorobenzene                            | < 0.90 | 0.90         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| 1,4-Dioxane                                    | < 1.1  | 1.1          |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| 2,2,4-trimethylpentane                         | < 0.70 | 0.70         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| 4-ethyltoluene                                 | < 0.74 | 0.74         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Acetone                                        | 27     | 3.6          |      | ug/m3               | 5  | 4/18/2019 12:16:00 AM |
| Allyl chloride                                 | < 0.47 | 0.47         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Benzene                                        | 1.1    | 0.48         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Benzyl chloride                                | < 0.86 | 0.86         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Bromodichloromethane                           | < 1.0  | 1.0          |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Bromoform                                      | < 1.6  | 1.6          |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Bromomethane                                   | < 0.58 | 0.58         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Carbon disulfide                               | < 0.47 | 0.47         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Carbon tetrachloride                           | 0.50   | 0.19         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Chlorobenzene                                  | < 0.69 | 0.69         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Chloroethane                                   | < 0.40 | 0.40         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Chloroform                                     | 1.5    | 0.73         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Chloromethane                                  | 0.97   | 0.31         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| cis-1,2-Dichloroethene                         | < 0.16 | 0.16         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| cis-1,3-Dichloropropene                        | < 0.68 | 0.68         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Cyclohexane                                    | 1.8    | 0.52         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Dibromochloromethane                           | < 1.3  | 1.3          |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Ethyl acetate                                  | 1.5    | 0.54         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Ethylbenzene                                   | 0.65   | 0.65         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Freon 11                                       | 1.3    | 0.84         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Freon 113                                      | < 1.1  | 1.1          |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Freon 114                                      | < 1.0  | 1.0          |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | ** | 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: 19-Apr-19

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1904041  
**Project:** 690 Portland Ave  
**Lab ID:** C1904041-001A

**Client Sample ID:** 702-20190410  
**Tag Number:** 595,434  
**Collection Date:** 4/10/2019  
**Matrix:** AIR

| Analyses                                       | Result | **Limit      | Qual | Units               | DF | Date Analyzed         |
|------------------------------------------------|--------|--------------|------|---------------------|----|-----------------------|
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |        | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                       |
| Freon 12                                       | 2.4    | 0.74         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Heptane                                        | 0.86   | 0.61         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Hexachloro-1,3-butadiene                       | < 1.6  | 1.6          |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Hexane                                         | 1.3    | 0.53         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Isopropyl alcohol                              | 27     | 1.8          |      | ug/m3               | 5  | 4/18/2019 12:16:00 AM |
| m&p-Xylene                                     | 2.3    | 1.3          |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Methyl Butyl Ketone                            | < 1.2  | 1.2          |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Methyl Ethyl Ketone                            | 1.1    | 0.88         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Methyl Isobutyl Ketone                         | < 1.2  | 1.2          |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Methyl tert-butyl ether                        | < 0.54 | 0.54         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Methylene chloride                             | 1.9    | 0.52         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| o-Xylene                                       | 0.87   | 0.65         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Propylene                                      | < 0.26 | 0.26         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Styrene                                        | 3.6    | 0.64         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Tetrachloroethylene                            | < 1.0  | 1.0          |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Tetrahydrofuran                                | < 0.44 | 0.44         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Toluene                                        | 5.9    | 0.57         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| trans-1,2-Dichloroethene                       | < 0.59 | 0.59         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| trans-1,3-Dichloropropene                      | < 0.68 | 0.68         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Trichloroethene                                | < 0.16 | 0.16         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Vinyl acetate                                  | < 0.53 | 0.53         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Vinyl Bromide                                  | < 0.66 | 0.66         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |
| Vinyl chloride                                 | < 0.10 | 0.10         |      | ug/m3               | 1  | 4/17/2019 6:00:00 AM  |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | ** | 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: 19-Apr-19

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1904041  
**Project:** 690 Portland Ave  
**Lab ID:** C1904041-002A

**Client Sample ID:** 708-20190410  
**Tag Number:** 589,450  
**Collection Date:** 4/10/2019  
**Matrix:** AIR

| Analyses                                       | Result | **Limit      | Qual | Units               | DF | Date Analyzed         |
|------------------------------------------------|--------|--------------|------|---------------------|----|-----------------------|
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |        | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                       |
| 1,1,1-Trichloroethane                          | < 0.82 | 0.82         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| 1,1,2,2-Tetrachloroethane                      | < 1.0  | 1.0          |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| 1,1,2-Trichloroethane                          | < 0.82 | 0.82         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| 1,1-Dichloroethane                             | < 0.61 | 0.61         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| 1,1-Dichloroethene                             | < 0.16 | 0.16         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| 1,2,4-Trichlorobenzene                         | < 1.1  | 1.1          |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| 1,2,4-Trimethylbenzene                         | < 0.74 | 0.74         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| 1,2-Dibromoethane                              | < 1.2  | 1.2          |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| 1,2-Dichlorobenzene                            | < 0.90 | 0.90         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| 1,2-Dichloroethane                             | < 0.61 | 0.61         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| 1,2-Dichloropropane                            | < 0.69 | 0.69         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| 1,3,5-Trimethylbenzene                         | < 0.74 | 0.74         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| 1,3-butadiene                                  | < 0.33 | 0.33         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| 1,3-Dichlorobenzene                            | < 0.90 | 0.90         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| 1,4-Dichlorobenzene                            | < 0.90 | 0.90         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| 1,4-Dioxane                                    | < 1.1  | 1.1          |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| 2,2,4-trimethylpentane                         | < 0.70 | 0.70         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| 4-ethyltoluene                                 | < 0.74 | 0.74         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| Acetone                                        | 19     | 3.6          |      | ug/m3               | 5  | 4/18/2019 12:54:00 AM |
| Allyl chloride                                 | < 0.47 | 0.47         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| Benzene                                        | 0.61   | 0.48         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| Benzyl chloride                                | < 0.86 | 0.86         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| Bromodichloromethane                           | < 1.0  | 1.0          |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| Bromoform                                      | < 1.6  | 1.6          |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| Bromomethane                                   | < 0.58 | 0.58         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| Carbon disulfide                               | < 0.47 | 0.47         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| Carbon tetrachloride                           | 0.50   | 0.19         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| Chlorobenzene                                  | < 0.69 | 0.69         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| Chloroethane                                   | < 0.40 | 0.40         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| Chloroform                                     | 0.54   | 0.73         | J    | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| Chloromethane                                  | 0.87   | 0.31         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| cis-1,2-Dichloroethene                         | < 0.16 | 0.16         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| cis-1,3-Dichloropropene                        | < 0.68 | 0.68         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| Cyclohexane                                    | 2.3    | 0.52         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| Dibromochloromethane                           | < 1.3  | 1.3          |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| Ethyl acetate                                  | 1.2    | 0.54         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| Ethylbenzene                                   | < 0.65 | 0.65         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| Freon 11                                       | 1.3    | 0.84         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| Freon 113                                      | < 1.1  | 1.1          |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |
| Freon 114                                      | < 1.0  | 1.0          |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM  |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | ** | 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: 19-Apr-19

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1904041  
**Project:** 690 Portand Ave  
**Lab ID:** C1904041-002A

**Client Sample ID:** 708-20190410  
**Tag Number:** 589,450  
**Collection Date:** 4/10/2019  
**Matrix:** AIR

| Analyses                                       | Result | **Limit      | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|--------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |        | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| Freon 12                                       | 2.4    | 0.74         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM |
| Heptane                                        | < 0.61 | 0.61         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM |
| Hexachloro-1,3-butadiene                       | < 1.6  | 1.6          |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM |
| Hexane                                         | 0.39   | 0.53         | J    | ug/m3               | 1  | 4/17/2019 6:40:00 AM |
| Isopropyl alcohol                              | 4.1    | 0.37         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM |
| m&p-Xylene                                     | 0.69   | 1.3          | J    | ug/m3               | 1  | 4/17/2019 6:40:00 AM |
| Methyl Butyl Ketone                            | < 1.2  | 1.2          |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM |
| Methyl Ethyl Ketone                            | 1.1    | 0.88         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM |
| Methyl Isobutyl Ketone                         | < 1.2  | 1.2          |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM |
| Methyl tert-butyl ether                        | < 0.54 | 0.54         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM |
| Methylene chloride                             | 0.94   | 0.52         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM |
| o-Xylene                                       | < 0.65 | 0.65         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM |
| Propylene                                      | < 0.26 | 0.26         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM |
| Styrene                                        | < 0.64 | 0.64         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM |
| Tetrachloroethylene                            | < 1.0  | 1.0          |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM |
| Tetrahydrofuran                                | < 0.44 | 0.44         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM |
| Toluene                                        | 1.6    | 0.57         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM |
| trans-1,2-Dichloroethene                       | < 0.59 | 0.59         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM |
| trans-1,3-Dichloropropene                      | < 0.68 | 0.68         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM |
| Trichloroethene                                | < 0.16 | 0.16         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM |
| Vinyl acetate                                  | < 0.53 | 0.53         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM |
| Vinyl Bromide                                  | < 0.66 | 0.66         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM |
| Vinyl chloride                                 | < 0.10 | 0.10         |      | ug/m3               | 1  | 4/17/2019 6:40:00 AM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | ** | 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: 19-Apr-19

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1904041  
**Project:** 690 Portland Ave  
**Lab ID:** C1904041-003A

**Client Sample ID:** 714-20190410  
**Tag Number:** 603,396  
**Collection Date:** 4/10/2019  
**Matrix:** AIR

| Analyses                                       | Result | **Limit      | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|--------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |        | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| 1,1,1-Trichloroethane                          | < 0.82 | 0.82         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| 1,1,2,2-Tetrachloroethane                      | < 1.0  | 1.0          |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| 1,1,2-Trichloroethane                          | < 0.82 | 0.82         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| 1,1-Dichloroethane                             | < 0.61 | 0.61         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| 1,1-Dichloroethene                             | < 0.16 | 0.16         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| 1,2,4-Trichlorobenzene                         | < 1.1  | 1.1          |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| 1,2,4-Trimethylbenzene                         | 0.54   | 0.74         | J    | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| 1,2-Dibromoethane                              | < 1.2  | 1.2          |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| 1,2-Dichlorobenzene                            | < 0.90 | 0.90         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| 1,2-Dichloroethane                             | < 0.61 | 0.61         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| 1,2-Dichloropropane                            | < 0.69 | 0.69         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| 1,3,5-Trimethylbenzene                         | < 0.74 | 0.74         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| 1,3-butadiene                                  | < 0.33 | 0.33         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| 1,3-Dichlorobenzene                            | < 0.90 | 0.90         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| 1,4-Dichlorobenzene                            | < 0.90 | 0.90         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| 1,4-Dioxane                                    | < 1.1  | 1.1          |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| 2,2,4-trimethylpentane                         | < 0.70 | 0.70         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| 4-ethyltoluene                                 | < 0.74 | 0.74         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Acetone                                        | 22     | 3.6          |      | ug/m3               | 5  | 4/18/2019 1:32:00 AM |
| Allyl chloride                                 | < 0.47 | 0.47         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Benzene                                        | 0.64   | 0.48         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Benzyl chloride                                | < 0.86 | 0.86         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Bromodichloromethane                           | < 1.0  | 1.0          |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Bromoform                                      | < 1.6  | 1.6          |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Bromomethane                                   | < 0.58 | 0.58         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Carbon disulfide                               | < 0.47 | 0.47         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Carbon tetrachloride                           | 0.57   | 0.19         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Chlorobenzene                                  | < 0.69 | 0.69         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Chloroethane                                   | < 0.40 | 0.40         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Chloroform                                     | 0.73   | 0.73         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Chloromethane                                  | 0.91   | 0.31         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| cis-1,2-Dichloroethene                         | < 0.16 | 0.16         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| cis-1,3-Dichloropropene                        | < 0.68 | 0.68         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Cyclohexane                                    | 2.1    | 0.52         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Dibromochloromethane                           | < 1.3  | 1.3          |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Ethyl acetate                                  | 1.5    | 0.54         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Ethylbenzene                                   | < 0.65 | 0.65         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Freon 11                                       | 1.5    | 0.84         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Freon 113                                      | 0.84   | 1.1          | J    | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Freon 114                                      | < 1.0  | 1.0          |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | ** | 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: 19-Apr-19

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1904041  
**Project:** 690 Portland Ave  
**Lab ID:** C1904041-003A

**Client Sample ID:** 714-20190410  
**Tag Number:** 603,396  
**Collection Date:** 4/10/2019  
**Matrix:** AIR

| Analyses                                       | Result | **Limit      | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|--------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |        | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| Freon 12                                       | 2.6    | 0.74         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Heptane                                        | < 0.61 | 0.61         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Hexachloro-1,3-butadiene                       | < 1.6  | 1.6          |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Hexane                                         | 0.49   | 0.53         | J    | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Isopropyl alcohol                              | 4.7    | 0.37         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| m&p-Xylene                                     | 0.87   | 1.3          | J    | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Methyl Butyl Ketone                            | < 1.2  | 1.2          |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Methyl Ethyl Ketone                            | 1.2    | 0.88         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Methyl Isobutyl Ketone                         | < 1.2  | 1.2          |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Methyl tert-butyl ether                        | < 0.54 | 0.54         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Methylene chloride                             | 0.83   | 0.52         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| o-Xylene                                       | < 0.65 | 0.65         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Propylene                                      | < 0.26 | 0.26         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Styrene                                        | < 0.64 | 0.64         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Tetrachloroethylene                            | < 1.0  | 1.0          |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Tetrahydrofuran                                | < 0.44 | 0.44         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Toluene                                        | 1.7    | 0.57         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| trans-1,2-Dichloroethene                       | < 0.59 | 0.59         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| trans-1,3-Dichloropropene                      | < 0.68 | 0.68         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Trichloroethene                                | < 0.16 | 0.16         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Vinyl acetate                                  | < 0.53 | 0.53         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Vinyl Bromide                                  | < 0.66 | 0.66         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |
| Vinyl chloride                                 | < 0.10 | 0.10         |      | ug/m3               | 1  | 4/17/2019 7:20:00 AM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | ** | 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: 19-Apr-19

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1904041  
**Project:** 690 Portland Ave  
**Lab ID:** C1904041-004A

**Client Sample ID:** OA-20190410  
**Tag Number:** 641,388  
**Collection Date:** 4/10/2019  
**Matrix:** AIR

| Analyses                                       | Result | **Limit      | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|--------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |        | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| 1,1,1-Trichloroethane                          | < 0.82 | 0.82         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| 1,1,2,2-Tetrachloroethane                      | < 1.0  | 1.0          |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| 1,1,2-Trichloroethane                          | < 0.82 | 0.82         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| 1,1-Dichloroethane                             | < 0.61 | 0.61         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| 1,1-Dichloroethene                             | < 0.16 | 0.16         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| 1,2,4-Trichlorobenzene                         | < 1.1  | 1.1          |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| 1,2,4-Trimethylbenzene                         | < 0.74 | 0.74         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| 1,2-Dibromoethane                              | < 1.2  | 1.2          |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| 1,2-Dichlorobenzene                            | < 0.90 | 0.90         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| 1,2-Dichloroethane                             | < 0.61 | 0.61         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| 1,2-Dichloropropane                            | < 0.69 | 0.69         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| 1,3,5-Trimethylbenzene                         | < 0.74 | 0.74         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| 1,3-butadiene                                  | < 0.33 | 0.33         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| 1,3-Dichlorobenzene                            | < 0.90 | 0.90         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| 1,4-Dichlorobenzene                            | < 0.90 | 0.90         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| 1,4-Dioxane                                    | < 1.1  | 1.1          |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| 2,2,4-trimethylpentane                         | < 0.70 | 0.70         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| 4-ethyltoluene                                 | < 0.74 | 0.74         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Acetone                                        | 17     | 3.6          |      | ug/m3               | 5  | 4/18/2019 2:10:00 AM |
| Allyl chloride                                 | < 0.47 | 0.47         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Benzene                                        | 0.45   | 0.48         | J    | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Benzyl chloride                                | < 0.86 | 0.86         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Bromodichloromethane                           | < 1.0  | 1.0          |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Bromoform                                      | < 1.6  | 1.6          |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Bromomethane                                   | < 0.58 | 0.58         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Carbon disulfide                               | < 0.47 | 0.47         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Carbon tetrachloride                           | 0.50   | 0.19         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Chlorobenzene                                  | < 0.69 | 0.69         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Chloroethane                                   | < 0.40 | 0.40         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Chloroform                                     | < 0.73 | 0.73         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Chloromethane                                  | 1.0    | 0.31         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| cis-1,2-Dichloroethene                         | < 0.16 | 0.16         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| cis-1,3-Dichloropropene                        | < 0.68 | 0.68         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Cyclohexane                                    | 0.89   | 0.52         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Dibromochloromethane                           | < 1.3  | 1.3          |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Ethyl acetate                                  | < 0.54 | 0.54         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Ethylbenzene                                   | < 0.65 | 0.65         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Freon 11                                       | 1.4    | 0.84         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Freon 113                                      | < 1.1  | 1.1          |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Freon 114                                      | < 1.0  | 1.0          |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | ** | 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: 19-Apr-19

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1904041  
**Project:** 690 Portand Ave  
**Lab ID:** C1904041-004A

**Client Sample ID:** OA-20190410  
**Tag Number:** 641,388  
**Collection Date:** 4/10/2019  
**Matrix:** AIR

| Analyses                                       | Result | **Limit      | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|--------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |        | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| Freon 12                                       | 2.6    | 0.74         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Heptane                                        | < 0.61 | 0.61         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Hexachloro-1,3-butadiene                       | < 1.6  | 1.6          |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Hexane                                         | < 0.53 | 0.53         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Isopropyl alcohol                              | 1.7    | 0.37         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| m&p-Xylene                                     | 0.48   | 1.3          | J    | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Methyl Butyl Ketone                            | < 1.2  | 1.2          |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Methyl Ethyl Ketone                            | 0.80   | 0.88         | J    | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Methyl Isobutyl Ketone                         | < 1.2  | 1.2          |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Methyl tert-butyl ether                        | < 0.54 | 0.54         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Methylene chloride                             | 0.80   | 0.52         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| o-Xylene                                       | < 0.65 | 0.65         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Propylene                                      | < 0.26 | 0.26         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Styrene                                        | < 0.64 | 0.64         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Tetrachloroethylene                            | < 1.0  | 1.0          |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Tetrahydrofuran                                | < 0.44 | 0.44         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Toluene                                        | 0.87   | 0.57         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| trans-1,2-Dichloroethene                       | < 0.59 | 0.59         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| trans-1,3-Dichloropropene                      | < 0.68 | 0.68         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Trichloroethene                                | < 0.16 | 0.16         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Vinyl acetate                                  | < 0.53 | 0.53         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Vinyl Bromide                                  | < 0.66 | 0.66         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |
| Vinyl chloride                                 | < 0.10 | 0.10         |      | ug/m3               | 1  | 4/17/2019 8:00:00 AM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | ** | 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: 05-Mar-20

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C2002057  
**Project:** 690 Portland Ave  
**Lab ID:** C2002057-001A

**Client Sample ID:** IA702-20200226  
**Tag Number:** 158,392  
**Collection Date:** 2/26/2020  
**Matrix:** AIR

| Analyses                                       | Result  | DL           | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|---------|--------------|------|---------------------|----|----------------------|
| <b>FIELD PARAMETERS</b>                        |         | <b>FLD</b>   |      | Analyst:            |    |                      |
| Lab Vacuum In                                  | 0       |              |      | "Hg                 |    | 2/28/2020            |
| Lab Vacuum Out                                 | -30     |              |      | "Hg                 |    | 2/28/2020            |
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |         | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| 1,1,1-Trichloroethane                          | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| 1,1,2,2-Tetrachloroethane                      | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| 1,1,2-Trichloroethane                          | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| 1,1-Dichloroethane                             | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| 1,1-Dichloroethene                             | < 0.040 | 0.040        |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| 1,2,4-Trichlorobenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| 1,2,4-Trimethylbenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| 1,2-Dibromoethane                              | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| 1,2-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| 1,2-Dichloroethane                             | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| 1,2-Dichloropropane                            | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| 1,3,5-Trimethylbenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| 1,3-butadiene                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| 1,3-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| 1,4-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| 1,4-Dioxane                                    | < 0.30  | 0.30         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| 2,2,4-trimethylpentane                         | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| 4-ethyltoluene                                 | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Acetone                                        | 8.7     | 3.0          |      | ppbV                | 10 | 2/29/2020 2:13:00 AM |
| Allyl chloride                                 | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Benzene                                        | 0.36    | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Benzyl chloride                                | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Bromodichloromethane                           | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Bromoform                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Bromomethane                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Carbon disulfide                               | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Carbon tetrachloride                           | 0.070   | 0.030        |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Chlorobenzene                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Chloroethane                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Chloroform                                     | 0.30    | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Chloromethane                                  | 0.51    | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| cis-1,2-Dichloroethene                         | < 0.040 | 0.040        |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| cis-1,3-Dichloropropene                        | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Cyclohexane                                    | 0.25    | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Dibromochloromethane                           | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Ethyl acetate                                  | 0.48    | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |

|                    |                                                      |    |                                           |
|--------------------|------------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | SC Sub-Contracted                                    | .  | 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    | DL | Detection Limit                           |

# Centek Laboratories, LLC

Date: 05-Mar-20

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C2002057  
**Project:** 690 Portland Ave  
**Lab ID:** C2002057-001A

**Client Sample ID:** IA702-20200226  
**Tag Number:** 158,392  
**Collection Date:** 2/26/2020  
**Matrix:** AIR

| Analyses                                       | Result  | DL           | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|---------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |         | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| Ethylbenzene                                   | 0.12    | 0.15         | J    | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Freon 11                                       | 0.20    | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Freon 113                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Freon 114                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Freon 12                                       | 0.49    | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Heptane                                        | 0.19    | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Hexachloro-1,3-butadiene                       | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Hexane                                         | 0.29    | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Isopropyl alcohol                              | 0.78    | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| m&p-Xylene                                     | 0.34    | 0.30         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Methyl Butyl Ketone                            | 0.20    | 0.30         | J    | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Methyl Ethyl Ketone                            | 2.2     | 3.0          | J    | ppbV                | 10 | 2/29/2020 2:13:00 AM |
| Methyl Isobutyl Ketone                         | < 0.30  | 0.30         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Methyl tert-butyl ether                        | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Methylene chloride                             | 0.13    | 0.15         | J    | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| o-Xylene                                       | 0.13    | 0.15         | J    | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Propylene                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Styrene                                        | 0.23    | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Tetrachloroethylene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Tetrahydrofuran                                | 1.8     | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Toluene                                        | 1.4     | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| trans-1,2-Dichloroethene                       | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| trans-1,3-Dichloropropene                      | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Trichloroethene                                | < 0.030 | 0.030        |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Vinyl acetate                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Vinyl Bromide                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Vinyl chloride                                 | < 0.040 | 0.040        |      | ppbV                | 1  | 2/28/2020 7:33:00 PM |
| Surr: Bromofluorobenzene                       | 84.0    | 70-130       |      | %REC                | 1  | 2/28/2020 7:33:00 PM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | SC | Sub-Contracted                                     | .  | 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    | DL | Detection Limit                           |

# Centek Laboratories, LLC

Date: 05-Mar-20

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C2002057  
**Project:** 690 Portland Ave  
**Lab ID:** C2002057-002A

**Client Sample ID:** I708-20200226  
**Tag Number:** 328,454  
**Collection Date:** 2/26/2020  
**Matrix:** AIR

| Analyses                                       | Result  | DL           | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|---------|--------------|------|---------------------|----|----------------------|
| <b>FIELD PARAMETERS</b>                        |         | <b>FLD</b>   |      | Analyst:            |    |                      |
| Lab Vacuum In                                  | -4      |              |      | "Hg                 |    | 2/28/2020            |
| Lab Vacuum Out                                 | -30     |              |      | "Hg                 |    | 2/28/2020            |
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |         | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| 1,1,1-Trichloroethane                          | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| 1,1,2,2-Tetrachloroethane                      | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| 1,1,2-Trichloroethane                          | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| 1,1-Dichloroethane                             | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| 1,1-Dichloroethene                             | < 0.040 | 0.040        |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| 1,2,4-Trichlorobenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| 1,2,4-Trimethylbenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| 1,2-Dibromoethane                              | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| 1,2-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| 1,2-Dichloroethane                             | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| 1,2-Dichloropropane                            | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| 1,3,5-Trimethylbenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| 1,3-butadiene                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| 1,3-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| 1,4-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| 1,4-Dioxane                                    | < 0.30  | 0.30         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| 2,2,4-trimethylpentane                         | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| 4-ethyltoluene                                 | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Acetone                                        | 3.3     | 3.0          |      | ppbV                | 10 | 2/29/2020 2:59:00 AM |
| Allyl chloride                                 | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Benzene                                        | 0.18    | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Benzyl chloride                                | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Bromodichloromethane                           | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Bromoform                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Bromomethane                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Carbon disulfide                               | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Carbon tetrachloride                           | 0.070   | 0.030        |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Chlorobenzene                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Chloroethane                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Chloroform                                     | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Chloromethane                                  | 0.55    | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| cis-1,2-Dichloroethene                         | < 0.040 | 0.040        |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| cis-1,3-Dichloropropene                        | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Cyclohexane                                    | 0.23    | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Dibromochloromethane                           | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Ethyl acetate                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | SC | Sub-Contracted                                     | .  | 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    | DL | Detection Limit                           |

# Centek Laboratories, LLC

Date: 05-Mar-20

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C2002057  
**Project:** 690 Portland Ave  
**Lab ID:** C2002057-002A

**Client Sample ID:** I708-20200226  
**Tag Number:** 328,454  
**Collection Date:** 2/26/2020  
**Matrix:** AIR

| Analyses                                       | Result  | DL           | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|---------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |         | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| Ethylbenzene                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Freon 11                                       | 0.21    | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Freon 113                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Freon 114                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Freon 12                                       | 0.51    | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Heptane                                        | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Hexachloro-1,3-butadiene                       | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Hexane                                         | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Isopropyl alcohol                              | 0.62    | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| m&p-Xylene                                     | < 0.30  | 0.30         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Methyl Butyl Ketone                            | < 0.30  | 0.30         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Methyl Ethyl Ketone                            | 0.24    | 0.30         | J    | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Methyl Isobutyl Ketone                         | < 0.30  | 0.30         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Methyl tert-butyl ether                        | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Methylene chloride                             | 0.14    | 0.15         | J    | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| o-Xylene                                       | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Propylene                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Styrene                                        | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Tetrachloroethylene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Tetrahydrofuran                                | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Toluene                                        | 0.21    | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| trans-1,2-Dichloroethene                       | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| trans-1,3-Dichloropropene                      | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Trichloroethene                                | < 0.030 | 0.030        |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Vinyl acetate                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Vinyl Bromide                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Vinyl chloride                                 | < 0.040 | 0.040        |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Surr: Bromofluorobenzene                       | 71.0    | 70-130       |      | %REC                | 1  | 2/28/2020 8:19:00 PM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | SC | Sub-Contracted                                     | .  | 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    | DL | Detection Limit                           |

# Centek Laboratories, LLC

Date: 05-Mar-20

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C2002057  
**Project:** 690 Portland Ave  
**Lab ID:** C2002057-003A

**Client Sample ID:** OA1-20200226  
**Tag Number:** 237,381  
**Collection Date:** 2/26/2020  
**Matrix:** AIR

| Analyses                                       | Result  | DL           | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|---------|--------------|------|---------------------|----|----------------------|
| <b>FIELD PARAMETERS</b>                        |         | <b>FLD</b>   |      | Analyst:            |    |                      |
| Lab Vacuum In                                  | 0       |              |      | "Hg                 |    | 2/28/2020            |
| Lab Vacuum Out                                 | -30     |              |      | "Hg                 |    | 2/28/2020            |
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |         | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| 1,1,1-Trichloroethane                          | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| 1,1,2,2-Tetrachloroethane                      | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| 1,1,2-Trichloroethane                          | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| 1,1-Dichloroethane                             | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| 1,1-Dichloroethene                             | < 0.040 | 0.040        |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| 1,2,4-Trichlorobenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| 1,2,4-Trimethylbenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| 1,2-Dibromoethane                              | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| 1,2-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| 1,2-Dichloroethane                             | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| 1,2-Dichloropropane                            | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| 1,3,5-Trimethylbenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| 1,3-butadiene                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| 1,3-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| 1,4-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| 1,4-Dioxane                                    | < 0.30  | 0.30         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| 2,2,4-trimethylpentane                         | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| 4-ethyltoluene                                 | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Acetone                                        | 3.4     | 3.0          |      | ppbV                | 10 | 2/29/2020 3:44:00 AM |
| Allyl chloride                                 | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Benzene                                        | 0.17    | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Benzyl chloride                                | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Bromodichloromethane                           | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Bromoform                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Bromomethane                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Carbon disulfide                               | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Carbon tetrachloride                           | 0.080   | 0.030        |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Chlorobenzene                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Chloroethane                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Chloroform                                     | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Chloromethane                                  | 0.47    | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| cis-1,2-Dichloroethene                         | < 0.040 | 0.040        |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| cis-1,3-Dichloropropene                        | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Cyclohexane                                    | 0.11    | 0.15         | J    | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Dibromochloromethane                           | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Ethyl acetate                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | SC | Sub-Contracted                                     | .  | 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    | DL | Detection Limit                           |

# Centek Laboratories, LLC

Date: 05-Mar-20

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C2002057  
**Project:** 690 Portland Ave  
**Lab ID:** C2002057-003A

**Client Sample ID:** OA1-20200226  
**Tag Number:** 237,381  
**Collection Date:** 2/26/2020  
**Matrix:** AIR

| Analyses                                       | Result  | DL           | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|---------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |         | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| Ethylbenzene                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Freon 11                                       | 0.21    | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Freon 113                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Freon 114                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Freon 12                                       | 0.51    | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Heptane                                        | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Hexachloro-1,3-butadiene                       | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Hexane                                         | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Isopropyl alcohol                              | 0.86    | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| m&p-Xylene                                     | < 0.30  | 0.30         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Methyl Butyl Ketone                            | < 0.30  | 0.30         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Methyl Ethyl Ketone                            | 0.21    | 0.30         | J    | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Methyl Isobutyl Ketone                         | < 0.30  | 0.30         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Methyl tert-butyl ether                        | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Methylene chloride                             | 0.12    | 0.15         | J    | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| o-Xylene                                       | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Propylene                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Styrene                                        | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Tetrachloroethylene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Tetrahydrofuran                                | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Toluene                                        | 0.21    | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| trans-1,2-Dichloroethene                       | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| trans-1,3-Dichloropropene                      | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Trichloroethene                                | < 0.030 | 0.030        |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Vinyl acetate                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Vinyl Bromide                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Vinyl chloride                                 | < 0.040 | 0.040        |      | ppbV                | 1  | 2/28/2020 9:06:00 PM |
| Surr: Bromofluorobenzene                       | 73.0    | 70-130       |      | %REC                | 1  | 2/28/2020 9:06:00 PM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | SC | Sub-Contracted                                     | .  | 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    | DL | Detection Limit                           |

# Centek Laboratories, LLC

Date: 05-Mar-20

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C2002057  
**Project:** 690 Portland Ave  
**Lab ID:** C2002057-001A

**Client Sample ID:** IA702-20200226  
**Tag Number:** 158,392  
**Collection Date:** 2/26/2020  
**Matrix:** AIR

| Analyses                                       | Result | DL           | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|--------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |        | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| 1,1,1-Trichloroethane                          | < 0.82 | 0.82         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| 1,1,2,2-Tetrachloroethane                      | < 1.0  | 1.0          |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| 1,1,2-Trichloroethane                          | < 0.82 | 0.82         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| 1,1-Dichloroethane                             | < 0.61 | 0.61         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| 1,1-Dichloroethene                             | < 0.16 | 0.16         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| 1,2,4-Trichlorobenzene                         | < 1.1  | 1.1          |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| 1,2,4-Trimethylbenzene                         | < 0.74 | 0.74         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| 1,2-Dibromoethane                              | < 1.2  | 1.2          |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| 1,2-Dichlorobenzene                            | < 0.90 | 0.90         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| 1,2-Dichloroethane                             | < 0.61 | 0.61         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| 1,2-Dichloropropane                            | < 0.69 | 0.69         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| 1,3,5-Trimethylbenzene                         | < 0.74 | 0.74         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| 1,3-butadiene                                  | < 0.33 | 0.33         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| 1,3-Dichlorobenzene                            | < 0.90 | 0.90         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| 1,4-Dichlorobenzene                            | < 0.90 | 0.90         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| 1,4-Dioxane                                    | < 1.1  | 1.1          |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| 2,2,4-trimethylpentane                         | < 0.70 | 0.70         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| 4-ethyltoluene                                 | < 0.74 | 0.74         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Acetone                                        | 21     | 7.1          |      | ug/m3               | 10 | 2/29/2020 2:13:00 AM |
| Allyl chloride                                 | < 0.47 | 0.47         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Benzene                                        | 1.1    | 0.48         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Benzyl chloride                                | < 0.86 | 0.86         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Bromodichloromethane                           | < 1.0  | 1.0          |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Bromoform                                      | < 1.6  | 1.6          |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Bromomethane                                   | < 0.58 | 0.58         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Carbon disulfide                               | < 0.47 | 0.47         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Carbon tetrachloride                           | 0.44   | 0.19         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Chlorobenzene                                  | < 0.69 | 0.69         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Chloroethane                                   | < 0.40 | 0.40         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Chloroform                                     | 1.5    | 0.73         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Chloromethane                                  | 1.1    | 0.31         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| cis-1,2-Dichloroethene                         | < 0.16 | 0.16         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| cis-1,3-Dichloropropene                        | < 0.68 | 0.68         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Cyclohexane                                    | 0.86   | 0.52         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Dibromochloromethane                           | < 1.3  | 1.3          |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Ethyl acetate                                  | 1.7    | 0.54         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Ethylbenzene                                   | 0.52   | 0.65         | J    | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Freon 11                                       | 1.1    | 0.84         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Freon 113                                      | < 1.1  | 1.1          |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Freon 114                                      | < 1.0  | 1.0          |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | SC | Sub-Contracted                                     | .  | 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    | DL | Detection Limit                           |



# Centek Laboratories, LLC

Date: 05-Mar-20

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C2002057  
**Project:** 690 Portland Ave  
**Lab ID:** C2002057-001A

**Client Sample ID:** IA702-20200226  
**Tag Number:** 158,392  
**Collection Date:** 2/26/2020  
**Matrix:** AIR

| Analyses                                       | Result | DL           | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|--------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |        | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| Freon 12                                       | 2.4    | 0.74         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Heptane                                        | 0.78   | 0.61         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Hexachloro-1,3-butadiene                       | < 1.6  | 1.6          |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Hexane                                         | 1.0    | 0.53         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Isopropyl alcohol                              | 1.9    | 0.37         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| m&p-Xylene                                     | 1.5    | 1.3          |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Methyl Butyl Ketone                            | 0.82   | 1.2          | J    | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Methyl Ethyl Ketone                            | 6.5    | 8.8          | J    | ug/m3               | 10 | 2/29/2020 2:13:00 AM |
| Methyl Isobutyl Ketone                         | < 1.2  | 1.2          |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Methyl tert-butyl ether                        | < 0.54 | 0.54         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Methylene chloride                             | 0.45   | 0.52         | J    | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| o-Xylene                                       | 0.56   | 0.65         | J    | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Propylene                                      | < 0.26 | 0.26         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Styrene                                        | 0.98   | 0.64         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Tetrachloroethylene                            | < 1.0  | 1.0          |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Tetrahydrofuran                                | 5.3    | 0.44         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Toluene                                        | 5.2    | 0.57         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| trans-1,2-Dichloroethene                       | < 0.59 | 0.59         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| trans-1,3-Dichloropropene                      | < 0.68 | 0.68         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Trichloroethene                                | < 0.16 | 0.16         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Vinyl acetate                                  | < 0.53 | 0.53         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Vinyl Bromide                                  | < 0.66 | 0.66         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |
| Vinyl chloride                                 | < 0.10 | 0.10         |      | ug/m3               | 1  | 2/28/2020 7:33:00 PM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | SC | Sub-Contracted                                     | .  | 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    | DL | Detection Limit                           |

# Centek Laboratories, LLC

Date: 05-Mar-20

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C2002057  
**Project:** 690 Portland Ave  
**Lab ID:** C2002057-002A

**Client Sample ID:** I708-20200226  
**Tag Number:** 328,454  
**Collection Date:** 2/26/2020  
**Matrix:** AIR

| Analyses                                       | Result | DL           | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|--------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |        | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| 1,1,1-Trichloroethane                          | < 0.82 | 0.82         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| 1,1,2,2-Tetrachloroethane                      | < 1.0  | 1.0          |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| 1,1,2-Trichloroethane                          | < 0.82 | 0.82         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| 1,1-Dichloroethane                             | < 0.61 | 0.61         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| 1,1-Dichloroethene                             | < 0.16 | 0.16         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| 1,2,4-Trichlorobenzene                         | < 1.1  | 1.1          |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| 1,2,4-Trimethylbenzene                         | < 0.74 | 0.74         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| 1,2-Dibromoethane                              | < 1.2  | 1.2          |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| 1,2-Dichlorobenzene                            | < 0.90 | 0.90         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| 1,2-Dichloroethane                             | < 0.61 | 0.61         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| 1,2-Dichloropropane                            | < 0.69 | 0.69         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| 1,3,5-Trimethylbenzene                         | < 0.74 | 0.74         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| 1,3-butadiene                                  | < 0.33 | 0.33         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| 1,3-Dichlorobenzene                            | < 0.90 | 0.90         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| 1,4-Dichlorobenzene                            | < 0.90 | 0.90         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| 1,4-Dioxane                                    | < 1.1  | 1.1          |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| 2,2,4-trimethylpentane                         | < 0.70 | 0.70         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| 4-ethyltoluene                                 | < 0.74 | 0.74         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Acetone                                        | 7.8    | 7.1          |      | ug/m3               | 10 | 2/29/2020 2:59:00 AM |
| Allyl chloride                                 | < 0.47 | 0.47         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Benzene                                        | 0.57   | 0.48         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Benzyl chloride                                | < 0.86 | 0.86         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Bromodichloromethane                           | < 1.0  | 1.0          |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Bromoform                                      | < 1.6  | 1.6          |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Bromomethane                                   | < 0.58 | 0.58         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Carbon disulfide                               | < 0.47 | 0.47         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Carbon tetrachloride                           | 0.44   | 0.19         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Chlorobenzene                                  | < 0.69 | 0.69         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Chloroethane                                   | < 0.40 | 0.40         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Chloroform                                     | < 0.73 | 0.73         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Chloromethane                                  | 1.1    | 0.31         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| cis-1,2-Dichloroethene                         | < 0.16 | 0.16         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| cis-1,3-Dichloropropene                        | < 0.68 | 0.68         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Cyclohexane                                    | 0.79   | 0.52         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Dibromochloromethane                           | < 1.3  | 1.3          |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Ethyl acetate                                  | < 0.54 | 0.54         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Ethylbenzene                                   | < 0.65 | 0.65         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Freon 11                                       | 1.2    | 0.84         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Freon 113                                      | < 1.1  | 1.1          |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Freon 114                                      | < 1.0  | 1.0          |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | SC | Sub-Contracted                                     | .  | 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    | DL | Detection Limit                           |

# Centek Laboratories, LLC

Date: 05-Mar-20

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C2002057  
**Project:** 690 Portland Ave  
**Lab ID:** C2002057-002A

**Client Sample ID:** I708-20200226  
**Tag Number:** 328,454  
**Collection Date:** 2/26/2020  
**Matrix:** AIR

| Analyses                                       | Result | DL           | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|--------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |        | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| Freon 12                                       | 2.5    | 0.74         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Heptane                                        | < 0.61 | 0.61         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Hexachloro-1,3-butadiene                       | < 1.6  | 1.6          |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Hexane                                         | < 0.53 | 0.53         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Isopropyl alcohol                              | 1.5    | 0.37         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| m&p-Xylene                                     | < 1.3  | 1.3          |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Methyl Butyl Ketone                            | < 1.2  | 1.2          |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Methyl Ethyl Ketone                            | 0.71   | 0.88         | J    | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Methyl Isobutyl Ketone                         | < 1.2  | 1.2          |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Methyl tert-butyl ether                        | < 0.54 | 0.54         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Methylene chloride                             | 0.49   | 0.52         | J    | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| o-Xylene                                       | < 0.65 | 0.65         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Propylene                                      | < 0.26 | 0.26         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Styrene                                        | < 0.64 | 0.64         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Tetrachloroethylene                            | < 1.0  | 1.0          |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Tetrahydrofuran                                | < 0.44 | 0.44         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Toluene                                        | 0.79   | 0.57         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| trans-1,2-Dichloroethene                       | < 0.59 | 0.59         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| trans-1,3-Dichloropropene                      | < 0.68 | 0.68         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Trichloroethene                                | < 0.16 | 0.16         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Vinyl acetate                                  | < 0.53 | 0.53         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Vinyl Bromide                                  | < 0.66 | 0.66         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |
| Vinyl chloride                                 | < 0.10 | 0.10         |      | ug/m3               | 1  | 2/28/2020 8:19:00 PM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | SC | Sub-Contracted                                     | .  | 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    | DL | Detection Limit                           |

# Centek Laboratories, LLC

Date: 05-Mar-20

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C2002057  
**Project:** 690 Portland Ave  
**Lab ID:** C2002057-003A

**Client Sample ID:** OA1-20200226  
**Tag Number:** 237,381  
**Collection Date:** 2/26/2020  
**Matrix:** AIR

| Analyses                                       | Result | DL           | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|--------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |        | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| 1,1,1-Trichloroethane                          | < 0.82 | 0.82         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| 1,1,2,2-Tetrachloroethane                      | < 1.0  | 1.0          |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| 1,1,2-Trichloroethane                          | < 0.82 | 0.82         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| 1,1-Dichloroethane                             | < 0.61 | 0.61         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| 1,1-Dichloroethene                             | < 0.16 | 0.16         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| 1,2,4-Trichlorobenzene                         | < 1.1  | 1.1          |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| 1,2,4-Trimethylbenzene                         | < 0.74 | 0.74         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| 1,2-Dibromoethane                              | < 1.2  | 1.2          |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| 1,2-Dichlorobenzene                            | < 0.90 | 0.90         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| 1,2-Dichloroethane                             | < 0.61 | 0.61         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| 1,2-Dichloropropane                            | < 0.69 | 0.69         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| 1,3,5-Trimethylbenzene                         | < 0.74 | 0.74         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| 1,3-butadiene                                  | < 0.33 | 0.33         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| 1,3-Dichlorobenzene                            | < 0.90 | 0.90         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| 1,4-Dichlorobenzene                            | < 0.90 | 0.90         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| 1,4-Dioxane                                    | < 1.1  | 1.1          |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| 2,2,4-trimethylpentane                         | < 0.70 | 0.70         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| 4-ethyltoluene                                 | < 0.74 | 0.74         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Acetone                                        | 8.1    | 7.1          |      | ug/m3               | 10 | 2/29/2020 3:44:00 AM |
| Allyl chloride                                 | < 0.47 | 0.47         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Benzene                                        | 0.54   | 0.48         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Benzyl chloride                                | < 0.86 | 0.86         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Bromodichloromethane                           | < 1.0  | 1.0          |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Bromoform                                      | < 1.6  | 1.6          |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Bromomethane                                   | < 0.58 | 0.58         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Carbon disulfide                               | < 0.47 | 0.47         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Carbon tetrachloride                           | 0.50   | 0.19         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Chlorobenzene                                  | < 0.69 | 0.69         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Chloroethane                                   | < 0.40 | 0.40         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Chloroform                                     | < 0.73 | 0.73         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Chloromethane                                  | 0.97   | 0.31         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| cis-1,2-Dichloroethene                         | < 0.16 | 0.16         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| cis-1,3-Dichloropropene                        | < 0.68 | 0.68         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Cyclohexane                                    | 0.38   | 0.52         | J    | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Dibromochloromethane                           | < 1.3  | 1.3          |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Ethyl acetate                                  | < 0.54 | 0.54         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Ethylbenzene                                   | < 0.65 | 0.65         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Freon 11                                       | 1.2    | 0.84         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Freon 113                                      | < 1.1  | 1.1          |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Freon 114                                      | < 1.0  | 1.0          |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | SC | Sub-Contracted                                     | .  | 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    | DL | Detection Limit                           |

# Centek Laboratories, LLC

Date: 05-Mar-20

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C2002057  
**Project:** 690 Portland Ave  
**Lab ID:** C2002057-003A

**Client Sample ID:** OA1-20200226  
**Tag Number:** 237,381  
**Collection Date:** 2/26/2020  
**Matrix:** AIR

| Analyses                                       | Result | DL           | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|--------|--------------|------|---------------------|----|----------------------|
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |        | <b>TO-15</b> |      | Analyst: <b>RJP</b> |    |                      |
| Freon 12                                       | 2.5    | 0.74         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Heptane                                        | < 0.61 | 0.61         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Hexachloro-1,3-butadiene                       | < 1.6  | 1.6          |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Hexane                                         | < 0.53 | 0.53         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Isopropyl alcohol                              | 2.1    | 0.37         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| m&p-Xylene                                     | < 1.3  | 1.3          |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Methyl Butyl Ketone                            | < 1.2  | 1.2          |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Methyl Ethyl Ketone                            | 0.62   | 0.88         | J    | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Methyl Isobutyl Ketone                         | < 1.2  | 1.2          |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Methyl tert-butyl ether                        | < 0.54 | 0.54         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Methylene chloride                             | 0.42   | 0.52         | J    | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| o-Xylene                                       | < 0.65 | 0.65         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Propylene                                      | < 0.26 | 0.26         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Styrene                                        | < 0.64 | 0.64         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Tetrachloroethylene                            | < 1.0  | 1.0          |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Tetrahydrofuran                                | < 0.44 | 0.44         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Toluene                                        | 0.79   | 0.57         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| trans-1,2-Dichloroethene                       | < 0.59 | 0.59         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| trans-1,3-Dichloropropene                      | < 0.68 | 0.68         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Trichloroethene                                | < 0.16 | 0.16         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Vinyl acetate                                  | < 0.53 | 0.53         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Vinyl Bromide                                  | < 0.66 | 0.66         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |
| Vinyl chloride                                 | < 0.10 | 0.10         |      | ug/m3               | 1  | 2/28/2020 9:06:00 PM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | SC | Sub-Contracted                                     | .  | 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    | DL | Detection Limit                           |

## **APPENDIX E**

# **DATA USABILITY SUMMARY REPORTS (ON CD)**

# **DATA USABILITY SUMMARY REPORT (DUSR)**

**702 – 714 Portland Ave.  
Monroe County, NY  
NYSDEC BCP # C 828151**

**SDG: C1512012**  
4 Air Samples

Prepared for:

**Ravi Engineering & Land Surveying, P.C.  
2110 South Clinton Avenue, Suite 1  
Rochester, NY 14618**

**January 2016**



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### **Summaries of Validated Results**

|           |       |
|-----------|-------|
| Table 6-1 | TO-15 |
|-----------|-------|



## 1.0 SUMMARY

**SITE:** 702 – 714 Portland Avenue  
Rochester, NY

**SAMPLING DATE:** November 30, 2015

**SAMPLE TYPE:** 4 air samples

**LABORATORY:** Centek Laboratories, LLC  
Syracuse, NY

**SDG No.:** C1512012

## 2.0 INTRODUCTION

This data usability summary report (DUSR) was prepared in accordance with guidance provided by the New York State Department of Environmental Conservation (NYSDEC). The DUSR is based on a review and evaluation of the laboratory analytical data package. Specifically, the NYSDEC guidance recommends review and evaluation of the following elements of the data package:

- Completeness of the data package as defined under the requirements of the NYSDEC Analytical Services Protocols (ASP) Category B or the United States Environmental Protection Agency (USEPA) Contract Laboratory Program (CLP) deliverables,
- Compliance with established analyte holding times,
- Adherence to quality control (QC) limits and specifications for blanks, instrument tuning and calibration, surrogate recoveries, spike recoveries, laboratory duplicate analyses, and other QC criteria,
- Adherence to established analytical protocols,
- Conformance of data summary sheets with raw analytical data, and
- Use of correct data qualifiers.

Data deficiencies, analytical protocol deviations, and quality control problems identified using the review criteria above and their effect on the analytical results are discussed in this report.

### **3.0 SAMPLE AND ANALYSIS SUMMARY**

The data package consists of analytical results for 4 air samples collected on November 30, 2015. These samples were analyzed for TO-15 volatile organic compounds.

All laboratory analyses were performed by Centek Laboratories, LLC, Syracuse, NY and analyzed as SDG C1512012. The analytical results were provided in NYSDEC ASP Category B format, which includes all raw analytical data and laboratory QC data.

### **4.0 GUIDANCE DOCUMENTS AND DATA REVIEW CRITERIA**

The guidance documents used for reviewing laboratory quality control (QC) data and assigning data qualifiers (flags) to analytical results are listed in Table 4-1. The QC limits established in the documents applicable to this data review were used to assess the quality of the analytical results. In some cases, however, QC limits established internally by the laboratory were taken into account to determine data quality.

The QC criteria considered for assessing the usability of the reported analytical results provided for each analyte type (i.e. VOCs, SVOCs, metals, etc.) are listed in Table 4-2. These criteria may vary with the analytical method utilized by the laboratory. These criteria comply with the guidance recommended in Section 2.0 above.

### **5.0 DATA VALIDATION QUALIFIERS**

The letter qualifiers (flags) used to define data usability are described briefly below. These letters are assigned by the data validator to analytical results having questionable accuracy and/or precision as determined by reviewing the laboratory QC data associated with the analytical results.

**TABLE 4-1****DATA VALIDATION GUIDANCE DOCUMENTS**

| <b>Analyte Type</b>   | <b>Validation Guidance</b>                                                                                                                                                                                                                                                             |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| VOCs                  | USEPA, 2008, Validating Volatile Organic Compounds By Gas Chromatography/Mass Spectrometry; SW-846 Method 8260B; SOP # HW-24, Rev. 2.<br><br>USEPA, 2008, Statement of Work for Organic Analysis of Low/Medium Concentration of Volatile Organic Compounds SOM01.2; SOP HW-33, Rev. 2. |
| SVOCs                 | USEPA, 2007, Statement of Work for Organic Analysis of Low/Medium Concentration of Semivolatile Organic Compounds SOM01.2; SOP HW-35, Rev. 1.                                                                                                                                          |
| Pesticides/PCBs       | USEPA, 2006, CLP Organics Data Review and Preliminary Review (CLP/SOW OLMO 4.3); SOP # HW-6, Rev. 14, Part C.                                                                                                                                                                          |
| Metals                | USEPA, 2006, Validation of Metals for the Contract Laboratory Program (CLP) based on SOW ILMO 5.3 (SOP Revision 13), SOP # HW-2, Rev. 13.                                                                                                                                              |
| Gen Chemistry         | NYSDEC, 2005, Analytical Services Protocols (ASP)                                                                                                                                                                                                                                      |
| VOCs<br>(Ambient air) | USEPA, 2006, Validating Air Samples, Volatile Organic Analysis of Ambient Air in Canister by Method TO-15; SOP # HW-31, Rev. 4.                                                                                                                                                        |

TABLE 4-2

**QUALITY CONTROL CRITERIA USED FOR VALIDATING  
LABORATORY ANALYTICAL DATA**

| <b>VOCs</b>                                                                                                                                                                                                                                                                 | <b>SVOCs</b>                                                                                                                                                                                                                                                      | <b>Pesticides/PCBs</b>                                                                                                                                                                                    | <b>Metals</b>                                                                                                                                                                                                                                                                    | <b>Gen Chemistry</b>                                                                                                                           | <b>Method TO-15</b>                                                                                                                                                                                                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Completeness of Pkg<br>Sample Condition<br>Holding Time<br>System Monitoring<br>Compounds<br>Lab Control Sample<br>Matrix Spikes<br>Blanks<br>Instrument Tuning<br>Internal Standards<br>Initial Calibration<br>Continuing Calibration<br>Lab Qualifiers<br>Field Duplicate | Completeness of Pkg<br>Sample Condition<br>Holding Time<br>Surrogate Recoveries<br>Lab Control Sample<br>Matrix Spikes<br>Blanks<br>Instrument Tuning<br>Internal Standards<br>Initial Calibration<br>Continuing Calibration<br>Lab Qualifiers<br>Field Duplicate | Completeness of Pkg<br>Sample Condition<br>Holding Time<br>Surrogate Recoveries<br>Matrix Spikes<br>Blanks<br>Instrument Calibration<br>& Verification<br>Analyte ID<br>Lab Qualifiers<br>Field Duplicate | Completeness of Pkg<br>Sample Condition<br>Holding Time<br>Initial/Continuing<br>Calibration<br>CRDL Standards<br>Blanks<br>Interference Check<br>Sample<br>Spike Recoveries<br>Lab Duplicate<br>Lab Control Sample<br>ICP Serial Dilutions<br>Lab Qualifiers<br>Field Duplicate | Completeness of Pkg<br>Sample Condition<br>Holding Times<br>Calibration<br>Lab Control Samples<br>Blanks<br>Spike Recoveries<br>Lab Duplicates | Completeness of Pkg<br>Sample Condition<br>Holding Time<br>Canister Certification<br>Lab Control Sample<br>Instrument Tuning<br>Blanks<br>Initial Calibration &<br>System Performance<br>Daily Calibration<br>Field Duplicate |

The laboratory may also use various letters and symbols to flag analytical results generated when QC limits were exceeded. The meanings of these flags may differ from those used by the independent data validator. Those used by the laboratory are provided with the analytical results.

**NOTE:** The assignment of data qualifiers by the data reviewer (validator) to laboratory analytical results should not necessarily be interpreted by the data user as a measure of laboratory ability or proficiency. Rather, the qualifiers are intended to provide a measure of data accuracy and precision to the data user, which, for example, may provide a level of confidence in determining whether or not standards or cleanup objectives have been met.

- U** The analyte was analyzed for but was not detected at or above the sample quantitation limit.
- J** The analyte was positively identified; the associated numerical value is the *approximate* concentration of the analyte in the sample. (The magnitude of any  $\pm$  value associated with the result is not determined by data validation).
- UJ** The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is *approximate* and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R** The sample result is rejected (i.e., is unusable) due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
- N** The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification".
- JN** The analyte is considered to be "presumptively present." The associated numerical value represents its *approximate* concentration.

The validated analytical results are attached to this report. Validation qualifiers (flags) are indicated using red ink. Data sheets having qualified data are signed and dated by the data reviewer.

## **6.0 RESULTS OF THE DATA REVIEW**

The results of the data review are summarized in Table 6-1. The table lists the samples where QC criteria were found to exceed acceptable limits and the actions taken to qualify the associated analytical results.

## **7.0 TOTAL USABLE DATA**

For SDG C1512012, four samples were analyzed and results were reported for 256 analyses. Twelve results were rejected. Even though some results were flagged with a “J” as estimated, all other results (95%) are considered usable. See the summary table for the analyses that have been rejected and the associated QC reasons.

**Table 6-1 TO-15**

| <b>SAMPLES AFFECTED</b> | <b>ANALYTES</b>                                              | <b>ACTION</b>            | <b>QC VIOLATION</b> | <b>COMMENTS</b>                                                      |
|-------------------------|--------------------------------------------------------------|--------------------------|---------------------|----------------------------------------------------------------------|
| All undiluted samples   | 1,2,4-Trichlorobenzene<br>Methyl ethyl ketone                | J detects/UJ non-detects | LCS < 70 %          | Results are estimated                                                |
| All undiluted samples   | 1,4-Dioxane<br>Methyl butyl ketone<br>Methyl isobutyl ketone | J detects/R non-detects  | LCS < 50 %          | Detected results may be biased low/non-detected results are rejected |
| All undiluted samples   | Methyl butyl ketone                                          | J detects/UJ non-detects | CCV > 30 %          | Results are estimated                                                |

## ***Appendix A***

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### ***Validated Analytical Results***





**CEN TEK LABORATORIES, LLC**

Date: 06-Jan-16

CLIENT: Ravi Engineering & Land Surveying, P.C.

Project: 702-714 Portland Ave

Lab Order: C1512012

## 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 ( $\pm 2$ ", 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 ( $\pm 1$ ", vacuum, absolute) for the sample to be valid. Once received at the laboratory, the canister vacuum should be confirmed to be 5" of Hg,  $\pm 1$ ". 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.

See Corrective Action: [3314] CC did not meet criteria.

See Corrective Action: [3315] LCSD did not reproduce.

Centek Laboratories, LLC

Corrective Action Report

Date Initiated: 03-Dec-15

Corrective Action Report ID: 3314

Initiated By: Russell Pellegrino

Department: MSVOA

Corrective Action Description

CAR Summary: CC did not meet criteria.

Description of Nonconformance Root/Cause(s): Continuing calibration did not meet criteria on 12/3/15 for MBK. The compound was more sensitive in the CC and did not meet criteria in the LCS. The compound in question was not found in associated samples.

Description of Corrective Action w/Proposed C.A.: Since the compounds of interest was found in the associated sample than the results should be considered bias high. If compounds remain outside criteria perform system calibration. All sets of data submitted.

Performed By: Russell Pellegrino

Completion Date: 04-Dec-15

Client Notification

Client Notification Required: No

Notified By:

Comment:

Quality Assurance Review

Nonconformance Type: Deficiency

Further Action required by QA: Recalibrate the system ASAP if compound remains outside criteria. Monitoring of all quality control remains post initial calibration. All sets of data submitted.

Approval and Closure

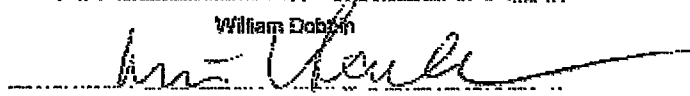
Technical Director /  
Deputy Tech. Dir.:



William Dobbin

Close Date: 05-Dec-15

QA Officer Approval:



Nick Scala

QA Date: 05-Dec-15

Last Updated BY: russ

Updated: 06-Jan-2016 12:10 PM

Reported: 06-Jan-2015 12:10 P

Centek Laboratories, LLC

Corrective Action Report

Date Initiated: 03-Dec-15

Corrective Action Report ID: 3315

Initiated By: Russell Pellegrino

Department: MSVOA

Corrective Action Description

CAR Summary: LCSD did not reproduce.

Description of Nonconformance Root/Cause(s): ALCS1UGD-120315 did not meet criteria for % recoveries for several compounds. All other QC required met criteria. The LCS 6 Liter canister was independent of the 6 Liter continuing calibration canister.

Description of Corrective Action w/Proposed C.A.: Since the LCS 6 Liter canister was independent of the 6 Liter continuing calibration canister and all other QC required met criteria, then continue with analysis. If results continue outside established limits then recalibrate system. All sets of data submitted.

Performed By: Russell Pellegrino

Completion Date: 04-Dec-15

Client Notification

Client Notification Required: No

Notified By:

Comment:

Quality Assurance Review

Nonconformance Type: Deficiency

Further Action required by QA: If continues than recalibrate the system. Perform new stock LCS. Monitor all quality control to meet established criteria. All sets of data submitted.

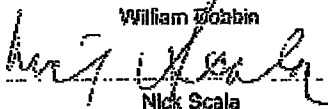
Approval and Closure

Technical Director /  
Deputy Tech. Dir.:



Close Date: 05-Dec-15

QA Officer Approval:

  
Nick Scala

QA Date: 05-Dec-15

Last Updated BY russ

Updated: 06-Jan-2016 12:12 PM

Reported: 06-Jan-2016 12:12 P



**CEN TEK LABORATORIES, LLC**

Date: 06-Jan-16

CLIENT: Ravi Engineering & Land Surveying, P.C.  
Project: 702-714 Portland Ave  
Lab Order: C1512012

**Work Order Sample Summary**

| Lab Sample ID | Client Sample ID | Tag Number | Collection Date | Date Received |
|---------------|------------------|------------|-----------------|---------------|
| C1512012-001A | AS-702           | 1179.434   | 11/30/2015      | 12/3/2015     |
| C1512012-002A | AS-708           | 556.373    | 11/30/2015      | 12/3/2015     |
| C1512012-003A | AS-714           | 496.454    | 11/30/2015      | 12/3/2015     |
| C1512012-004A | AS-OUT           | 107.344    | 11/30/2015      | 12/3/2015     |

## Centek Laboratories, LLC

Date: 05-Jan-16

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Lab Order: C1512012  
 Project: 702-714 Portland Ave  
 Lab ID: C1512012-001A

Client Sample ID: AS-702  
 Tag Number: 1179.434  
 Collection Date: 11/30/2015  
 Matrix: AIR

| Analyses                             | Result | **Limit | Qual  | Units | DF | Date Analyzed        |
|--------------------------------------|--------|---------|-------|-------|----|----------------------|
| <b>FIELD PARAMETERS</b>              |        |         |       |       |    |                      |
|                                      |        |         | FLD   |       |    | Analyst:             |
| Lab Vacuum In                        | -4     |         |       | "Hg   |    | 12/3/2015            |
| Lab Vacuum Out                       | -30    |         |       | "Hg   |    | 12/3/2015            |
| <b>1UG/M3 W/ 0.25UG/M3 CT-TCE-VC</b> |        |         |       |       |    |                      |
|                                      |        |         | TD-15 |       |    | Analyst: RJP         |
| 1,1,1-Trichloroethane                | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| 1,1,2,2-Tetrachloroethane            | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| 1,1,2-Trichloroethane                | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| 1,1-Dichloroethane                   | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| 1,1-Dichloroethene                   | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| 1,2,4-Trichlorobenzene               | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| 1,2,4-Triethylbenzene                | 0.11   | 0.15    | J     | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| 1,2-Dibromoethane                    | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| 1,2-Dichlorobenzene                  | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| 1,2-Dichloroethane                   | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| 1,2-Dichloropropane                  | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| 1,3,5-Trimethylbenzene               | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| 1,3-butadiene                        | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| 1,3-Dichlorobenzene                  | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| 1,4-Dichlorobenzene                  | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| 1,4-Dioxane                          | < 0.30 | 0.30    |       | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| 2,2,4-Trimethylpentane               | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| 4-ethyltoluene                       | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Acetone                              | 7.5    | 3.0     |       | ppbV  | 10 | 12/4/2015 5:25:00 PM |
| Amyl chloride                        | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Benzene                              | 0.30   | 0.15    |       | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Benzyl chloride                      | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Bromodichloromethane                 | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Bromoform                            | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Bromomethane                         | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Carbon disulfide                     | 0.13   | 0.15    | J     | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Carbon tetrachloride                 | 0.000  | 0.040   |       | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Chlorobenzene                        | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Chloroethane                         | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Chloroform                           | 0.15   | 0.15    |       | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Chloromethane                        | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| cis-1,2-Dichloroethene               | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| cis-1,3-Dichloropropene              | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Cyclohexane                          | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Dibromochloromethane                 | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 1:36:00 AM |
| Ethyl acetate                        | < 0.25 | 0.25    |       | ppbV  | 1  | 12/4/2015 1:36:00 AM |

Qualifiers: \*\* Reporting Limit  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 IN Non-routine analyte. Quantitation estimated.  
 S Spike Recovery outside accepted recovery limits

Results reported are not blank corrected  
 E Value above quantitation range  
 J Analyte detected at or below quantitation limits  
 ND Not Detected at the Reporting Limit

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## Centek Laboratories, LLC

Date: 05-Jan-16

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Lab Order: C1512012  
 Project: 702-714 Portland Ave  
 Lab ID: C1512012-001A

Client Sample ID: AS-702  
 Tag Number: 1179.434  
 Collection Date: 11/30/2015  
 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  | 12/4/2015 1:36:00 AM |
| Freon 11                      | 0.27     | 0.15    |      | ppbV         | 1  | 12/4/2015 1:36:00 AM |
| Freon 113                     | < 0.15   | 0.15    |      | ppbV         | 1  | 12/4/2015 1:36:00 AM |
| Freon 114                     | < 0.15   | 0.15    |      | ppbV         | 1  | 12/4/2015 1:36:00 AM |
| Freon 12                      | 0.58     | 0.15    |      | ppbV         | 1  | 12/4/2015 1:36:00 AM |
| Heptane                       | < 0.15   | 0.15    |      | ppbV         | 1  | 12/4/2015 1:36:00 AM |
| Hexachloro-1,3-butadiene      | < 0.15   | 0.15    |      | ppbV         | 1  | 12/4/2015 1:36:00 AM |
| Hexane                        | < 0.15   | 0.15    |      | ppbV         | 1  | 12/4/2015 1:36:00 AM |
| Isopropyl alcohol             | 6.6      | 1.5     |      | ppbV         | 10 | 12/4/2015 5:25:00 PM |
| m&p-Xylene                    | 0.24     | 0.30    | J    | ppbV         | 1  | 12/4/2015 1:36:00 AM |
| Methyl Butyl Ketone           | < 0.30 R | 0.30    |      | ppbV         | 1  | 12/4/2015 1:36:00 AM |
| Methyl Ethyl Ketone           | 1.2 J    | 0.30    |      | ppbV         | 1  | 12/4/2015 1:36:00 AM |
| Methyl Isobutyl Ketone        | < 0.30 R | 0.30    |      | ppbV         | 1  | 12/4/2015 1:36:00 AM |
| Methyl tert-butyl ether       | < 0.15   | 0.15    |      | ppbV         | 1  | 12/4/2015 1:36:00 AM |
| Methylene chloride            | 0.14     | 0.15    | J    | ppbV         | 1  | 12/4/2015 1:36:00 AM |
| o-Xylene                      | < 0.15   | 0.15    |      | ppbV         | 1  | 12/4/2015 1:36:00 AM |
| Propylene                     | < 0.15   | 0.15    |      | ppbV         | 1  | 12/4/2015 1:36:00 AM |
| Styrene                       | < 0.15   | 0.15    |      | ppbV         | 1  | 12/4/2015 1:36:00 AM |
| Tetrachloroethylene           | < 0.15   | 0.15    |      | ppbV         | 1  | 12/4/2015 1:36:00 AM |
| Tetrahydrofuran               | 0.31     | 0.15    |      | ppbV         | 1  | 12/4/2015 1:36:00 AM |
| Toluene                       | 0.50     | 0.15    |      | ppbV         | 1  | 12/4/2015 1:36:00 AM |
| trans-1,2-Dichloroethene      | < 0.15   | 0.15    |      | ppbV         | 1  | 12/4/2015 1:36:00 AM |
| trans-1,3-Dichloropropene     | < 0.15   | 0.15    |      | ppbV         | 1  | 12/4/2015 1:36:00 AM |
| Trichloroethene               | < 0.040  | 0.040   |      | ppbV         | 1  | 12/4/2015 1:36:00 AM |
| Vinyl acetate                 | < 0.15   | 0.15    |      | ppbV         | 1  | 12/4/2015 1:36:00 AM |
| Vinyl Bromide                 | < 0.15   | 0.15    |      | ppbV         | 1  | 12/4/2015 1:36:00 AM |
| Vinyl chloride                | < 0.040  | 0.040   |      | ppbV         | 1  | 12/4/2015 1:36:00 AM |
| Sum: Bromofluorobenzene       | 83.0     | 70-120  |      | %REC         | 1  | 12/4/2015 1:36:00 AM |

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

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## Centek Laboratories, LLC

Date: 05-Jan-16

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Lab Order: C1512012  
 Project: 702-714 Portland Ave  
 Lab ID: C1512012-001A

Client Sample ID: AS-702  
 Tag Number: 1179.434  
 Collection Date: 11/30/2015  
 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  | 12/4/2015 1:36:00 AM |
| 1,1,2,2-Tetrachloroethane     | < 1.0             | 1.0     |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| 1,1,2-Trichloroethane         | < 0.82            | 0.82    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| 1,1-Dichloroethane            | < 0.61            | 0.61    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| 1,1-Dichloroethene            | < 0.59            | 0.59    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| 1,2,4-Trichlorobenzene        | < 1.1             | 1.1     |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| 1,2,4-Trimethylbenzene        | 0.54              | 0.74    | J    | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| 1,2-Dichloroethane            | < 1.2             | 1.2     |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| 1,2-Dichlorobenzene           | < 0.90            | 0.90    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| 1,2-Dichloroethane            | < 0.61            | 0.61    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| 1,2-Dichloropropane           | < 0.69            | 0.69    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| 1,3,5-Trimethylbenzene        | < 0.74            | 0.74    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| 1,3-butadiene                 | < 0.33            | 0.33    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| 1,3-Dichlorobenzene           | < 0.90            | 0.90    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| 1,4-Dichlorobenzene           | < 0.90            | 0.90    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| 1,4-Dioxane                   | <del>0.74</del> R | 1.1     |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| 2,2,4-Trimethylpentane        | < 0.70            | 0.70    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| 4-ethyltoluene                | < 0.74            | 0.74    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Acetone                       | 16                | 7.1     |      | ug/m3        | 10 | 12/4/2015 5:26:00 PM |
| Allyl chloride                | < 0.47            | 0.47    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Benzene                       | 0.96              | 0.48    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Benzyl chloride               | < 0.86            | 0.86    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Bromodichloromethane          | < 1.0             | 1.0     |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Bromoform                     | < 1.6             | 1.6     |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Bromomethane                  | < 0.58            | 0.58    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Carbon disulfide              | 0.40              | 0.47    | J    | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Carbon tetrachloride          | 0.57              | 0.25    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Chlorobenzene                 | < 0.69            | 0.69    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Chloroethane                  | < 0.40            | 0.40    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Chloroform                    | 0.73              | 0.73    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Chloromethane                 | < 0.31            | 0.31    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| cis-1,2-Dichloroethene        | < 0.59            | 0.59    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| cis-1,3-Dichloropropene       | < 0.66            | 0.66    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Cyclohexane                   | < 0.52            | 0.52    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Dibromochloromethane          | < 1.3             | 1.3     |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Ethyl acetate                 | < 0.90            | 0.90    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Ethylbenzene                  | < 0.65            | 0.65    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Freon 11                      | 1.5               | 0.84    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Freon 113                     | < 1.1             | 1.1     |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Freon 114                     | < 1.0             | 1.0     |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |

Qualifiers: \*\* Reporting Limit  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 JN Non-routine analyte. Quantitation estimated.  
 S Spike Recovery outside accepted recovery limits

. Results reported are not blank corrected  
 E Value above quantitation range  
 J Analyte detected at or below quantitation limits  
 ND Not Detected at the Reporting Limit

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## Centek Laboratories, LLC

Date: 05-Jan-16

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Lab Order: C1512012  
 Project: 702-714 Portland Ave  
 Lab ID: C1512012-001A

Client Sample ID: AS-702  
 Tag Number: 1179.434  
 Collection Date: 11/30/2015  
 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  | 12/4/2015 1:36:00 AM |
| Heptane                       | < 0.61           | 0.81    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Hexachloro-1,3-butadiene      | < 1.6            | 1.6     |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Hexane                        | < 0.53           | 0.53    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Isopropyl alcohol             | 15               | 3.7     |      | ug/m3        | 10 | 12/4/2015 5:25:00 PM |
| m&p-Xylene                    | 1.0              | 1.3     | J    | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Methyl Butyl Ketone           | <del>5.2</del> R | 1.2     |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Methyl Ethyl Ketone           | 3.4 J            | 0.88    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Methyl Isobutyl Ketone        | <del>1.2</del> R | 1.2     |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Methyl tert-butyl ether       | < 0.54           | 0.54    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Methylene chloride            | 0.49             | 0.52    | J    | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| o-Xylene                      | < 0.65           | 0.65    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Propylene                     | < 0.26           | 0.26    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Styrene                       | < 0.64           | 0.64    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Tetrachloroethylene           | < 1.0            | 1.0     |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Tetrahydrofuran               | 0.91             | 0.44    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Toluene                       | 1.9              | 0.67    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| trans-1,2-Dichloroethene      | < 0.59           | 0.59    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| trans-1,3-Dichloropropene     | < 0.68           | 0.68    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Trichloroethene               | < 0.21           | 0.21    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Vinyl acetate                 | < 0.53           | 0.53    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Vinyl Bromide                 | < 0.66           | 0.66    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |
| Vinyl chloride                | < 0.10           | 0.10    |      | ug/m3        | 1  | 12/4/2015 1:36:00 AM |

Qualifiers: \*\* Reporting Limit  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 N Non-rotation analyte. Quantitation estimated.  
 S Spike Recovery outside accepted recovery limits

Results reported are not blank corrected  
 E Value above quantitation range  
 J Analyte detected at or below quantitation limits  
 ND Not Detected at the Reporting Limit

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## Centek Laboratories, LLC

Date: 05-Jan-16

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Lab Order: C1512012  
 Project: 702-714 Portland Ave  
 Lab ID: C1512012-002A

Client Sample ID: AS-708  
 Tag Number: 556373  
 Collection Date: 11/30/2015  
 Matrix: AIR

| Analyses                             | Result | **Limit | Qual       | Units | DF | Date Analyzed        |
|--------------------------------------|--------|---------|------------|-------|----|----------------------|
| <b>FIELD PARAMETERS</b>              |        |         |            |       |    |                      |
| Lab Vacuum In                        | -7     |         |            | "Hg   |    | Analyst: 12/3/2015   |
| Lab Vacuum Out                       | -30    |         |            | "Hg   |    | 12/3/2015            |
| <b>1UG/M3 W/ 0.25UG/M3 CT-TCE-VC</b> |        |         |            |       |    |                      |
|                                      |        |         | <b>FLD</b> |       |    | Analyst: RJP         |
| 1,1,1-Trichloroethane                | < 0.15 | 0.15    |            | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| 1,1,2,2-Tetrachloroethane            | < 0.15 | 0.15    |            | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| 1,1,2-Trichloroethane                | < 0.15 | 0.15    |            | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| 1,1-Dichloroethane                   | < 0.15 | 0.15    |            | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| 1,1-Dichloroethene                   | < 0.15 | 0.15    |            | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| 1,2,4-Trichlorobenzene               | < 0.15 | 0.15    |            | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| 1,2,4-Trimethylbenzene               | 0.17   | 0.15    |            | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| 1,2-Dibromoethane                    | < 0.15 | 0.15    |            | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| 1,2-Dichlorobenzene                  | < 0.15 | 0.15    |            | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| 1,2-Dichloroethane                   | < 0.15 | 0.15    |            | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| 1,2-Dichloropropane                  | < 0.15 | 0.15    |            | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| 1,3,5-Trimethylbenzene               | < 0.15 | 0.15    |            | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| 1,3-butadiene                        | < 0.15 | 0.15    |            | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| 1,3-Dichlorobenzene                  | < 0.15 | 0.15    |            | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| 1,4-Dichlorobenzene                  | < 0.15 | 0.15    |            | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| 1,4-Dioxane                          | < 0.30 | 0.30    |            | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| 2,2,4-trimethylpentane               | < 0.15 | 0.15    |            | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| 4-ethyltoluene                       | < 0.15 | 0.15    |            | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Acetone                              | 0.6    | 3.0     |            | ppbV  | 30 | 12/4/2015 6:01:00 PM |
| Allyl chloride                       | < 0.15 | 0.15    |            | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Benzene                              | 0.29   | 0.15    |            | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Benzyl chloride                      | < 0.15 | 0.15    |            | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Bromodichloromethane                 | < 0.15 | 0.15    |            | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Bromoform                            | < 0.15 | 0.15    |            | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Bromomethane                         | < 0.15 | 0.15    |            | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Carbon disulfide                     | < 0.15 | 0.15    |            | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Carbon tetrachloride                 | 0.090  | 0.040   |            | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Chlorobenzene                        | < 0.15 | 0.15    |            | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Chloroethane                         | < 0.15 | 0.15    |            | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Chloroform                           | 0.13   | 0.15    | J          | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Chloromethane                        | 0.51   | 0.15    |            | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| cis-1,2-Dichloroethane               | < 0.15 | 0.15    |            | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| cis-1,3-Dichloropropene              | < 0.15 | 0.15    |            | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Cyclohexane                          | < 0.15 | 0.15    |            | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Dibromochloromethane                 | < 0.15 | 0.15    |            | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Ethyl acetate                        | 0.13   | 0.25    | J          | ppbV  | 1  | 12/4/2015 2:14:00 AM |

Qualifiers: \*\* Reporting Limit  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 JN Non-routine analyte. Quantitation estimated.  
 S Spike Recovery outside accepted recovery limits

Results reported are net blank corrected  
 E Value above quantitation range  
 J Analyte detected at or below quantitation limits  
 ND Not Detected at the Reporting Limit

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## Centek Laboratories, LLC

Date: 05-Jan-16

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Lab Order: C1512012  
 Project: 702-714 Portland Ave  
 Lab ID: C1512012-002A

Client Sample ID: AS-708  
 Tag Number: 556.373  
 Collection Date: 11/30/2015  
 Matrix: AIR

| Analyses                      | Result   | **Limit | Qual  | Units | DF | Date Analyzed        |
|-------------------------------|----------|---------|-------|-------|----|----------------------|
| 1UG/M3 W/ 0.25UG/M3 CT-TCE-VC |          |         | 70-15 |       |    | Analyst: RJP         |
| Ethylbenzene                  | 0.10     | 0.15    | J     | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Freon 11                      | 0.20     | 0.15    |       | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Freon 113                     | < 0.15   | 0.15    |       | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Freon 114                     | < 0.15   | 0.15    |       | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Freon 12                      | 0.58     | 0.15    |       | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Heptane                       | < 0.15   | 0.15    |       | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Hexachloro-1,3-butadiene      | < 0.15   | 0.15    |       | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Hexane                        | 0.24     | 0.15    |       | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Isopropyl alcohol             | 2.2      | 0.15    |       | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| m&p-Xylene                    | 0.29     | 0.30    | J     | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Methyl Butyl Ketone           | < 0.30 R | 0.30    |       | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Methyl Ethyl Ketone           | 0.65 J   | 0.30    |       | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Methyl Isobutyl Ketone        | < 0.30 R | 0.30    |       | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Methyl tert-butyl ether       | < 0.15   | 0.15    |       | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Methylene chloride            | 0.16     | 0.15    |       | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| o-Xylene                      | < 0.15   | 0.15    |       | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Propylene                     | < 0.15   | 0.15    |       | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Styrene                       | < 0.15   | 0.15    |       | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Tetrachloroethylene           | < 0.15   | 0.15    |       | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Tetrahydrofuran               | < 0.15   | 0.15    |       | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Toluene                       | 0.80     | 0.15    |       | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| trans-1,2-Dichloroethene      | < 0.15   | 0.15    |       | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| trans-1,3-Dichloropropene     | < 0.15   | 0.15    |       | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Trichloroethene               | < 0.040  | 0.040   |       | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Vinyl acetate                 | < 0.15   | 0.15    |       | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Vinyl Bromide                 | < 0.15   | 0.15    |       | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Vinyl chloride                | < 0.040  | 0.040   |       | ppbV  | 1  | 12/4/2015 2:14:00 AM |
| Sum: Bromofluorobenzene       | 85.0     | 70-130  |       | %REC  | 1  | 12/4/2015 2:14:00 AM |

Qualifiers: \*\* Reporting Limit  
 B Analyte detected in the associated Method Blank  
 L Holding times for preparation or analysis exceeded  
 N Non-routine analyte. Quantitation estimated.  
 S Spike Recovery outside accepted recovery limits

. Results reported are not blank corrected  
 E Value above quantitation range  
 J Analyte detected at or below quantitation limits  
 ND Not Detected at the Reporting Limit

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MKP 1/8/16

## Centek Laboratories, LLC

Date: 05-Jan-16

CLIENT: Ravi Engineering &amp; Land Surveying, P.C.

Client Sample ID: AS-708

Lab Order: C1512012

Tag Number: 556.373

Project: 702-714 Portland Ave

Collection Date: 11/30/2015

Lab ID: C1512012-002A

Matrix: AIR

| Analyses                      | Result | Limit | Qual | Units        | DF | Date Analyzed        |
|-------------------------------|--------|-------|------|--------------|----|----------------------|
| 1UG/M3 W/ 0.25UG/M3 CT-TCE-VC |        | TQ-15 |      | Analyst: RJP |    |                      |
| 1,1,1-Trichloroethane         | < 0.82 | 0.82  |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| 1,1,2,2-Tetrachloroethane     | < 1.0  | 1.0   |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| 1,1,2-Trichloroethane         | < 0.82 | 0.82  |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| 1,1-Dichloroethane            | < 0.61 | 0.61  |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| 1,1-Dichloroethene            | < 0.59 | 0.59  |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| 1,2,4-Trichlorobenzene        | < 1.1  | 1.1   |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| 1,2,4-Trimethylbenzene        | 0.84   | 0.74  |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| 1,2-Dibromoethane             | < 1.2  | 1.2   |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| 1,2-Dichlorobenzene           | < 0.90 | 0.90  |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| 1,2-Dichloroethane            | < 0.61 | 0.61  |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| 1,2-Dichloropropane           | < 0.69 | 0.69  |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| 1,3,5-Trimethylbenzene        | < 0.74 | 0.74  |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| 1,3-butadiene                 | < 0.33 | 0.33  |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| 1,3-Dichlorobenzene           | < 0.90 | 0.90  |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| 1,4-Dichlorobenzene           | < 0.90 | 0.90  |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| 1,4-Dioxane                   | < 1.1  | 1.1   |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| 2,2,4-Trimethylpentane        | < 0.70 | 0.70  |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| 4-ethyltoluene                | < 0.74 | 0.74  |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| Acetone                       | 20     | 7.1   |      | ug/m3        | 10 | 12/4/2015 6:01:00 PM |
| Allyl chloride                | < 0.47 | 0.47  |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| Benzene                       | 0.93   | 0.48  |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| Benzyl chloride               | < 0.86 | 0.86  |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| Bromodichloromethane          | < 1.0  | 1.0   |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| Bromoform                     | < 1.6  | 1.6   |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| Bromomethane                  | < 0.58 | 0.58  |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| Carbon disulfide              | < 0.47 | 0.47  |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| Carbon tetrachloride          | 0.57   | 0.25  |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| Chlorobenzene                 | < 0.69 | 0.69  |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| Chloroethane                  | < 0.40 | 0.40  |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| Chloroform                    | 0.63   | 0.73  | J    | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| Chloromethane                 | 1.1    | 0.31  |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| cis-1,2-Dichloroethene        | < 0.59 | 0.59  |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| cis-1,3-Dichloropropene       | < 0.68 | 0.68  |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| Cyclohexane                   | < 0.52 | 0.52  |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| Dibromochloromethane          | < 1.3  | 1.3   |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| Ethyl acetate                 | 0.47   | 0.90  | J    | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| Ethylbenzene                  | 0.43   | 0.65  | J    | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| Freon 11                      | 1.6    | 0.84  |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| Freon 113                     | < 1.1  | 1.1   |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |
| Freon 114                     | < 1.0  | 1.0   |      | ug/m3        | 1  | 12/4/2015 2:14:00 AM |

|             |                                                    |                                                    |
|-------------|----------------------------------------------------|----------------------------------------------------|
| Qualifiers: | ** Reporting Limit                                 | Results reported are not blank corrected           |
| B           | Analyte detected in the associated Method Blank    | E Value above quantitation range                   |
| 11          | Holding times for preparation or analysis exceeded | J Analyte detected at or below quantitation limits |
| 5N          | Non-routine analyte. Quantitation estimated.       | ND Not Detected at the Reporting Limit             |
| S           | Spike Recovery outside accepted recovery limits    |                                                    |

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## Centek Laboratories, LLC

Date: 05-Jan-16

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Lab Order: C1512012  
 Project: 702-714 Portland Ave  
 Lab ID: C1512012-002A

Client Sample ID: AS-708  
 Tag Number: 556,373  
 Collection Date: 11/30/2015  
 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  | 12/4/2015 2:14:00 AM |
| Heptane                       | < 0.61  | 0.61    |      | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Hexachloro-1,3-butadiene      | < 1.6   | 1.6     |      | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Hexane                        | 0.85    | 0.53    |      | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Isopropyl alcohol             | 5.4     | 0.37    |      | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| m&p-Xylene                    | 1.3     | 1.3     | J    | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Methyl Butyl Ketone           | < 1.2 R | 1.2     |      | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Methyl Ethyl Ketone           | 1.9 J   | 0.88    |      | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Methyl isobutyl Ketone        | < 1.2 R | 1.2     |      | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Methyl tert-butyl ether       | < 0.54  | 0.54    |      | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Methylene chloride            | 0.56    | 0.52    |      | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| o-Xylene                      | < 0.65  | 0.65    |      | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Propylene                     | < 0.26  | 0.26    |      | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Styrene                       | < 0.64  | 0.64    |      | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Tetrachloroethylene           | < 1.0   | 1.0     |      | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Tetrahydrofuran               | < 0.44  | 0.44    |      | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Toluene                       | 3.3     | 0.57    |      | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| trans-1,2-Dichloroethene      | < 0.59  | 0.59    |      | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| trans-1,3-Dichloropropene     | < 0.68  | 0.68    |      | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Trichloroethene               | < 0.21  | 0.21    |      | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Vinyl acetate                 | < 0.53  | 0.53    |      | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Vinyl Bromide                 | < 0.66  | 0.66    |      | ug/m3 | 1  | 12/4/2015 2:14:00 AM |
| Vinyl chloride                | < 0.10  | 0.10    |      | ug/m3 | 1  | 12/4/2015 2:14:00 AM |

Qualifiers: \*\* Reporting Limit  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 IN Non-routine analyte. Quantitation estimated.  
 S Spike Recovery outside accepted recovery limits

Results reported are not blank corrected  
 E Value above quantitation range  
 J Analyte detected at or below quantitation limits  
 ND Not Detected at the Reporting Limit

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## Centek Laboratories, LLC

Date: 05-Jan-16

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Lab Order: C1512012  
 Project: 702-714 Portland Ave  
 Lab ID: C1512012-003A

Client Sample ID: AS-714  
 Tag Number: 496.454  
 Collection Date: 11/30/2015  
 Matrix: AIR

| Analyses                             | Result | **Limit    | Qual | Units | DF | Date Analyzed        |
|--------------------------------------|--------|------------|------|-------|----|----------------------|
| <b>FIELD PARAMETERS</b>              |        |            |      |       |    |                      |
| Lab Vacuum In                        | -7     |            |      | "Hg   |    | 12/3/2015            |
| Lab Vacuum Out                       | -30    |            |      | "Hg   |    | 12/3/2015            |
| <b>1UG/MS W/ 0.25UG/MS CT-TCE-VC</b> |        |            |      |       |    |                      |
|                                      |        | <b>FLD</b> |      |       |    | <b>Analyst:</b>      |
| 1,1,1-Trichloroethane                | < 0.15 | 0.15       |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |
| 1,1,2,2-Tetrachloroethane            | < 0.15 | 0.15       |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |
| 1,1,2-Trichloroethane                | < 0.15 | 0.15       |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |
| 1,1-Dichloroethane                   | < 0.15 | 0.15       |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |
| 1,1-Dichloroethene                   | < 0.15 | 0.15       |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |
| 1,2,4-Trichlorobenzene               | < 0.15 | 0.15       |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |
| 1,2,4-Trimethylbenzene               | 0.59   | 0.15       |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |
| 1,2-Dibromoethane                    | < 0.15 | 0.15       |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |
| 1,2-Dichlorobenzene                  | < 0.15 | 0.15       |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |
| 1,2-Dichloroethane                   | < 0.15 | 0.15       |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |
| 1,2-Dichloropropane                  | < 0.15 | 0.15       |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |
| 1,3,5-Trimethylbenzene               | 0.19   | 0.15       |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |
| 1,3-butadiene                        | < 0.15 | 0.15       |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |
| 1,3-Dichlorobenzene                  | < 0.15 | 0.15       |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |
| 1,4-Dichlorobenzene                  | < 0.15 | 0.15       |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |
| 1,4-Dioxane                          | < 0.30 | 0.30       |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |
| 2,2,4-trimethylpentane               | 0.34   | 0.15       |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |
| 4-ethyltoluene                       | < 0.15 | 0.15       |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |
| Acetone                              | 5.0    | 1.5        |      | ppbV  | 5  | 12/4/2015 6:37:00 PM |
| Allyl chloride                       | < 0.15 | 0.15       |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |
| Benzene                              | 0.30   | 0.15       |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |
| Benzyl chloride                      | < 0.15 | 0.15       |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |
| Bromodichloromethane                 | < 0.15 | 0.15       |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |
| Bromoforn                            | < 0.15 | 0.15       |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |
| Bromomethane                         | < 0.15 | 0.15       |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |
| Carbon disulfide                     | < 0.15 | 0.15       |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |
| Carbon tetrachloride                 | 0.090  | 0.040      |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |
| Chlorobenzene                        | < 0.15 | 0.15       |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |
| Chloroethane                         | < 0.15 | 0.15       |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |
| Chloroform                           | 0.07   | 0.15       |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |
| Chloromethane                        | 0.53   | 0.15       |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |
| cis-1,2-Dichloroethene               | < 0.15 | 0.15       |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |
| cis-1,3-Dichloropropene              | < 0.15 | 0.15       |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |
| Cyclohexane                          | < 0.15 | 0.15       |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |
| Dibromochloromethane                 | < 0.15 | 0.15       |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |
| Ethyl acetate                        | < 0.25 | 0.25       |      | ppbV  | 1  | 12/4/2015 2:53:00 AM |

Qualifiers: \*\* Reporting Limit  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 IN Non-routine analyte. Quantitation estimated.  
 S Spike Recovery outside accepted recovery limits

Results reported are not blank corrected  
 E Value above quantitation range  
 J Analyte detected at or below quantitation limits  
 ND Not Detected at the Reporting Limit

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## Centek Laboratories, LLC

Date: 05-Jan-16

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Lab Order: C1512012  
 Project: 702-714 Portland Ave  
 Lab ID: C1512012-003A

Client Sample ID: AS-714  
 Tag Number: 496.454  
 Collection Date: 11/30/2015  
 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  | 12/4/2015 2:53:00 AM |
| Freon 11                      | 0.28     | 0.15   |      | ppbV         | 1  | 12/4/2015 2:53:00 AM |
| Freon 113                     | < 0.15   | 0.15   |      | ppbV         | 1  | 12/4/2015 2:53:00 AM |
| Freon 114                     | < 0.15   | 0.15   |      | ppbV         | 1  | 12/4/2015 2:53:00 AM |
| Freon 12                      | 0.57     | 0.15   |      | ppbV         | 1  | 12/4/2015 2:53:00 AM |
| Heptane                       | 0.29     | 0.15   |      | ppbV         | 1  | 12/4/2015 2:53:00 AM |
| Hexachloro-1,3-butadiene      | < 0.15   | 0.15   |      | ppbV         | 1  | 12/4/2015 2:53:00 AM |
| Hexane                        | 0.24     | 0.15   |      | ppbV         | 1  | 12/4/2015 2:53:00 AM |
| Isopropyl alcohol             | 1.5      | 0.15   |      | ppbV         | 1  | 12/4/2015 2:53:00 AM |
| m&p-Xylene                    | 0.50     | 0.30   |      | ppbV         | 1  | 12/4/2015 2:53:00 AM |
| Methyl Butyl Ketone           | < 0.20 R | 0.30   |      | ppbV         | 1  | 12/4/2015 2:53:00 AM |
| Methyl Ethyl Ketone           | 0.40 J   | 0.30   |      | ppbV         | 1  | 12/4/2015 2:53:00 AM |
| Methyl Isobutyl Ketone        | 0.10 R   | 0.30   | J    | ppbV         | 1  | 12/4/2015 2:53:00 AM |
| Methyl tert-butyl ether       | < 0.15   | 0.15   |      | ppbV         | 1  | 12/4/2015 2:53:00 AM |
| Methylene chloride            | 0.15     | 0.15   |      | ppbV         | 1  | 12/4/2015 2:53:00 AM |
| o-Xylene                      | 0.19     | 0.15   |      | ppbV         | 1  | 12/4/2015 2:53:00 AM |
| Propylene                     | < 0.15   | 0.15   |      | ppbV         | 1  | 12/4/2015 2:53:00 AM |
| Styrene                       | < 0.15   | 0.15   |      | ppbV         | 1  | 12/4/2015 2:53:00 AM |
| Tetrachloroethylene           | < 0.15   | 0.15   |      | ppbV         | 1  | 12/4/2015 2:53:00 AM |
| Tetrahydrofuran               | < 0.15   | 0.15   |      | ppbV         | 1  | 12/4/2015 2:53:00 AM |
| Toluene                       | 0.79     | 0.15   |      | ppbV         | 1  | 12/4/2015 2:53:00 AM |
| trans-1,2-Dichloroethene      | < 0.15   | 0.15   |      | ppbV         | 1  | 12/4/2015 2:53:00 AM |
| trans-1,3-Dichloropropene     | < 0.15   | 0.15   |      | ppbV         | 1  | 12/4/2015 2:53:00 AM |
| Trichloroethene               | < 0.040  | 0.040  |      | ppbV         | 1  | 12/4/2015 2:53:00 AM |
| Vinyl acetate                 | < 0.15   | 0.15   |      | ppbV         | 1  | 12/4/2015 2:53:00 AM |
| Vinyl Bromide                 | < 0.15   | 0.15   |      | ppbV         | 1  | 12/4/2015 2:53:00 AM |
| Vinyl chloride                | < 0.040  | 0.040  |      | ppbV         | 1  | 12/4/2015 2:53:00 AM |
| Surr: Bromofluorobenzene      | 92.0     | 70-130 |      | %REC         | 1  | 12/4/2015 2:53:00 AM |

Qualifiers: \*\* Reporting Limit  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 EN Non-routine analyte. Quantitation estimated.  
 S Spike Recovery outside accepted recovery limits

Results reported are not blank corrected  
 E Value above quantitation range  
 J Analyte detected at or below quantitation limits  
 ND Not Detected at the Reporting Limit

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## Centek Laboratories, LLC

Date: 05-Jan-16

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Lab Order: C1512012  
 Project: 702-714 Portland Ave  
 Lab ID: C1512012-003A

Client Sample ID: AS-714  
 Tag Number: 496454  
 Collection Date: 11/30/2015  
 Matrix: AIR

| Analyses                      | Result          | **Limit | Qual | Units | DF | Date Analyzed                        |
|-------------------------------|-----------------|---------|------|-------|----|--------------------------------------|
| 1UG/M3 W/ 0.25UG/M3 CT-TCE-VC |                 |         |      |       |    |                                      |
| 1,1,1-Trichloroethane         | < 0.82          | 0.82    |      | ug/m3 | 1  | Analyst: RJP<br>12/4/2015 2:53:00 AM |
| 1,1,2,2-Tetrachloroethane     | < 1.0           | 1.0     |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| 1,1,2-Trichloroethane         | < 0.82          | 0.82    |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| 1,1-Dichloroethane            | < 0.61          | 0.61    |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| 1,1-Dichloroethene            | < 0.59          | 0.59    |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| 1,2,4-Trichlorobenzene        | < 1.1 <i>WJ</i> | 1.1     |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| 1,2,4-Trimethylbenzene        | 2.0             | 0.74    |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| 1,2-Dibromoethane             | < 1.2           | 1.2     |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| 1,2-Dichlorobenzene           | < 0.90          | 0.90    |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| 1,2-Dichloroethane            | < 0.61          | 0.61    |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| 1,2-Dichloropropane           | < 0.69          | 0.69    |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| 1,3,5-Trimethylbenzene        | 0.93            | 0.74    |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| 1,3-butadiene                 | < 0.33          | 0.33    |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| 1,3-Dichlorobenzene           | < 0.90          | 0.90    |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| 1,4-Dichlorobenzene           | < 0.90          | 0.90    |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| 1,4-Dioxane                   | <i>SLT R</i>    | 1.1     |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| 2,2,4-trimethylpentane        | 1.6             | 0.70    |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| 4-ethyltoluene                | < 0.74          | 0.74    |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| Acetone                       | 12              | 3.6     |      | ug/m3 | 5  | 12/4/2015 6:37:00 PM                 |
| Allyl chloride                | < 0.47          | 0.47    |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| Benzene                       | 0.96            | 0.40    |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| Benzyl chloride               | < 0.86          | 0.86    |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| Bromodichloromethane          | < 1.0           | 1.0     |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| Bromoforn                     | < 1.6           | 1.6     |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| Bromomethane                  | < 0.58          | 0.58    |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| Carbon disulfide              | < 0.47          | 0.47    |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| Carbon tetrachloride          | 0.57            | 0.25    |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| Chlorobenzene                 | < 0.69          | 0.69    |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| Chloroethane                  | < 0.40          | 0.40    |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| Chloroform                    | 4.2             | 0.73    |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| Chloromethane                 | 1.1             | 0.31    |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| cis-1,2-Dichloroethene        | < 0.59          | 0.59    |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| cis-1,3-Dichloropropene       | < 0.68          | 0.68    |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| Cyclohexane                   | < 0.52          | 0.52    |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| Dibromochloromethane          | < 1.3           | 1.3     |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| Ethyl acetate                 | < 0.90          | 0.90    |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| Ethylbenzene                  | 0.65            | 0.65    |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| Freon 11                      | 1.6             | 0.84    |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| Freon 113                     | < 1.1           | 1.1     |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |
| Freon 114                     | < 1.0           | 1.0     |      | ug/m3 | 1  | 12/4/2015 2:53:00 AM                 |

Qualifiers: \*\* Reporting Limit  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 JN Non-routine analyte. Quantitation estimated.  
 S Spike Recovery outside accepted recovery limits

Results reported are not blank corrected  
 E Value above quantitation range  
 J Analyte detected at or below quantitation limits  
 ND Not Detected at the Reporting Limit

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## Centek Laboratories, LLC

Date: 05-Jun-16

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Lab Order: C1512012  
 Project: 702-714 Portland Ave  
 Lab ID: C1512012-003A

Client Sample ID: AS-714  
 Tag Number: 496.454  
 Collection Date: 11/30/2015  
 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  | 12/4/2015 2:53:00 AM |
| Heptane                       | 1.2    | 0.61    |      | ug/m3        | 1  | 12/4/2015 2:53:00 AM |
| Hexachloro-1,3-butadiene      | < 1.6  | 1.6     |      | ug/m3        | 1  | 12/4/2015 2:53:00 AM |
| Hexane                        | 0.85   | 0.53    |      | ug/m3        | 1  | 12/4/2015 2:53:00 AM |
| Isopropyl alcohol             | 3.6    | 0.37    |      | ug/m3        | 1  | 12/4/2015 2:53:00 AM |
| m&p-Xylene                    | 2.2    | 1.3     |      | ug/m3        | 1  | 12/4/2015 2:53:00 AM |
| Methyl Butyl Ketone           | 3.2 R  | 1.2     |      | ug/m3        | 1  | 12/4/2015 2:53:00 AM |
| Methyl Ethyl Ketone           | 1.2 J  | 0.88    |      | ug/m3        | 1  | 12/4/2015 2:53:00 AM |
| Methyl Isobutyl Ketone        | 0.68 R | 1.2 J   |      | ug/m3        | 1  | 12/4/2015 2:53:00 AM |
| Methyl tert-butyl ether       | < 0.54 | 0.54    |      | ug/m3        | 1  | 12/4/2015 2:53:00 AM |
| Methylene chloride            | 0.52   | 0.52    |      | ug/m3        | 1  | 12/4/2015 2:53:00 AM |
| o-Xylene                      | 0.82   | 0.65    |      | ug/m3        | 1  | 12/4/2015 2:53:00 AM |
| Propylene                     | < 0.26 | 0.26    |      | ug/m3        | 1  | 12/4/2015 2:53:00 AM |
| Styrene                       | < 0.64 | 0.64    |      | ug/m3        | 1  | 12/4/2015 2:53:00 AM |
| Tetrachloroethylene           | < 1.0  | 1.0     |      | ug/m3        | 1  | 12/4/2015 2:53:00 AM |
| Tetrahydrofuran               | < 0.44 | 0.44    |      | ug/m3        | 1  | 12/4/2015 2:53:00 AM |
| Toluene                       | 3.0    | 0.57    |      | ug/m3        | 1  | 12/4/2015 2:53:00 AM |
| trans-1,2-Dichloroethene      | < 0.59 | 0.59    |      | ug/m3        | 1  | 12/4/2015 2:53:00 AM |
| trans-1,3-Dichloropropene     | < 0.68 | 0.68    |      | ug/m3        | 1  | 12/4/2015 2:53:00 AM |
| Trichloroethene               | < 0.21 | 0.21    |      | ug/m3        | 1  | 12/4/2015 2:53:00 AM |
| Vinyl acetate                 | < 0.53 | 0.53    |      | ug/m3        | 1  | 12/4/2015 2:53:00 AM |
| Vinyl Bromide                 | < 0.66 | 0.66    |      | ug/m3        | 1  | 12/4/2015 2:53:00 AM |
| Vinyl chloride                | < 0.10 | 0.10    |      | ug/m3        | 1  | 12/4/2015 2:53:00 AM |

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

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## Centek Laboratories, LLC

Date: 05-Jan-16

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Lab Order: C1512012  
 Project: 702-714 Portland Ave  
 Lab ID: C1512012-004A

Client Sample ID: AS-OUT  
 Tag Number: 107.544  
 Collection Date: 11/30/2015  
 Matrix: AIR

| Analyses                             | Result | **Limit | Qual  | Units | DF | Date Analyzed         |
|--------------------------------------|--------|---------|-------|-------|----|-----------------------|
| <b>FIELD PARAMETERS</b>              |        |         |       |       |    |                       |
| Lab Vacuum In                        | -4     |         | FLD   | "Hg   |    | Analyst:<br>12/3/2015 |
| Lab Vacuum Out                       | -30    |         |       | "Hg   |    | 12/3/2015             |
| <b>1UG/M3 W/ 0.25UG/M3 CT-TCE-VC</b> |        |         |       |       |    |                       |
|                                      |        |         | TO-15 |       |    | Analyst: RJP          |
| 1,1,1-Trichloroethane                | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |
| 1,1,2,2-Tetrachloroethane            | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |
| 1,1,2-Trichloroethane                | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |
| 1,1-Dichloroethane                   | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |
| 2,1-Dichloroethane                   | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |
| 1,2,4-Trichlorobenzene               | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |
| 1,2,4-Trimethylbenzene               | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |
| 1,2-Dibromomethane                   | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |
| 1,2-Dichlorobenzene                  | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |
| 1,2-Dichloroethane                   | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |
| 1,2-Dichloropropane                  | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |
| 1,3,5-Trimethylbenzene               | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |
| 1,3-butadiene                        | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |
| 1,3-Dichlorobenzene                  | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |
| 1,4-Dichlorobenzene                  | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |
| 1,4-Dioxane                          | < 0.15 | 0.30    |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |
| 2,2,4-trimethylpentane               | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |
| 4-ethyltoluene                       | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |
| Acetone                              | 4.8    | 1.5     |       | ppbV  | 5  | 12/4/2015 7:13:00 PM  |
| Allyl chloride                       | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |
| Benzene                              | 0.23   | 0.15    |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |
| Benzyl chloride                      | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |
| Bromodichloromethane                 | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |
| Bromoform                            | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |
| Bromomethane                         | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |
| Carbon disulfide                     | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |
| Carbon tetrachloride                 | 0.090  | 0.040   |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |
| Chlorobenzene                        | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |
| Chloroethane                         | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |
| Chloroform                           | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |
| Chloromethane                        | 0.47   | 0.15    |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |
| cis-1,2-Dichloroethane               | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |
| cis-1,3-Dichloropropene              | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |
| Cyclohexane                          | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |
| Dibromochloromethane                 | < 0.15 | 0.15    |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |
| Ethyl acetate                        | < 0.25 | 0.25    |       | ppbV  | 1  | 12/4/2015 3:31:00 AM  |

Qualifiers: \*\* Reporting Limit  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 JN Non-routine analyte. Quantitation estimated.  
 S Spike Recovery outside accepted recovery limits

- Results reported are not blank corrected  
 E Value above quantitation range  
 J Analyte detected at or below quantitation limits  
 ND Not Detected at the Reporting Limit

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## Centek Laboratories, LLC

Date: 05-Jan-16

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Lab Order: C1512012  
 Project: 702-714 Portland Ave  
 Lab ID: C1512012-004A

Client Sample ID: AS-OUT  
 Tag Number: 107344  
 Collection Date: 11/30/2015  
 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  | 12/4/2015 3:31:00 AM |
| Freon 11                      | 0.28     | 0.15    |      | ppbV         | 1  | 12/4/2015 3:31:00 AM |
| Freon 113                     | < 0.15   | 0.15    |      | ppbV         | 1  | 12/4/2015 3:31:00 AM |
| Freon 114                     | < 0.15   | 0.15    |      | ppbV         | 1  | 12/4/2015 3:31:00 AM |
| Freon 12                      | 0.69     | 0.15    |      | ppbV         | 1  | 12/4/2015 3:31:00 AM |
| Heptane                       | < 0.15   | 0.15    |      | ppbV         | 1  | 12/4/2015 3:31:00 AM |
| Hexachloro-1,3-butadiene      | < 0.15   | 0.15    |      | ppbV         | 1  | 12/4/2015 3:31:00 AM |
| Hexane                        | 0.16     | 0.15    |      | ppbV         | 1  | 12/4/2015 3:31:00 AM |
| Isopropyl alcohol             | 1.2      | 0.15    |      | ppbV         | 1  | 12/4/2015 3:31:00 AM |
| m&p-Xylene                    | 0.15     | 0.30    | J    | ppbV         | 1  | 12/4/2015 3:31:00 AM |
| Methyl Butyl Ketone           | < 0.30 R | 0.30    |      | ppbV         | 1  | 12/4/2015 3:31:00 AM |
| Methyl Ethyl Ketone           | 0.30 J   | 0.30    |      | ppbV         | 1  | 12/4/2015 3:31:00 AM |
| Methyl Isobutyl Ketone        | 0.10 R   | 0.30    | J    | ppbV         | 1  | 12/4/2015 3:31:00 AM |
| Methyl tert-butyl ether       | < 0.15   | 0.15    |      | ppbV         | 1  | 12/4/2015 3:31:00 AM |
| Methylene chloride            | 0.11     | 0.15    | J    | ppbV         | 1  | 12/4/2015 3:31:00 AM |
| o-Xylene                      | < 0.15   | 0.15    |      | ppbV         | 1  | 12/4/2015 3:31:00 AM |
| Propylene                     | < 0.15   | 0.15    |      | ppbV         | 1  | 12/4/2015 3:31:00 AM |
| Styrene                       | < 0.15   | 0.15    |      | ppbV         | 1  | 12/4/2015 3:31:00 AM |
| Tetrachloroethylene           | < 0.15   | 0.15    |      | ppbV         | 1  | 12/4/2015 3:31:00 AM |
| Tetrahydrofuran               | < 0.15   | 0.15    |      | ppbV         | 1  | 12/4/2015 3:31:00 AM |
| Toluene                       | 0.66     | 0.15    |      | ppbV         | 1  | 12/4/2015 3:31:00 AM |
| trans-1,2-Dichloroethene      | < 0.15   | 0.15    |      | ppbV         | 1  | 12/4/2015 3:31:00 AM |
| trans-1,3-Dichloropropene     | < 0.15   | 0.15    |      | ppbV         | 1  | 12/4/2015 3:31:00 AM |
| Trichloroethene               | < 0.040  | 0.040   |      | ppbV         | 1  | 12/4/2015 3:31:00 AM |
| Vinyl acetate                 | < 0.15   | 0.15    |      | ppbV         | 1  | 12/4/2015 3:31:00 AM |
| Vinyl Bromide                 | < 0.15   | 0.15    |      | ppbV         | 1  | 12/4/2015 3:31:00 AM |
| Vinyl chloride                | < 0.040  | 0.040   |      | ppbV         | 1  | 12/4/2015 3:31:00 AM |
| Surf: Bromofluorobenzene      | 77.0     | 70-130  |      | %REC         | 1  | 12/4/2015 3:31:00 AM |

| Qualifiers: | ** Reporting Limit                                 | Results reported are not blank corrected           |
|-------------|----------------------------------------------------|----------------------------------------------------|
| B           | Analyte detected in the associated Method Blank    | E Value above quantitation range                   |
| H           | Holding times for preparation or analysis exceeded | F Analyte detected at or below quantitation limits |
| N           | Non-environmental analyte. Quantitation estimated. | ND Not Detected at the Reporting Limit             |
| S           | Spike Recovery outside accepted recovery limits    |                                                    |

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## Centek Laboratories, LLC

Date: 05-Jan-16

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Lab Order: C1512012  
 Project: 702-714 Portland Ave  
 Lab ID: C1512012-004A

Client Sample ID: AS-OUT  
 Tag Number: 107.344  
 Collection Date: 11/30/2015  
 Matrix: AIR

| Analyses                      | Result | **Limit | Qual | Units | DF | Date Analyzed        |
|-------------------------------|--------|---------|------|-------|----|----------------------|
| 1UG/M3 W/ 0.25UG/M3 CT-TCE-VG |        |         |      |       |    |                      |
|                               |        | TO-15   |      |       |    | Analyst: RJP         |
| 1,1,1-Trichloroethane         | < 0.82 | 0.82    |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| 1,1,2,2-Tetrachloroethane     | < 1.0  | 1.0     |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| 1,1,2-Trichloroethane         | < 0.82 | 0.82    |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| 1,1-Dichloroethane            | < 0.61 | 0.61    |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| 1,1-Dichloroethene            | < 0.59 | 0.59    |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| 1,2,4-Trichlorobenzene        | < 1.1  | 1.1     | UJ   | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| 1,2,4-Trimethylbenzene        | < 0.74 | 0.74    |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| 1,2-Dibromoethane             | < 1.2  | 1.2     |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| 1,2-Dichlorobenzene           | < 0.90 | 0.90    |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| 1,2-Dichloroethane            | < 0.61 | 0.61    |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| 1,2-Dichloropropane           | < 0.69 | 0.69    |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| 1,3,5-Trimethylbenzene        | < 0.74 | 0.74    |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| 1,3-butadiene                 | < 0.33 | 0.33    |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| 1,3-Dichlorobenzene           | < 0.90 | 0.90    |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| 1,4-Dichlorobenzene           | < 0.90 | 0.90    |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| 1,4-Dioxane                   | < 1.1  | 1.1     | R    | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| 2,2,4-Trimethylpentane        | < 0.70 | 0.70    |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| 4-ethyltoluene                | < 0.74 | 0.74    |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Acetone                       | 11     | 3.6     |      | ug/m3 | 5  | 12/4/2015 7:13:00 PM |
| Allyl chloride                | < 0.47 | 0.47    |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Benzene                       | 0.73   | 0.48    |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Benzyl chloride               | < 0.86 | 0.86    |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Bromodichloromethane          | < 1.0  | 1.0     |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Bromoform                     | < 1.6  | 1.6     |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Bromomethane                  | < 0.58 | 0.58    |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Carbon disulfide              | < 0.47 | 0.47    |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Carbon tetrachloride          | 0.57   | 0.25    |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Chlorobenzene                 | < 0.69 | 0.69    |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Chloroethane                  | < 0.40 | 0.40    |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Chloroform                    | < 0.73 | 0.73    |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Chloromethane                 | 0.97   | 0.31    |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| cis-1,2-Dichloroethene        | < 0.59 | 0.59    |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| cis-1,3-Dichloropropene       | < 0.68 | 0.68    |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Cyclohexane                   | < 0.52 | 0.52    |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Dibromochloromethane          | < 1.3  | 1.3     |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Ethyl acetate                 | < 0.90 | 0.90    |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Ethylbenzene                  | < 0.65 | 0.65    |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Freon 11                      | 1.6    | 0.84    |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Freon 113                     | < 1.1  | 1.1     |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Freon 114                     | < 1.0  | 1.0     |      | ug/m3 | 1  | 12/4/2015 3:31:00 AM |

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

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## Centek Laboratories, LLC

Date: 05-Jan-16

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Lab Order: C1512012  
 Project: 702-714 Portland Ave  
 Lab ID: C1512012-004A

Client Sample ID: AS-OUT  
 Tag Number: 107.344  
 Collection Date: 11/30/2015  
 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  | 12/4/2015 3:31:00 AM |
| Heptane                       | < 0.61 | 0.61    |       | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Hexachloro-1,3-butadiene      | < 1.6  | 1.6     |       | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Hexane                        | 0.58   | 0.53    |       | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Isopropyl alcohol             | 2.8    | 0.37    |       | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| m&p-Xylene                    | 0.82   | 1.3     | J     | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Methyl Butyl Ketone           | 0.82 R | 1.2     |       | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Methyl Ethyl Ketone           | 0.88 J | 0.88    |       | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Methyl Isobutyl Ketone        | 0.44 R | 1.2     | J     | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Methyl tert-butyl ether       | < 0.54 | 0.54    |       | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Methylene chloride            | 0.38   | 0.52    | J     | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| o-Xylene                      | < 0.65 | 0.65    |       | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Propylene                     | < 0.26 | 0.26    |       | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Styrene                       | < 0.64 | 0.64    |       | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Tetrachloroethylene           | < 1.0  | 1.0     |       | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Tetrahydrofuran               | < 0.44 | 0.44    |       | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Toluene                       | 2.1    | 0.57    |       | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| trans-1,2-Dichloroethene      | < 0.59 | 0.59    |       | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| trans-1,3-Dichloropropene     | < 0.68 | 0.68    |       | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Trichloroethene               | < 0.21 | 0.21    |       | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Vinyl acetate                 | < 0.53 | 0.53    |       | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Vinyl Bromide                 | < 0.66 | 0.66    |       | ug/m3 | 1  | 12/4/2015 3:31:00 AM |
| Vinyl chloride                | < 0.10 | 0.10    |       | ug/m3 | 1  | 12/4/2015 3:31:00 AM |

|             |                                                    |                                                    |
|-------------|----------------------------------------------------|----------------------------------------------------|
| Qualifiers: | ** Reporting Limit                                 | Results reported are not blank corrected           |
| B           | Analyte detected in the associated Method Blank    | E Value above quantitation range                   |
| H           | Holding times for preparation or analysis exceeded | F Analyte detected at or below quantitation limits |
| EN          | Non-routine analysis. Quantitation estimated.      | ND Not Detected at the Reporting Limit             |
| S           | Spike Recovery outside accepted recovery limits    |                                                    |

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## ***Appendix B***

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### ***Laboratory QC Documentation***



CEN TEK LABORATORIES, LLC

Date: 05-Jan-16

# ANALYTICAL QC SUMMARY REPORT

CLIENT: Ravi Engineering & Land Surveying, P.C.  
Work Order: C1512012  
Project: 702-714 Portland Ave

TestCode: 0.25CT-TCE-VC

|                           |                  |                       |             |                          |               |          |           |             |      |          |      |
|---------------------------|------------------|-----------------------|-------------|--------------------------|---------------|----------|-----------|-------------|------|----------|------|
| Sample ID: ALCSTUG-120316 | Sample Type: LCS | TestCode: 0.25CT-TCE- | Units: pptV | Prep Date:               | RunNo: 10436  |          |           |             |      |          |      |
| Client ID: ZZZZZ          | Batch ID: R10436 | TestNo: TO-16         |             | Analysis Date: 12/3/2015 | SeqNo: 123007 |          |           |             |      |          |      |
| Analyte                   | Result           | PQL                   | SPK value   | SPK Ref Val              | %REC          | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| 1,1,1-Trichloroethane     | 1.220            | 0.15                  | 1           | 0                        | 122           | 70       | 130       |             |      |          |      |
| 1,1,2,2-Tetrachloroethane | 1.100            | 0.15                  | 1           | 0                        | 110           | 70       | 130       |             |      |          |      |
| 1,1,2-Trichloroethane     | 1.190            | 0.15                  | 1           | 0                        | 119           | 70       | 130       |             |      |          |      |
| 1,1-Dichloroethane        | 1.120            | 0.15                  | 1           | 0                        | 112           | 70       | 130       |             |      |          |      |
| 1,1-Dichloroethane        | 1.040            | 0.15                  | 1           | 0                        | 104           | 70       | 130       |             |      |          |      |
| 1,2,4-Trichlorobenzene    | 0.5900           | 0.15                  | 1           | 0                        | 59.0          | 70       | 130       |             |      |          | S    |
| 1,2,4-Trimethylbenzene    | 0.7600           | 0.15                  | 1           | 0                        | 76.0          | 70       | 130       |             |      |          |      |
| 1,2-Dibromoethane         | 1.140            | 0.15                  | 1           | 0                        | 114           | 70       | 130       |             |      |          |      |
| 1,2-Dichlorobenzene       | 0.8700           | 0.15                  | 1           | 0                        | 87.0          | 70       | 130       |             |      |          |      |
| 1,2-Dichloroethane        | 1.040            | 0.15                  | 1           | 0                        | 104           | 70       | 130       |             |      |          |      |
| 1,2-Dichloropropane       | 1.240            | 0.15                  | 1           | 0                        | 124           | 70       | 130       |             |      |          |      |
| 1,3,5-Trimethylbenzene    | 0.8800           | 0.15                  | 1           | 0                        | 88.0          | 70       | 130       |             |      |          |      |
| 1,3-butadiene             | 1.270            | 0.15                  | 1           | 0                        | 127           | 70       | 130       |             |      |          |      |
| 1,3-Dichlorobenzene       | 1.000            | 0.15                  | 1           | 0                        | 100           | 70       | 130       |             |      |          |      |
| 1,4-Dichlorobenzene       | 0.9600           | 0.15                  | 1           | 0                        | 96.0          | 70       | 130       |             |      |          |      |
| 1,4-Dioxane               | 0.3100           | 0.30                  | 1           | 0                        | 31.0          | 70       | 130       |             |      |          | S    |
| 2,2,4-Trimethylpentane    | 1.090            | 0.15                  | 1           | 0                        | 109           | 70       | 130       |             |      |          |      |
| 4-ethyltoluene            | 0.8800           | 0.15                  | 1           | 0                        | 88.0          | 70       | 130       |             |      |          |      |
| Acetone                   | 1.020            | 0.30                  | 1           | 0                        | 102           | 70       | 130       |             |      |          |      |
| Allyl chloride            | 0.9100           | 0.15                  | 1           | 0                        | 91.0          | 70       | 130       |             |      |          |      |
| Benzene                   | 1.190            | 0.15                  | 1           | 0                        | 119           | 70       | 130       |             |      |          |      |
| Benzyl chloride           | 0.8000           | 0.15                  | 1           | 0                        | 80.0          | 70       | 130       |             |      |          |      |
| Bromodichloromethane      | 1.160            | 0.15                  | 1           | 0                        | 116           | 70       | 130       |             |      |          |      |
| Bromoform                 | 1.140            | 0.15                  | 1           | 0                        | 114           | 70       | 130       |             |      |          |      |
| Bromomethane              | 0.9500           | 0.15                  | 1           | 0                        | 95.0          | 70       | 130       |             |      |          |      |

Qualifiers: . Results reported are not blank corrected  
J Analyte detected at or below quantitation limits  
S Spike Recovery outside accepted recovery limits

E Value above quantitation range  
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded  
R RPD outside accepted recovery limits

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Work Order: C1512012  
 Project: 702-714 Portland Ave

TestCode: 0.25CT-TCE-VC

|                          |                |                  |                       |             |                          |               |           |             |      |          |      |
|--------------------------|----------------|------------------|-----------------------|-------------|--------------------------|---------------|-----------|-------------|------|----------|------|
| Sample ID                | ALCS1UG-120315 | SampleType: LCS  | TestCode: 0.25CT-TCE- | Units: ppbV | Prep Date:               | RunNo: 10436  |           |             |      |          |      |
| Client ID:               | ZZZZZ          | Batch ID: R10436 | TestNo: TO-15         |             | Analysis Date: 12/3/2016 | SeqNo: 123007 |           |             |      |          |      |
| Analyte                  | Result         | PQL              | SPK value             | SPK Ref Val | %REC                     | LowLimit      | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Carbon disulfide         | 1.140          | 0.15             | 1                     | 0           | 114                      | 70            | 130       |             |      |          |      |
| Carbon tetrachloride     | 1.080          | 0.040            | 1                     | 0           | 108                      | 70            | 130       |             |      |          |      |
| Chlorobenzene            | 1.080          | 0.15             | 1                     | 0           | 108                      | 70            | 130       |             |      |          |      |
| Chloroethane             | 0.9700         | 0.15             | 1                     | 0           | 97.0                     | 70            | 130       |             |      |          |      |
| Chloroform               | 1.080          | 0.15             | 1                     | 0           | 108                      | 70            | 130       |             |      |          |      |
| Chloromethane            | 1.090          | 0.15             | 1                     | 0           | 109                      | 70            | 130       |             |      |          |      |
| cis-1,2-Dichloroethene   | 1.000          | 0.15             | 1                     | 0           | 100                      | 70            | 130       |             |      |          |      |
| cis-1,3-Dichloropropene  | 0.9400         | 0.15             | 1                     | 0           | 94.0                     | 70            | 130       |             |      |          |      |
| Cyclohexane              | 1.140          | 0.15             | 1                     | 0           | 114                      | 70            | 130       |             |      |          |      |
| Dibromochloromethane     | 1.170          | 0.15             | 1                     | 0           | 117                      | 70            | 130       |             |      |          |      |
| Ethyl acetate            | 0.7500         | 0.25             | 1                     | 0           | 75.0                     | 70            | 130       |             |      |          |      |
| Ethylbenzene             | 1.000          | 0.15             | 1                     | 0           | 100                      | 70            | 130       |             |      |          |      |
| Freon 11                 | 1.120          | 0.15             | 1                     | 0           | 112                      | 70            | 130       |             |      |          |      |
| Freon 113                | 1.090          | 0.15             | 1                     | 0           | 109                      | 70            | 130       |             |      |          |      |
| Freon 114                | 1.080          | 0.15             | 1                     | 0           | 108                      | 70            | 130       |             |      |          |      |
| Freon 12                 | 1.020          | 0.15             | 1                     | 0           | 102                      | 70            | 130       |             |      |          |      |
| Heptane                  | 1.180          | 0.15             | 1                     | 0           | 118                      | 70            | 130       |             |      |          |      |
| Hexachloro-1,3-butadiene | 0.7100         | 0.15             | 1                     | 0           | 71.0                     | 70            | 130       |             |      |          |      |
| Hexane                   | 0.9200         | 0.15             | 1                     | 0           | 92.0                     | 70            | 130       |             |      |          |      |
| Isopropyl alcohol        | 0.7600         | 0.15             | 1                     | 0           | 76.0                     | 70            | 130       |             |      |          |      |
| m&p-Xylene               | 2.080          | 0.30             | 2                     | 0           | 104                      | 70            | 130       |             |      |          |      |
| Methyl Butyl Ketone      | 0.2800         | 0.30             | 1                     | 0           | 29.0                     | 70            | 130       |             |      |          | JS   |
| Methyl Ethyl Ketone      | 0.5800         | 0.30             | 1                     | 0           | 58.0                     | 70            | 130       |             |      |          | S    |
| Methyl Isobutyl Ketone   | 0.1800         | 0.30             | 1                     | 0           | 18.0                     | 70            | 130       |             |      |          | JS   |
| Methyl tert-butyl ether  | 0.9100         | 0.15             | 1                     | 0           | 91.0                     | 70            | 130       |             |      |          |      |
| Methylene chloride       | 1.020          | 0.15             | 1                     | 0           | 102                      | 70            | 130       |             |      |          |      |
| o-Xylene                 | 0.9600         | 0.15             | 1                     | 0           | 96.0                     | 70            | 130       |             |      |          |      |
| Propylene                | 1.080          | 0.15             | 1                     | 0           | 108                      | 70            | 130       |             |      |          |      |
| Styrene                  | 1.020          | 0.15             | 1                     | 0           | 102                      | 70            | 130       |             |      |          |      |
| Tetrachloromethylene     | 1.150          | 0.15             | 1                     | 0           | 115                      | 70            | 130       |             |      |          |      |
| Tetrahydrofuran          | 0.7300         | 0.15             | 1                     | 0           | 73.0                     | 70            | 130       |             |      |          |      |

Qualifiers:  
 . Results reported are not blank corrected  
 J Analyte detected at or below quantitation limits  
 S Spike Recovery outside accepted recovery limits

E Value above quantitation range  
 ND Not Detected at the Reporting Limit

II Holding times for preparation or analysis exceeded  
 R RPD outside accepted recovery limits



CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Work Order: C1512012  
 Project: 702-714 Portland Ave

TestCode: 0.25CT-TCE-VC

|                           |                |                  |                       |             |                          |               |           |             |      |          |      |
|---------------------------|----------------|------------------|-----------------------|-------------|--------------------------|---------------|-----------|-------------|------|----------|------|
| Sample ID                 | ALCS1UG-120315 | SampType: LCS    | TestCode: 0.25CT-TCE- | Units: ppbV | Prep Date:               | RunNo: 10436  |           |             |      |          |      |
| Client ID:                | ZZZZZ          | Batch ID: R10436 | TestNo: TQ-15         |             | Analysis Date: 12/3/2016 | SeqNo: 123007 |           |             |      |          |      |
| Analyte                   | Result         | PQL              | SPK value             | SPK Ref Val | %REC                     | LowLimit      | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Toluene                   | 1.150          | 0.15             | 1                     | 0           | 115                      | 70            | 130       |             |      |          |      |
| trans-1,2-Dichloroethane  | 1.030          | 0.15             | 1                     | 0           | 103                      | 70            | 130       |             |      |          |      |
| trans-1,3-Dichloropropene | 1.050          | 0.15             | 1                     | 0           | 105                      | 70            | 130       |             |      |          |      |
| Trichloroethene           | 1.100          | 0.040            | 1                     | 0           | 110                      | 70            | 130       |             |      |          |      |
| Vinyl acetate             | 0.8800         | 0.15             | 1                     | 0           | 88.0                     | 70            | 130       |             |      |          |      |
| Vinyl Bromide             | 1.060          | 0.15             | 1                     | 0           | 106                      | 70            | 130       |             |      |          |      |
| Vinyl chloride            | 0.9100         | 0.040            | 1                     | 0           | 91.0                     | 70            | 130       |             |      |          |      |

|                           |                |                  |                       |             |                          |               |           |             |      |          |      |
|---------------------------|----------------|------------------|-----------------------|-------------|--------------------------|---------------|-----------|-------------|------|----------|------|
| Sample ID                 | ALCS1UG-120415 | SampType: LCS    | TestCode: 0.25CT-TCE- | Units: ppbV | Prep Date:               | RunNo: 10437  |           |             |      |          |      |
| Client ID:                | ZZZZZ          | Batch ID: R10437 | TestNo: TQ-15         |             | Analysis Date: 12/4/2015 | SeqNo: 123018 |           |             |      |          |      |
| Analyte                   | Result         | PQL              | SPK value             | SPK Ref Val | %REC                     | LowLimit      | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| 1,1,1-Trichloroethane     | 1.210          | 0.15             | 1                     | 0           | 121                      | 70            | 130       |             |      |          |      |
| 1,1,2,2-Tetrachloroethane | 1.170          | 0.15             | 1                     | 0           | 117                      | 70            | 130       |             |      |          |      |
| 1,1,2-Trichloroethane     | 1.170          | 0.15             | 1                     | 0           | 117                      | 70            | 130       |             |      |          |      |
| 1,1-Dichloroethane        | 1.060          | 0.15             | 1                     | 0           | 106                      | 70            | 130       |             |      |          |      |
| 1,1-Dichloroethene        | 1.030          | 0.15             | 1                     | 0           | 103                      | 70            | 130       |             |      |          |      |
| 1,2,4-Trichlorobenzene    | 1.270          | 0.15             | 1                     | 0           | 127                      | 70            | 130       |             |      |          |      |
| 1,2,4-Trimethylbenzene    | 1.040          | 0.15             | 1                     | 0           | 104                      | 70            | 130       |             |      |          |      |
| 1,2-Dibromoethane         | 1.110          | 0.15             | 1                     | 0           | 111                      | 70            | 130       |             |      |          |      |
| 1,2-Dichlorobenzene       | 1.140          | 0.15             | 1                     | 0           | 114                      | 70            | 130       |             |      |          |      |
| 1,2-Dichloroethane        | 1.010          | 0.15             | 1                     | 0           | 101                      | 70            | 130       |             |      |          |      |
| 1,2-Dichloropropane       | 1.230          | 0.15             | 1                     | 0           | 123                      | 70            | 130       |             |      |          |      |
| 1,3,5-Trimethylbenzene    | 1.030          | 0.15             | 1                     | 0           | 103                      | 70            | 130       |             |      |          |      |
| 1,3-butadiene             | 1.130          | 0.15             | 1                     | 0           | 113                      | 70            | 130       |             |      |          |      |
| 1,3-Dichlorobenzene       | 1.160          | 0.15             | 1                     | 0           | 116                      | 70            | 130       |             |      |          |      |
| 1,4-Dichlorobenzene       | 1.190          | 0.15             | 1                     | 0           | 119                      | 70            | 130       |             |      |          |      |
| 1,4-Dioxane               | 1.110          | 0.30             | 1                     | 0           | 111                      | 70            | 130       |             |      |          |      |
| 2,2,4-Trimethylpentane    | 1.040          | 0.15             | 1                     | 0           | 104                      | 70            | 130       |             |      |          |      |
| 4-ethyltoluene            | 1.030          | 0.15             | 1                     | 0           | 103                      | 70            | 130       |             |      |          |      |

Qualifiers:  
 J Result reported are not blank corrected  
 J Analyte detected at or below quantitation limits  
 S Spike Recovery outside accepted recovery limits

E Value above quantitation range  
 ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded  
 R RPD outside accepted recovery limits

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Work Order: C1512012  
 Project: 702-714 Portland Ave

TestCode: 0.25CT-TCE-VC

|                           |                  |                      |             |                          |               |          |           |             |      |          |      |
|---------------------------|------------------|----------------------|-------------|--------------------------|---------------|----------|-----------|-------------|------|----------|------|
| Sample ID: ALCS1UG-120415 | SampType: LCS    | TestCode: 0.25CT-TCE | Units: ppbV | Prep Date:               | RunNo: 10437  |          |           |             |      |          |      |
| Client ID: ZZZZZ          | Batch ID: R10437 | TestNo: TO-15        |             | Analysis Date: 12/4/2015 | SeqNo: 123018 |          |           |             |      |          |      |
| Analyte                   | Result           | PQL                  | SPK value   | SPK Ref Val              | %REC          | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Acetone                   | 1.190            | 0.30                 | 1           | 0                        | 119           | 70       | 130       |             |      |          |      |
| Allyl chloride            | 0.9800           | 0.15                 | 1           | 0                        | 98.0          | 70       | 130       |             |      |          |      |
| Benzene                   | 1.160            | 0.15                 | 1           | 0                        | 116           | 70       | 130       |             |      |          |      |
| Benzyl chloride           | 1.040            | 0.15                 | 1           | 0                        | 104           | 70       | 130       |             |      |          |      |
| Bromodichloromethane      | 1.190            | 0.15                 | 1           | 0                        | 119           | 70       | 130       |             |      |          |      |
| Bromoform                 | 1.140            | 0.15                 | 1           | 0                        | 114           | 70       | 130       |             |      |          |      |
| Bromomethane              | 1.070            | 0.15                 | 1           | 0                        | 107           | 70       | 130       |             |      |          |      |
| Carbon disulfide          | 1.180            | 0.15                 | 1           | 0                        | 118           | 70       | 130       |             |      |          |      |
| Carbon tetrachloride      | 1.100            | 0.040                | 1           | 0                        | 110           | 70       | 130       |             |      |          |      |
| Chlorobenzene             | 1.050            | 0.15                 | 1           | 0                        | 105           | 70       | 130       |             |      |          |      |
| Chloroethane              | 1.020            | 0.15                 | 1           | 0                        | 102           | 70       | 130       |             |      |          |      |
| Chloroform                | 1.080            | 0.15                 | 1           | 0                        | 108           | 70       | 130       |             |      |          |      |
| Chloromethane             | 1.280            | 0.15                 | 1           | 0                        | 128           | 70       | 130       |             |      |          |      |
| cis-1,2-Dichloroethene    | 0.9200           | 0.15                 | 1           | 0                        | 92.0          | 70       | 130       |             |      |          |      |
| cis-1,3-Dichloropropene   | 1.170            | 0.15                 | 1           | 0                        | 117           | 70       | 130       |             |      |          |      |
| Cyclohexane               | 1.130            | 0.15                 | 1           | 0                        | 113           | 70       | 130       |             |      |          |      |
| Dibromochloromethane      | 1.150            | 0.15                 | 1           | 0                        | 115           | 70       | 130       |             |      |          |      |
| Ethyl acetate             | 0.9600           | 0.25                 | 1           | 0                        | 96.0          | 70       | 130       |             |      |          |      |
| Ethylbenzene              | 0.9900           | 0.15                 | 1           | 0                        | 99.0          | 70       | 130       |             |      |          |      |
| Freon 11                  | 1.170            | 0.15                 | 1           | 0                        | 117           | 70       | 130       |             |      |          |      |
| Freon 113                 | 1.140            | 0.15                 | 1           | 0                        | 114           | 70       | 130       |             |      |          |      |
| Freon 114                 | 1.210            | 0.15                 | 1           | 0                        | 121           | 70       | 130       |             |      |          |      |
| Freon 12                  | 1.030            | 0.15                 | 1           | 0                        | 103           | 70       | 130       |             |      |          |      |
| Heptane                   | 1.100            | 0.15                 | 1           | 0                        | 110           | 70       | 130       |             |      |          |      |
| Hexachloro-1,3-butadiene  | 1.270            | 0.15                 | 1           | 0                        | 127           | 70       | 130       |             |      |          |      |
| Hexane                    | 1.030            | 0.15                 | 1           | 0                        | 103           | 70       | 130       |             |      |          |      |
| Isopropyl alcohol         | 1.160            | 0.15                 | 1           | 0                        | 116           | 70       | 130       |             |      |          |      |
| m&p-Xylene                | 2.070            | 0.30                 | 2           | 0                        | 104           | 70       | 130       |             |      |          |      |
| Methyl Butyl Ketone       | 1.240            | 0.30                 | 1           | 0                        | 124           | 70       | 130       |             |      |          |      |
| Methyl Ethyl Ketone       | 0.9700           | 0.30                 | 1           | 0                        | 97.0          | 70       | 130       |             |      |          |      |
| Methyl Isobutyl Ketone    | 1.280            | 0.30                 | 1           | 0                        | 128           | 70       | 130       |             |      |          |      |

Qualifiers:  
 J Results reported are not blank corrected  
 J Analyte detected at or below quantitation limits  
 S Spike Recovery outside accepted recovery limits

B Value above quantitation range  
 NFJ Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded  
 R RPD outside accepted recovery limits

CLIENT: Ravi Engineering &amp; Land Surveying, P.C.

Work Order: C1512012

Project: 702-714 Portland Ave

TestCode: 0.25CT-TCE-VC

|                           |                  |                       |             |                          |               |          |           |             |      |          |      |
|---------------------------|------------------|-----------------------|-------------|--------------------------|---------------|----------|-----------|-------------|------|----------|------|
| Sample ID: ALCS1UG-120415 | SampType: LCS    | TestCode: 0.25CT-TCE- | Units: ppbV | Prep Date:               | RunNo: 10437  |          |           |             |      |          |      |
| Client ID: ZZZZZ          | Batch ID: R10437 | TestNo: TQ-15         |             | Analysis Date: 12/4/2015 | SeqNo: 123018 |          |           |             |      |          |      |
| Analyte                   | Result           | PQL                   | SPK value   | SPK Ref Val              | %REC          | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Methyl tert-butyl ether   | 0.8800           | 0.15                  | 1           | 0                        | 88.0          | 70       | 130       |             |      |          |      |
| Methylene chloride        | 1.010            | 0.15                  | 1           | 0                        | 101           | 70       | 130       |             |      |          |      |
| o-Xylene                  | 1.120            | 0.15                  | 1           | 0                        | 112           | 70       | 130       |             |      |          |      |
| Propylene                 | 1.030            | 0.15                  | 1           | 0                        | 103           | 70       | 130       |             |      |          |      |
| Styrene                   | 1.070            | 0.15                  | 1           | 0                        | 107           | 70       | 130       |             |      |          |      |
| Tetrachloroethylene       | 1.110            | 0.15                  | 1           | 0                        | 111           | 70       | 130       |             |      |          |      |
| Tetrahydrofuran           | 0.9700           | 0.15                  | 1           | 0                        | 97.0          | 70       | 130       |             |      |          |      |
| Toluene                   | 1.030            | 0.15                  | 1           | 0                        | 103           | 70       | 130       |             |      |          |      |
| trans-1,2-Dichloroethene  | 1.110            | 0.15                  | 1           | 0                        | 111           | 70       | 130       |             |      |          |      |
| trans-1,3-Dichloropropene | 1.090            | 0.15                  | 1           | 0                        | 109           | 70       | 130       |             |      |          |      |
| Trichloroethene           | 1.060            | 0.040                 | 1           | 0                        | 106           | 70       | 130       |             |      |          |      |
| Vinyl acetate             | 0.8000           | 0.15                  | 1           | 0                        | 80.0          | 70       | 130       |             |      |          |      |
| Vinyl Bromide             | 1.100            | 0.15                  | 1           | 0                        | 110           | 70       | 130       |             |      |          |      |
| Vinyl chloride            | 1.020            | 0.040                 | 1           | 0                        | 102           | 70       | 130       |             |      |          |      |

Qualifiers: . Results reported are not blank corrected  
 J Analyte detected at or below quantitation limits  
 S Spike Recovery outside accepted recovery limits

U Value above quantitation range  
 ND Not Detected at the Reporting Limit

ET Holding times for preparation or analysis exceeded  
 R RPD outside accepted recovery limits



CENTEK LABORATORIES, LLC

Date: 05-Jun-16

## ANALYTICAL QC SUMMARY REPORT

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Work Order: C1512012  
 Project: 702-714 Portland Ave

TestCode: 0.25CT-TCE-VC

| Sample ID: ALCS1UGD-120316 | Sample Type: LCSD | Test Code: 0.25CT-TCE- | Units: ppbV | Prep Date:               | RunNo: 10436  |          |           |             |       |          |      |
|----------------------------|-------------------|------------------------|-------------|--------------------------|---------------|----------|-----------|-------------|-------|----------|------|
| Client ID: ZZZZZ           | Batch ID: R10436  | TestNo: TO-15          |             | Analysis Date: 12/4/2015 | SeqNo: 123008 |          |           |             |       |          |      |
| Analyte                    | Result            | PQL                    | SPK value   | SPK Ref Val              | %REC          | LowLimit | HighLimit | RPD Ref Val | %RPD  | RPDLimit | Qual |
| 1,1,1-Trichloroethane      | 1.260             | 0.15                   | 1           | 0                        | 126           | 70       | 130       | 1.22        | 3.23  | 30       |      |
| 1,1,2,2-Tetrachloroethane  | 1.160             | 0.15                   | 1           | 0                        | 116           | 70       | 130       | 1.1         | 5.31  | 30       |      |
| 1,1,2-Trichloroethane      | 1.220             | 0.15                   | 1           | 0                        | 122           | 70       | 130       | 1.19        | 2.49  | 30       |      |
| 1,1-Dichloroethane         | 1.110             | 0.15                   | 1           | 0                        | 111           | 70       | 130       | 1.12        | 0.897 | 30       |      |
| 1,1-Dichloroethane         | 1.060             | 0.15                   | 1           | 0                        | 106           | 70       | 130       | 1.04        | 1.90  | 30       |      |
| 1,2,4-Trichlorobenzene     | 0.9000            | 0.15                   | 1           | 0                        | 90.0          | 70       | 130       | 0.59        | 41.6  | 30       | R    |
| 1,2,4-Trimethylbenzene     | 0.9900            | 0.15                   | 1           | 0                        | 99.0          | 70       | 130       | 0.76        | 25.3  | 30       |      |
| 1,2-Dibromoethane          | 1.170             | 0.15                   | 1           | 0                        | 117           | 70       | 130       | 1.14        | 2.60  | 30       |      |
| 1,2-Dichlorobenzene        | 1.050             | 0.15                   | 1           | 0                        | 105           | 70       | 130       | 0.87        | 16.8  | 30       |      |
| 1,2-Dichloroethane         | 0.9600            | 0.15                   | 1           | 0                        | 96.0          | 70       | 130       | 1.04        | 5.94  | 30       |      |
| 1,2-Dichloropropane        | 1.260             | 0.15                   | 1           | 0                        | 125           | 70       | 130       | 1.24        | 0.803 | 30       |      |
| 1,3,5-Trimethylbenzene     | 1.020             | 0.15                   | 1           | 0                        | 102           | 70       | 130       | 0.68        | 14.7  | 30       |      |
| 1,3-Butadiene              | 1.140             | 0.15                   | 1           | 0                        | 114           | 70       | 130       | 1.27        | 10.8  | 30       |      |
| 1,3-Dichlorobenzene        | 1.190             | 0.15                   | 1           | 0                        | 119           | 70       | 130       | 1           | 17.4  | 30       |      |
| 1,4-Dichlorobenzene        | 1.120             | 0.15                   | 1           | 0                        | 112           | 70       | 130       | 0.96        | 15.4  | 30       |      |
| 1,4-Dioxane                | 0.1800            | 0.30                   | 1           | 0                        | 18.0          | 70       | 130       | 0.31        | 0     | 30       | JS   |
| 2,2,4-trimethylpentane     | 1.120             | 0.15                   | 1           | 0                        | 112           | 70       | 130       | 1.09        | 2.71  | 30       |      |
| 4-ethyltoluene             | 1.010             | 0.15                   | 1           | 0                        | 101           | 70       | 130       | 0.86        | 13.8  | 30       |      |
| Acetone                    | 1.590             | 0.30                   | 1           | 0                        | 159           | 70       | 130       | 1.02        | 43.7  | 30       | SR   |
| Allyl chloride             | 1.250             | 0.15                   | 1           | 0                        | 125           | 70       | 130       | 0.91        | 31.5  | 30       | R    |
| Benzene                    | 1.230             | 0.15                   | 1           | 0                        | 123           | 70       | 130       | 1.19        | 2.31  | 30       |      |
| Benzyl chloride            | 0.8200            | 0.15                   | 1           | 0                        | 82.0          | 70       | 130       | 0.8         | 2.47  | 30       |      |
| Bromodichloromethane       | 1.180             | 0.15                   | 1           | 0                        | 118           | 70       | 130       | 1.16        | 1.71  | 30       |      |
| Bromoform                  | 1.100             | 0.15                   | 1           | 0                        | 110           | 70       | 130       | 1.14        | 3.57  | 30       |      |
| Bromomethane               | 0.9600            | 0.15                   | 1           | 0                        | 96.0          | 70       | 130       | 0.96        | 1.05  | 30       |      |

Qualifiers: . Results reported are not blank corrected  
 J Analyte detected at or below quantitation limits  
 S Spike Recovery outside accepted recovery limits

E Value above quantitation range  
 ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded  
 R RPD outside accepted recovery limits

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Work Order: C1512012  
 Project: 702-714 Portland Ave

TestCode: 0.25CT-TCE-VC

|                          |                  |                |                          |               |            |              |           |             |       |          |      |
|--------------------------|------------------|----------------|--------------------------|---------------|------------|--------------|-----------|-------------|-------|----------|------|
| Sample ID                | ALCS1UGD-120315  | SampType: LCSD | TestCode: 0.25CT-TCE-    | Units: ppbV   | Prep Date: | RunNo: 10436 |           |             |       |          |      |
| Client ID: ZZZZZ         | Batch ID: R10436 | TestNo: TC-15  | Analysis Date: 12/4/2015 | SeqNo: 123006 |            |              |           |             |       |          |      |
| Analyte                  | Result           | PQL            | SPK value                | SPK Ref Val   | %REC       | LowLimit     | HighLimit | RPD Ref Val | %RPD  | RPDLimit | Qual |
| Carbon disulfide         | 1.120            | 0.15           | 1                        | 0             | 112        | 70           | 130       | 1.14        | 1.77  | 30       |      |
| Carbon tetrachloride     | 1.070            | 0.040          | 1                        | 0             | 107        | 70           | 130       | 1.08        | 0.930 | 30       |      |
| Chlorobenzene            | 1.130            | 0.15           | 1                        | 0             | 113        | 70           | 130       | 1.08        | 4.62  | 30       |      |
| Chloroethane             | 0.9800           | 0.15           | 1                        | 0             | 98.0       | 70           | 130       | 0.97        | 1.03  | 30       |      |
| Chloroform               | 1.060            | 0.15           | 1                        | 0             | 106        | 70           | 130       | 1.05        | 0     | 30       |      |
| Chloromethane            | 1.070            | 0.15           | 1                        | 0             | 107        | 70           | 130       | 1.09        | 1.85  | 30       |      |
| cis-1,2-Dichloroethene   | 1.000            | 0.15           | 1                        | 0             | 100        | 70           | 130       | 1           | 0     | 30       |      |
| cis-1,3-Dichloropropene  | 0.9900           | 0.15           | 1                        | 0             | 99.0       | 70           | 130       | 0.94        | 5.18  | 30       |      |
| Cyclohexane              | 1.240            | 0.15           | 1                        | 0             | 124        | 70           | 130       | 1.14        | 8.40  | 30       |      |
| Dibromochloromethane     | 1.100            | 0.15           | 1                        | 0             | 110        | 70           | 130       | 1.17        | 6.17  | 30       |      |
| Ethyl acetate            | 0.8200           | 0.25           | 1                        | 0             | 82.0       | 70           | 130       | 0.76        | 8.92  | 30       |      |
| Ethylbenzene             | 1.080            | 0.15           | 1                        | 0             | 108        | 70           | 130       | 1           | 7.69  | 30       |      |
| Freon 11                 | 1.100            | 0.15           | 1                        | 0             | 110        | 70           | 130       | 1.12        | 1.80  | 30       |      |
| Freon 113                | 1.090            | 0.15           | 1                        | 0             | 109        | 70           | 130       | 1.09        | 0     | 30       |      |
| Freon 114                | 1.120            | 0.15           | 1                        | 0             | 112        | 70           | 130       | 1.08        | 3.64  | 30       |      |
| Freon 12                 | 1.100            | 0.15           | 1                        | 0             | 110        | 70           | 130       | 1.02        | 7.65  | 30       |      |
| Heptane                  | 1.090            | 0.15           | 1                        | 0             | 109        | 70           | 130       | 1.18        | 7.93  | 30       |      |
| Hexachloro-1,3-butadiene | 1.070            | 0.15           | 1                        | 0             | 107        | 70           | 130       | 0.71        | 40.4  | 30       | R    |
| Hexane                   | 1.220            | 0.15           | 1                        | 0             | 122        | 70           | 130       | 0.99        | 20.8  | 30       |      |
| Isopropyl alcohol        | 1.220            | 0.15           | 1                        | 0             | 122        | 70           | 130       | 0.76        | 46.5  | 30       | R    |
| m&p-Xylene               | 2.210            | 0.30           | 2                        | 0             | 110        | 70           | 130       | 2.08        | 6.06  | 30       |      |
| Methyl Butyl Ketone      | < 0.30           | 0.30           | 1                        | 0             | 0          | 70           | 130       | 0.29        | 0     | 30       | S    |
| Methyl Ethyl Ketone      | 1.980            | 0.30           | 1                        | 0             | 198        | 70           | 130       | 0.98        | 92.6  | 30       | SR   |
| Methyl Isobutyl Ketone   | 0.2400           | 0.30           | 1                        | 0             | 24.0       | 70           | 130       | 0.18        | 0     | 30       | JS   |
| Methyl tert-butyl ether  | 0.9300           | 0.15           | 1                        | 0             | 93.0       | 70           | 130       | 0.91        | 2.17  | 30       |      |
| Methylene chloride       | 1.060            | 0.15           | 1                        | 0             | 106        | 70           | 130       | 1.02        | 2.90  | 30       |      |
| o-Xylene                 | 1.130            | 0.15           | 1                        | 0             | 113        | 70           | 130       | 0.98        | 14.2  | 30       |      |
| Propylene                | 1.250            | 0.15           | 1                        | 0             | 125        | 70           | 130       | 1.08        | 14.6  | 30       |      |
| Styrene                  | 1.110            | 0.15           | 1                        | 0             | 111        | 70           | 130       | 1.02        | 8.45  | 30       |      |
| Tetrachloroethylene      | 1.160            | 0.15           | 1                        | 0             | 116        | 70           | 130       | 1.15        | 0.896 | 30       |      |
| Tetrahydrofuran          | 0.9100           | 0.15           | 1                        | 0             | 91.0       | 70           | 130       | 0.73        | 22.0  | 30       |      |

Qualifiers:  
 F Results reported are not blank corrected  
 J Analyte detected at or below quantitation limits  
 S Spike Recovery outside accepted recovery limits

E Value above quantitation range  
 ND Not Detected at the Reporting Limit

11 Holding times for preparation or analysis exceeded  
 R RPD outside accepted recovery limits

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Work Order: C1512012  
 Project: 702-714 Portland Ave

TestCode: 0.25CT-TCE-VC

| Sample ID: ALC51UGD-120316 | Sample Type: LCSD | TestCode: 0.25CT-TCE- | Units: ppbV | Prep Date:               | RunNo: 10436  |          |           |             |      |          |      |
|----------------------------|-------------------|-----------------------|-------------|--------------------------|---------------|----------|-----------|-------------|------|----------|------|
| Client ID: ZZZZZ           | Batch ID: R10436  | TestNo: TO-15         |             | Analysis Date: 12/4/2015 | SeqNo: 123008 |          |           |             |      |          |      |
| Analyte                    | Result            | PQL                   | SPK value   | SPK Ref Val              | %REC          | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Toluene                    | 1.120             | 0.15                  | 1           | 0                        | 112           | 70       | 130       | 1.15        | 2.64 | 30       |      |
| trans-1,2-Dichloroethane   | 1.280             | 0.15                  | 1           | 0                        | 128           | 70       | 130       | 1.03        | 21.6 | 30       |      |
| trans-1,3-Dichloropropene  | 1.110             | 0.15                  | 1           | 0                        | 111           | 70       | 130       | 1.05        | 5.56 | 30       |      |
| Trichloroethene            | 1.100             | 0.040                 | 1           | 0                        | 110           | 70       | 130       | 1.1         | 0    | 30       |      |
| Vinyl acetate              | 0.8800            | 0.15                  | 1           | 0                        | 88.0          | 70       | 130       | 0.88        | 2.30 | 30       |      |
| Vinyl Bromide              | 1.040             | 0.15                  | 1           | 0                        | 104           | 70       | 130       | 1.05        | 1.90 | 30       |      |
| Vinyl chloride             | 0.9900            | 0.040                 | 1           | 0                        | 99.0          | 70       | 130       | 0.91        | 8.42 | 30       |      |

| Sample ID: ALC51UGD-120415 | SampType: LCSD   | TestCode: 0.25CT-TCE- | Units: ppbV | Prep Date:               | RunNo: 10437  |          |           |             |       |          |      |
|----------------------------|------------------|-----------------------|-------------|--------------------------|---------------|----------|-----------|-------------|-------|----------|------|
| Client ID: ZZZZZ           | Batch ID: R10437 | TestNo: TO-16         |             | Analysis Date: 12/4/2015 | SeqNo: 123010 |          |           |             |       |          |      |
| Analyte                    | Result           | PQL                   | SPK value   | SPK Ref Val              | %REC          | LowLimit | HighLimit | RPD Ref Val | %RPD  | RPDLimit | Qual |
| 1,1,1-Trichloroethane      | 1.170            | 0.15                  | 1           | 0                        | 117           | 70       | 130       | 1.21        | 3.36  | 30       |      |
| 1,1,2,2-Tetrachloroethane  | 1.230            | 0.15                  | 1           | 0                        | 123           | 70       | 130       | 1.17        | 5.00  | 30       |      |
| 1,1,2-Trichloroethane      | 1.190            | 0.15                  | 1           | 0                        | 119           | 70       | 130       | 1.17        | 1.69  | 30       |      |
| 1,1-Dichloroethane         | 1.060            | 0.15                  | 1           | 0                        | 106           | 70       | 130       | 1.06        | 0     | 30       |      |
| 1,1-Dichloroethene         | 0.9700           | 0.15                  | 1           | 0                        | 97.0          | 70       | 130       | 1.03        | 6.00  | 30       |      |
| 1,2,4-Trichlorobenzene     | 1.210            | 0.15                  | 1           | 0                        | 121           | 70       | 130       | 1.27        | 4.84  | 30       |      |
| 1,2,4-Trimethylbenzene     | 1.020            | 0.15                  | 1           | 0                        | 102           | 70       | 130       | 1.04        | 1.94  | 30       |      |
| 1,2-Dibromoethane          | 1.170            | 0.15                  | 1           | 0                        | 117           | 70       | 130       | 1.11        | 5.26  | 30       |      |
| 1,2-Dichlorobenzene        | 1.110            | 0.15                  | 1           | 0                        | 111           | 70       | 130       | 1.14        | 2.67  | 30       |      |
| 1,2-Dichloroethane         | 1.000            | 0.15                  | 1           | 0                        | 100           | 70       | 130       | 1.01        | 0.995 | 30       |      |
| 1,2-Dichloropropane        | 1.150            | 0.15                  | 1           | 0                        | 115           | 70       | 130       | 1.23        | 6.72  | 30       |      |
| 1,3,5-Trimethylbenzene     | 1.150            | 0.15                  | 1           | 0                        | 115           | 70       | 130       | 1.03        | 11.0  | 30       |      |
| 1,3-butadiene              | 1.170            | 0.15                  | 1           | 0                        | 117           | 70       | 130       | 1.13        | 3.46  | 30       |      |
| 1,3-Dichlorobenzene        | 1.300            | 0.15                  | 1           | 0                        | 130           | 70       | 130       | 1.16        | 11.4  | 30       |      |
| 1,4-Dichlorobenzene        | 1.260            | 0.15                  | 1           | 0                        | 126           | 70       | 130       | 1.19        | 6.71  | 30       |      |
| 1,4-Dioxane                | 0.9900           | 0.30                  | 1           | 0                        | 99.0          | 70       | 130       | 1.11        | 11.4  | 30       |      |
| 2,2,4-Trimethylpentane     | 1.010            | 0.15                  | 1           | 0                        | 101           | 70       | 130       | 1.04        | 2.93  | 30       |      |
| 4-ethyltoluene             | 1.090            | 0.15                  | 1           | 0                        | 109           | 70       | 130       | 1.03        | 5.66  | 30       |      |

Qualifiers:  
 J Results reported are not blank corrected  
 J Analyte detected at or below quantitation limits  
 N Spike Recovery outside accepted recovery limits

E Value above quantitation range  
 ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded  
 R RPD outside accepted recovery limits

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Work Order: C1512012  
 Project: 702-714 Portland Ave

TestCode: 0.25CT-TCE-VC

|                            |                   |                        |             |                          |                |           |            |             |       |           |      |
|----------------------------|-------------------|------------------------|-------------|--------------------------|----------------|-----------|------------|-------------|-------|-----------|------|
| Sample ID: ALCS1UGD-120415 | Sample Type: LCSD | Test Code: 0.25CT-TCE- | Units: ppbV | Prep Date:               | Run No: 10437  |           |            |             |       |           |      |
| Client ID: ZZZZZ           | Batch ID: R10437  | Test No: TO-15         |             | Analysis Date: 12/4/2015 | Seq No: 123019 |           |            |             |       |           |      |
| Analyte                    | Result            | PQL                    | SPK value   | SPK Ref Val              | %REC           | Low Limit | High Limit | RPD Ref Val | %RPD  | RPD Limit | Qual |
| Acetone                    | 0.9200            | 0.30                   | 1           | 0                        | 92.0           | 70        | 130        | 1.19        | 25.6  | 30        |      |
| Allyl chloride             | 0.9600            | 0.15                   | 1           | 0                        | 96.0           | 70        | 130        | 0.90        | 3.08  | 30        |      |
| Benzene                    | 1.120             | 0.15                   | 1           | 0                        | 112            | 70        | 130        | 1.16        | 3.51  | 30        |      |
| Benzyl chloride            | 1.090             | 0.15                   | 1           | 0                        | 109            | 70        | 130        | 1.04        | 4.69  | 30        |      |
| Bromodichloromethane       | 1.130             | 0.15                   | 1           | 0                        | 113            | 70        | 130        | 1.18        | 5.17  | 30        |      |
| Bromoform                  | 1.170             | 0.16                   | 1           | 0                        | 117            | 70        | 130        | 1.14        | 2.60  | 30        |      |
| Bromomethane               | 0.9500            | 0.15                   | 1           | 0                        | 95.0           | 70        | 130        | 1.07        | 11.9  | 30        |      |
| Carbon disulfide           | 1.050             | 0.15                   | 1           | 0                        | 105            | 70        | 130        | 1.18        | 11.7  | 30        |      |
| Carbon tetrachloride       | 1.090             | 0.040                  | 1           | 0                        | 109            | 70        | 130        | 1.1         | 0.913 | 30        |      |
| Chlorobenzene              | 1.130             | 0.15                   | 1           | 0                        | 113            | 70        | 130        | 1.05        | 7.34  | 30        |      |
| Chloroethane               | 0.9500            | 0.15                   | 1           | 0                        | 95.0           | 70        | 130        | 1.02        | 7.11  | 30        |      |
| Chloroform                 | 1.050             | 0.15                   | 1           | 0                        | 105            | 70        | 130        | 1.08        | 2.82  | 30        |      |
| Chloromethane              | 0.9900            | 0.15                   | 1           | 0                        | 99.0           | 70        | 130        | 1.29        | 25.6  | 30        |      |
| cis-1,2-Dichloroethene     | 0.9400            | 0.15                   | 1           | 0                        | 94.0           | 70        | 130        | 0.92        | 2.15  | 30        |      |
| cis-1,3-Dichloropropene    | 1.110             | 0.15                   | 1           | 0                        | 111            | 70        | 130        | 1.17        | 6.26  | 30        |      |
| Cyclohexane                | 1.070             | 0.15                   | 1           | 0                        | 107            | 70        | 130        | 1.13        | 5.45  | 30        |      |
| Dibromochloromethane       | 1.180             | 0.15                   | 1           | 0                        | 118            | 70        | 130        | 1.15        | 2.58  | 30        |      |
| Ethyl acetate              | 0.7700            | 0.25                   | 1           | 0                        | 77.0           | 70        | 130        | 0.96        | 22.0  | 30        |      |
| Ethylbenzene               | 1.050             | 0.15                   | 1           | 0                        | 105            | 70        | 130        | 0.99        | 5.88  | 30        |      |
| Freon 11                   | 1.120             | 0.15                   | 1           | 0                        | 112            | 70        | 130        | 1.17        | 4.37  | 30        |      |
| Freon 113                  | 1.090             | 0.15                   | 1           | 0                        | 109            | 70        | 130        | 1.14        | 4.48  | 30        |      |
| Freon 114                  | 1.070             | 0.15                   | 1           | 0                        | 107            | 70        | 130        | 1.21        | 12.3  | 30        |      |
| Freon 12                   | 0.9900            | 0.15                   | 1           | 0                        | 99.0           | 70        | 130        | 1.03        | 3.96  | 30        |      |
| Heptane                    | 1.100             | 0.15                   | 1           | 0                        | 110            | 70        | 130        | 1.1         | 0     | 30        |      |
| Hexachloro-1,3-butadiene   | 1.290             | 0.15                   | 1           | 0                        | 129            | 70        | 130        | 1.27        | 1.58  | 30        |      |
| Hexane                     | 0.9800            | 0.15                   | 1           | 0                        | 98.0           | 70        | 130        | 1.03        | 4.98  | 30        |      |
| Isopropyl alcohol          | 1.220             | 0.15                   | 1           | 0                        | 122            | 70        | 130        | 1.18        | 3.33  | 30        |      |
| m&p-Xylene                 | 2.130             | 0.30                   | 2           | 0                        | 106            | 70        | 130        | 2.07        | 2.86  | 30        |      |
| Methyl Butyl Ketone        | 1.140             | 0.30                   | 1           | 0                        | 114            | 70        | 130        | 1.24        | 8.40  | 30        |      |
| Methyl Ethyl Ketone        | 0.8900            | 0.30                   | 1           | 0                        | 89.0           | 70        | 130        | 0.97        | 8.60  | 30        |      |
| Methyl Isobutyl Ketone     | 1.200             | 0.30                   | 1           | 0                        | 120            | 70        | 130        | 1.28        | 6.45  | 30        |      |

Qualifiers:  
 . Results reported are not blank corrected  
 J Analyte detected at or below quantitation limits  
 S Spike Recovery outside accepted recovery limits

E Value above quantitation range  
 ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded  
 R RPD outside accepted recovery limits

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Work Order: C1512012  
 Project: 702-714 Portland Ave

TestCode: 0.25CT-TCE-VC

| Sample ID: ALC51UGD-120415 |        | SampType: LCSD   |           | TestCode: 0.25CT-TCE |      | Units: ppbV              |           | Prep Date:    |      | RunNo: 10437 |      |
|----------------------------|--------|------------------|-----------|----------------------|------|--------------------------|-----------|---------------|------|--------------|------|
| Client ID: ZZZZZ           |        | Batch ID: R10437 |           | TestNo: TO-16        |      | Analysis Date: 12/4/2015 |           | SeqNo: 123019 |      |              |      |
| Analyte                    | Result | PQL              | SPK value | SPK Ref Val          | %REC | LowLimit                 | HighLimit | RPD Ref Val   | %RPD | RPDLimit     | Qual |
| Methyl tert-butyl ether    | 0.9500 | 0.15             | 1         | 0                    | 95.0 | 70                       | 130       | 0.88          | 7.65 | 30           |      |
| Methylene chloride         | 0.9700 | 0.15             | 1         | 0                    | 97.0 | 70                       | 130       | 1.01          | 4.04 | 30           |      |
| o-Xylene                   | 1.000  | 0.15             | 1         | 0                    | 100  | 70                       | 130       | 1.12          | 11.3 | 30           |      |
| Propylene                  | 0.9000 | 0.15             | 1         | 0                    | 90.0 | 70                       | 130       | 1.03          | 13.5 | 30           |      |
| Styrene                    | 1.120  | 0.15             | 1         | 0                    | 112  | 70                       | 130       | 1.07          | 4.57 | 30           |      |
| Tetrachloroethylene        | 1.200  | 0.15             | 1         | 0                    | 120  | 70                       | 130       | 1.11          | 7.79 | 30           |      |
| Tetrahydrofuran            | 0.8700 | 0.15             | 1         | 0                    | 87.0 | 70                       | 130       | 0.97          | 10.9 | 30           |      |
| Toluene                    | 1.050  | 0.15             | 1         | 0                    | 105  | 70                       | 130       | 1.03          | 1.92 | 30           |      |
| trans-1,2-Dichloroethane   | 1.190  | 0.15             | 1         | 0                    | 119  | 70                       | 130       | 1.11          | 6.96 | 30           |      |
| trans-1,3-Dichloropropene  | 1.070  | 0.15             | 1         | 0                    | 107  | 70                       | 130       | 1.09          | 1.85 | 30           |      |
| Trichloroethene            | 1.040  | 0.040            | 1         | 0                    | 104  | 70                       | 130       | 1.06          | 1.90 | 30           |      |
| Vinyl acetate              | 0.8400 | 0.15             | 1         | 0                    | 84.0 | 70                       | 130       | 0.8           | 4.88 | 30           |      |
| Vinyl Bromide              | 1.030  | 0.15             | 1         | 0                    | 103  | 70                       | 130       | 1.1           | 6.57 | 30           |      |
| Vinyl chloride             | 0.9000 | 0.040            | 1         | 0                    | 90.0 | 70                       | 130       | 1.02          | 12.5 | 30           |      |

Qualifiers:  
 - Results reported are not blank corrected  
 J Analyte detected at or below quantitation limits  
 S Spike Recovery outside accepted recovery limits

D Value above quantitation range  
 ND Not Detected at the Reporting Limit

I Holding time for preparation or analysis exceeded  
 R RPD outside accepted recovery limits



## Centek Laboratories, LLC

## Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\AM120303.D

Acq On : 3 Dec 2015 11:17 am

Sample : A10G\_1.0

Misc : AO26\_1UG

MS Integration Params: RTEINT.P

Vial: 3

Operator: RJP

Inst : MSD #1

Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\AO26\_1UG.M (RTE Integrator)

Title : TO-15 VOA Standards for 5 point calibration

Last Update : Tue Jan 05 10:25:53 2016

Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min

Max. RRF Dev : 30% Max. Rel. Area : 150%

|      | Compound                  | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|------|---------------------------|-------|-------|-------|-------|----------|
| 1 I  | Bromochloromethane        | 1.000 | 1.000 | 0.0   | 79    | 0.00     |
| 2 T  | Propylene                 | 0.894 | 0.883 | 1.2   | 81    | 0.00     |
| 3 T  | Freon 12                  | 5.333 | 5.146 | 3.5   | 78    | 0.00     |
| 4 T  | Chloromethane             | 1.356 | 1.314 | 3.1   | 77    | 0.00     |
| 5 T  | Freon 114                 | 4.001 | 4.199 | -4.9  | 82    | 0.00     |
| 6 T  | Vinyl Chloride            | 1.261 | 1.209 | 12.1  | 77    | 0.00     |
| 7 T  | Butane                    | 1.491 | 1.503 | -0.8  | 81    | 0.00     |
| 8 T  | 1,3-butadiene             | 1.025 | 1.077 | -5.1  | 89    | 0.00     |
| 9 T  | Bromomethane              | 1.544 | 1.469 | 4.9   | 78    | 0.00     |
| 10 T | Chloroethane              | 0.531 | 0.526 | 0.9   | 82    | 0.00     |
| 11 T | Ethanol                   | 0.305 | 0.367 | -20.3 | 108   | 0.00     |
| 12 T | Acrolein                  | 0.284 | 0.262 | 7.7   | 80    | 0.00     |
| 13 T | Vinyl Bromide             | 1.413 | 1.358 | 3.9   | 78    | 0.00     |
| 14 T | Freon 11                  | 5.145 | 5.489 | -6.7  | 85    | 0.00     |
| 15 T | Acetone                   | 0.463 | 0.486 | -5.0  | 85    | 0.00     |
| 16 T | Pentane                   | 1.023 | 1.070 | -4.6  | 86    | 0.00     |
| 17 T | Isopropyl alcohol         | 1.277 | 1.494 | -17.0 | 104   | 0.00     |
| 18 T | 1,1-dichloroethene        | 1.440 | 1.328 | 7.8   | 77    | 0.00     |
| 19 T | Freon 113                 | 3.348 | 3.336 | 0.4   | 81    | 0.00     |
| 20 T | t-Butyl alcohol           | 1.724 | 2.089 | -21.2 | 107   | 0.00     |
| 21 T | Methylene chloride        | 1.121 | 1.065 | 5.0   | 80    | 0.00     |
| 22 T | Allyl chloride            | 0.949 | 0.875 | 7.8   | 75    | 0.00     |
| 23 T | Carbon disulfide          | 2.952 | 2.676 | 9.3   | 80    | 0.00     |
| 24 T | trans-1,2-dichloroethene  | 1.517 | 1.411 | 7.0   | 71    | 0.00     |
| 25 T | methyl tert-butyl ether   | 2.958 | 2.974 | -0.5  | 86    | 0.00     |
| 26 T | 1,1-dichloroethane        | 2.532 | 2.480 | 2.1   | 81    | 0.00     |
| 27 T | Vinyl acetate             | 1.670 | 1.510 | 9.6   | 77    | 0.00     |
| 28 T | Methyl Ethyl Ketone       | 0.503 | 0.490 | 2.6   | 80    | 0.00     |
| 29 T | cis-1,2-dichloroethene    | 1.465 | 1.281 | 12.6  | 71    | 0.00     |
| 30 T | Hexane                    | 1.318 | 1.181 | 10.4  | 71    | 0.00     |
| 31 T | Ethyl acetate             | 2.088 | 2.151 | -3.0  | 83    | 0.00     |
| 32 T | Chloroform                | 3.590 | 3.388 | 5.6   | 78    | 0.00     |
| 33 T | Tetrahydrofuran           | 0.795 | 0.734 | 7.7   | 76    | 0.00     |
| 34 T | 1,2-dichloroethane        | 2.321 | 2.098 | 9.6   | 76    | 0.00     |
| 35 I | 1,4-difluorobenzene       | 1.000 | 1.000 | 0.0   | 68    | 0.00     |
| 36 T | 1,1,1-trichloroethane     | 1.063 | 1.147 | -7.9  | 77    | 0.00     |
| 37 T | Cyclohexane               | 0.365 | 0.375 | -2.7  | 70    | 0.00     |
| 38 T | Carbon tetrachloride      | 1.437 | 1.451 | -1.0  | 78    | 0.00     |
| 39 T | Benzene                   | 1.025 | 1.052 | -2.6  | 72    | 0.00     |
| 40 T | Methyl methacrylate       | 0.296 | 0.314 | -6.1  | 80    | 0.00     |
| 41 T | 1,4-dioxane               | 0.148 | 0.191 | -29.1 | 100   | 0.00     |
| 42 T | 2,2,4-trimethylpentane    | 1.226 | 1.247 | -1.7  | 70    | 0.00     |
| 43 T | Heptane                   | 0.393 | 0.394 | -0.3  | 71    | 0.00     |
| 44 T | Trichloroethene           | 0.592 | 0.547 | 7.6   | 70    | 0.00     |
| 45 T | 1,2-dichloropropane       | 0.383 | 0.412 | -7.6  | 73    | 0.00     |
| 46 T | Bromodichloromethane      | 1.062 | 1.129 | -6.3  | 75    | 0.00     |
| 47 T | cis-1,3-dichloropropene   | 0.557 | 0.583 | -4.7  | 71    | 0.00     |
| 48 T | trans-1,3-dichloropropene | 0.465 | 0.440 | 5.4   | 68    | 0.00     |
| 49 T | 1,1,2-trichloroethane     | 0.549 | 0.602 | -9.7  | 77    | 0.00     |

({#}) = Out of Range

AM120303.D AO26\_1UG.M

Tue Jan 05 10:30:40 2016

MSDI

Page 1

## Centek Laboratories, LLC

## Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\AM120303.D

Acq On : 3 Dec 2015 11:17 am

Sample : A1UG\_1.0

Misc : AO26\_1UG

MS Integration Params: RTEINT.P

Vial: 3

Operator: RJP

Inst : MSD #1

Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\AO26\_1UG.M (RTE Integrator)

Title : TO-15 VOA Standards for 5 point calibration

Last Update : Tue Jan 05 10:25:53 2016

Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min

Max. RRF Dev : 30% Max. Rel. Area : 150%

|      | Compound                  | AvgRRF | CCRF  | %Dev   | Area% | Dev(min) |
|------|---------------------------|--------|-------|--------|-------|----------|
| 51 T | Toluene                   | 0.641  | 0.622 | 3.0    | 67    | 0.00     |
| 52 T | Methyl Isobutyl Ketone    | 0.556  | 0.715 | -28.6  | 94    | 0.00     |
| 53 T | Dibromochloromethane      | 1.059  | 1.129 | -6.6   | 76    | 0.00     |
| 54 T | Methyl Butyl Ketone       | 0.539  | 0.793 | -47.1# | 111   | 0.00     |
| 55 T | 1,2-dibromoethane         | 0.773  | 0.788 | -1.9   | 73    | 0.00     |
| 56 T | Tetrachloroethylene       | 0.676  | 0.686 | -1.5   | 73    | 0.00     |
| 57 T | Chlorobenzene             | 1.074  | 1.029 | 4.2    | 67    | 0.00     |
| 58 T | 1,1,1,2-tetrachloroethane | 0.825  | 0.875 | -6.1   | 76    | 0.00     |
| 59 T | Ethylbenzene              | 1.330  | 1.258 | 5.4    | 66    | 0.00     |
| 60 T | m&p-xylene                | 1.160  | 1.135 | 2.2    | 65    | 0.00     |
| 61 T | Nonane                    | 0.625  | 0.657 | -5.1   | 69    | 0.00     |
| 62 T | Styrene                   | 0.882  | 0.893 | -1.2   | 68    | 0.00     |
| 63 T | Bromoform                 | 1.136  | 1.254 | -10.4  | 78    | 0.00     |
| 64 T | o-xylene                  | 1.625  | 1.775 | -9.2   | 70    | 0.00     |
| 65 T | Cumene                    | 1.513  | 1.449 | 4.2    | 66    | 0.00     |
| 66 S | Bromofluorobenzene        | 0.692  | 0.734 | -6.1   | 66    | 0.00     |
| 67 T | 1,1,2,2-tetrachloroethane | 1.162  | 1.308 | -12.6  | 79    | 0.00     |
| 68 T | Propylbenzene             | 1.918  | 1.808 | 5.7    | 65    | 0.00     |
| 69 T | 2-Chlorotoluene           | 1.518  | 1.371 | 9.7    | 64    | 0.00     |
| 70 T | 4-ethyltoluene            | 1.688  | 1.713 | -1.5   | 69    | 0.00     |
| 71 T | 1,3,5-trimethylbenzene    | 1.665  | 1.741 | -4.6   | 69    | 0.00     |
| 72 T | 1,2,4-trimethylbenzene    | 1.205  | 1.219 | -1.2   | 70    | 0.00     |
| 73 T | 1,3-dichlorobenzene       | 1.198  | 1.319 | -10.1  | 75    | 0.00     |
| 74 T | benzyl chloride           | 1.238  | 1.527 | -23.3  | 83    | 0.00     |
| 75 T | 1,4-dichlorobenzene       | 1.166  | 1.319 | -13.1  | 76    | 0.00     |
| 76 T | 1,2,3-trimethylbenzene    | 1.429  | 1.564 | -9.4   | 74    | 0.00     |
| 77 T | 1,2-dichlorobenzene       | 1.169  | 1.295 | -10.8  | 75    | 0.00     |
| 78 T | 1,2,4-trichlorobenzene    | 0.533  | 0.693 | -30.0# | 93    | 0.00     |
| 79 T | Naphthalene               | 1.372  | 1.471 | -25.5  | 95    | 0.00     |
| 80 T | Hexachloro-1,3-butadiene  | 1.282  | 1.645 | -28.3  | 88    | 0.00     |

(#)= Out of Range

SPCC's out = 0 CCC's out = 0

AM120303.D AO26\_1UG.M

Tue Jan 05 10:30:40 2016

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## ***Appendix C***

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### ***Validator Qualifications***

**MICHAEL K. PERRY**  
**Chemist/Data Validator**

B.S. Chemistry, Georgia State University, Atlanta, GA

A.A.S., Chemical Technology, Alfred State College, Alfred, NY

Mr. Perry has over 30 years of experience in the analytical laboratory business. During his early career, he spent several years as a laboratory analyst performing the analysis of soil, water, and air samples for inorganic and organic chemical parameters. During his last 20 years in the environmental laboratory business, he managed and directed two major analytical laboratories in Rochester, NY. His management responsibilities included oversight of the daily operations of the lab, staff training and supervision, the selection, purchase, and maintenance of analytical instruments, the introduction of new laboratory methods, analytical quality assurance and quality control, data acquisition and management, and other business-related activities.

Mr. Perry has an extensive working knowledge of the methods and procedures used for sampling and analyzing both inorganic and organic analytes in soil, water, and air. He is an accomplished laboratory chemist and is familiar with the analytical methods and procedures established under the USEPA Contract Laboratory Protocols (CLP), the NYSDEC Analytical Services Protocols (ASP), and the NYSDOH Environmental Laboratory Approval Program (ELAP).

**KENNETH R. APPLIN**  
**Geochemist/Data Validator**

Ph.D., Geochemistry and Mineralogy, The Pennsylvania State University

M.S., Geochemistry and Mineralogy, The Pennsylvania State University

B.A., Geological Sciences, SUNY at Geneseo, NY

Dr. Applin has over 35 years of experience working with the geochemistry of natural waters. His prior experience includes working as an Assistant Professor of Geology at the University of Missouri-Columbia and as Chief Hydrogeologist and Geochemist with a leading engineering firm in Rochester, NY. In 1993, he established KR Applin and Associates, a small consulting business that focuses on the geochemistry of natural waters, especially as applied to problems involving the contamination of groundwater and surface water.

Dr. Applin is also an experienced analytical data validator and has provided data validation services since 1994 to a variety of clients performing brownfield cleanup projects, hazardous waste remediation, groundwater monitoring at solid waste facilities, and other projects requiring third-party data validation. Dr. Applin has several years of hands-on experience with the laboratory analysis of natural waters and has successfully completed the USEPA Region II certification courses for performing inorganic and organic analytical data validation.

# **DATA USABILITY SUMMARY REPORT (DUSR)**

**690 Portland Ave.  
Rochester, NY  
NYSDEC BCP # C 828151**

**SDG: C1804026**  
4 Air Samples

Prepared for:

**Ravi Engineering & Land Surveying, P.C.  
2110 South Clinton Ave  
Rochester, NY 14618**

**October 2018**



*Environmental Data Usability 10028 Deer Park Dr. Dansville, NY 14437 585.991.9156*

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| Table 4-1 | Data Validation Guidance Documents                                 |
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### **Summaries of Validated Results**

|           |       |
|-----------|-------|
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|-----------|-------|

**REVIEWER'S NARRATIVE**  
**SDG C1804026**

The data associated with this Sample Delivery Group (SDG) C1804026, analyzed by Centek Laboratories, LLC Syracuse, NY have been reviewed in accordance with assessment criteria provided by the New York State Department of Environmental Conservation following the review procedures provided in the USEPA Functional Guidelines for evaluating organic and inorganic data.

All analytical results reported by the laboratory are considered valid and acceptable except results that have been qualified as rejected, "R". Results qualified as estimated "J", or as non-detects, "U", are considered usable for the purpose of evaluating water and/or soil quality. However, these qualifiers indicate that the accuracy and/or precision of the analytical result is questionable. A summary of all data that have been qualified and the reasons for qualification are provided in the following data usability summary report (DUSR).

Two facts should be noted by all data users. First, the "R" qualifier means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the analyte is present or not. Values qualified with an "R" should not appear on the final data tables because they cannot be relied upon, even as the last resort. Second, no analyte concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error.

Reviewer's Signature: Michael K. Perry Date: 10/26/18  
Michael K. Perry  
Chemist



## 1.0 SUMMARY

**SITE:** 690 Portland Avenue  
Rochester, NY

**SAMPLING DATE:** April 12-13, 2018

**SAMPLE TYPE:** 4 air samples

**LABORATORY:** Centek Laboratories, LLC  
Syracuse, NY

**SDG No.:** C1804026

## 2.0 INTRODUCTION

This data usability summary report (DUSR) was prepared in accordance with guidance provided by the New York State Department of Environmental Conservation (NYSDEC). The DUSR is based on a review and evaluation of the laboratory analytical data package. Specifically, the NYSDEC guidance recommends review and evaluation of the following elements of the data package:

- Completeness of the data package as defined under the requirements of the NYSDEC Analytical Services Protocols (ASP) Category B or the United States Environmental Protection Agency (USEPA) Contract Laboratory Program (CLP) deliverables,
- Compliance with established analyte holding times,
- Adherence to quality control (QC) limits and specifications for blanks, instrument tuning and calibration, surrogate recoveries, spike recoveries, laboratory duplicate analyses, and other QC criteria,
- Adherence to established analytical protocols,
- Conformance of data summary sheets with raw analytical data, and
- Use of correct data qualifiers.

Data deficiencies, analytical protocol deviations, and quality control problems identified using the review criteria above and their effect on the analytical results are discussed in this report.

### **3.0 SAMPLE AND ANALYSIS SUMMARY**

The data package consists of analytical results for 4 air samples collected on April 12-13, 2018. These samples were analyzed for TO-15 volatile organic compounds.

All laboratory analyses were performed by Centek Laboratories, LLC, Syracuse, NY and analyzed as SDG C1804026. The analytical results were provided in NYSDEC ASP Category B format, which includes all raw analytical data and laboratory QC data.

### **4.0 GUIDANCE DOCUMENTS AND DATA REVIEW CRITERIA**

The guidance documents used for reviewing laboratory quality control (QC) data and assigning data qualifiers (flags) to analytical results are listed in Table 4-1. The QC limits established in the documents applicable to this data review were used to assess the quality of the analytical results. In some cases, however, QC limits established internally by the laboratory were taken into account to determine data quality.

The QC criteria considered for assessing the usability of the reported analytical results provided for each analyte type (i.e. VOCs, SVOCs, metals, etc.) are listed in Table 4-2. These criteria may vary with the analytical method utilized by the laboratory. These criteria comply with the guidance recommended in Section 2.0 above.

### **5.0 DATA VALIDATION QUALIFIERS**

The letter qualifiers (flags) used to define data usability are described briefly below. These letters are assigned by the data validator to analytical results having questionable accuracy and/or precision as determined by reviewing the laboratory QC data associated with the analytical results.

TABLE 4-1

## DATA VALIDATION GUIDANCE DOCUMENTS

| Analyte Type          | Validation Guidance                                                                                                                                                                                                                                                                    |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| VOCs                  | USEPA, 2008, Validating Volatile Organic Compounds By Gas Chromatography/Mass Spectrometry; SW-846 Method 8260B; SOP # HW-24, Rev. 2.<br><br>USEPA, 2008, Statement of Work for Organic Analysis of Low/Medium Concentration of Volatile Organic Compounds SOM01.2; SOP HW-33, Rev. 2. |
| SVOCs                 | USEPA, 2007, Statement of Work for Organic Analysis of Low/Medium Concentration of Semivolatile Organic Compounds SOM01.2; SOP HW-35, Rev. 1.                                                                                                                                          |
| Pesticides/PCBs       | USEPA, 2006, CLP Organics Data Review and Preliminary Review (CLP/SOW OLMO 4.3); SOP # HW-6, Rev. 14, Part C.                                                                                                                                                                          |
| Metals                | USEPA, 2006, Validation of Metals for the Contract Laboratory Program (CLP) based on SOW ILMO 5.3 (SOP Revision 13), SOP # HW-2, Rev. 13.                                                                                                                                              |
| Gen Chemistry         | NYSDEC, 2005, Analytical Services Protocols (ASP)                                                                                                                                                                                                                                      |
| VOCs<br>(Ambient air) | USEPA, 2006, Validating Air Samples, Volatile Organic Analysis of Ambient Air in Canister by Method TO-15; SOP # HW-31, Rev. 4.                                                                                                                                                        |

TABLE 4-2

**QUALITY CONTROL CRITERIA USED FOR VALIDATING  
LABORATORY ANALYTICAL DATA**

| <b>VOCs</b>                                                                                                                                                                                                                                                                 | <b>SVOCs</b>                                                                                                                                                                                                                                                      | <b>Pesticides/PCBs</b>                                                                                                                                                                                    | <b>Metals</b>                                                                                                                                                                                                                                                                    | <b>Gen Chemistry</b>                                                                                                                           | <b>Method TO-15</b>                                                                                                                                                                                                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Completeness of Pkg<br>Sample Condition<br>Holding Time<br>System Monitoring<br>Compounds<br>Lab Control Sample<br>Matrix Spikes<br>Blanks<br>Instrument Tuning<br>Internal Standards<br>Initial Calibration<br>Continuing Calibration<br>Lab Qualifiers<br>Field Duplicate | Completeness of Pkg<br>Sample Condition<br>Holding Time<br>Surrogate Recoveries<br>Lab Control Sample<br>Matrix Spikes<br>Blanks<br>Instrument Tuning<br>Internal Standards<br>Initial Calibration<br>Continuing Calibration<br>Lab Qualifiers<br>Field Duplicate | Completeness of Pkg<br>Sample Condition<br>Holding Time<br>Surrogate Recoveries<br>Matrix Spikes<br>Blanks<br>Instrument Calibration<br>& Verification<br>Analyte ID<br>Lab Qualifiers<br>Field Duplicate | Completeness of Pkg<br>Sample Condition<br>Holding Time<br>Initial/Continuing<br>Calibration<br>CRDL Standards<br>Blanks<br>Interference Check<br>Sample<br>Spike Recoveries<br>Lab Duplicate<br>Lab Control Sample<br>ICP Serial Dilutions<br>Lab Qualifiers<br>Field Duplicate | Completeness of Pkg<br>Sample Condition<br>Holding Times<br>Calibration<br>Lab Control Samples<br>Blanks<br>Spike Recoveries<br>Lab Duplicates | Completeness of Pkg<br>Sample Condition<br>Holding Time<br>Canister Certification<br>Lab Control Sample<br>Instrument Tuning<br>Blanks<br>Initial Calibration &<br>System Performance<br>Daily Calibration<br>Field Duplicate |

The laboratory may also use various letters and symbols to flag analytical results generated when QC limits were exceeded. The meanings of these flags may differ from those used by the independent data validator. Those used by the laboratory are provided with the analytical results.

**NOTE:** The assignment of data qualifiers by the data reviewer (validator) to laboratory analytical results should not necessarily be interpreted by the data user as a measure of laboratory ability or proficiency. Rather, the qualifiers are intended to provide a measure of data accuracy and precision to the data user, which, for example, may provide a level of confidence in determining whether or not standards or cleanup objectives have been met.

- U** The analyte was analyzed for but was not detected at or above the sample quantitation limit.
- J** The analyte was positively identified; the associated numerical value is the *approximate* concentration of the analyte in the sample. (The magnitude of any  $\pm$  value associated with the result is not determined by data validation).
- UJ** The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is *approximate* and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R** The sample result is rejected (i.e., is unusable) due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
- N** The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification".
- JN** The analyte is considered to be "presumptively present." The associated numerical value represents its *approximate* concentration.

The validated analytical results are attached to this report. Validation qualifiers (flags) are indicated using red ink. Data sheets having qualified data are signed and dated by the data reviewer.

## **6.0 RESULTS OF THE DATA REVIEW**

The results of the data review are summarized in Table 6-1. The table lists the samples where QC criteria were found to exceed acceptable limits and the actions taken to qualify the associated analytical results.

## **7.0 TOTAL USABLE DATA**

For SDG C1804026, four samples were analyzed and results were reported for 256 analyses. Even though some results were flagged with a “J” as estimated, all results (100%) are considered usable. See the summary table for the flagged analytes and the associated QC reasons.

C1804026

**Table 6-1      TO-15**

| <b>SAMPLES<br/>AFFECTED</b> | <b>ANALYTES</b>                                                                             | <b>ACTION</b> | <b>QC VIOLATION</b>                                          | <b>COMMENTS</b>                                                   |
|-----------------------------|---------------------------------------------------------------------------------------------|---------------|--------------------------------------------------------------|-------------------------------------------------------------------|
| All samples                 | 1,2,4-Trichlorobenzene<br>1,2-Dichlorobenzene<br>1,3-Dichlorobenzene<br>Hexachlorobutadiene | J detects     | LCSD >130 %                                                  | No data affected                                                  |
| All samples                 | Isopropyl Alcohol                                                                           | JN detects    | Relative Intensity of<br>characteristic ions not +/-<br>30 % | Compounds are tentatively identified and<br>results are estimated |

## ACRONYMS

|        |                                      |
|--------|--------------------------------------|
| BSP    | Blank Spike                          |
| CCAL   | Continuing Calibration               |
| CCB    | Continuing Calibration Blank         |
| CCV    | Continuing Calibration Verification  |
| CRDL   | Contract Required Detection Limit    |
| CRQL   | Contract Required Quantitation Limit |
| %D     | Percent Difference                   |
| ICAL   | Initial Calibration                  |
| ICB    | Initial Calibration Blank            |
| IS     | Internal Standard                    |
| LCS    | Laboratory Control Sample            |
| MS/MSD | Matrix Spike/Matrix Spike Duplicate  |
| QA     | Quality Assurance                    |
| QC     | Quality Control                      |
| %R     | Percent recovery                     |
| RPD    | Relative Percent Difference          |
| RRF    | Relative Response Factor             |
| %RSD   | Percent Relative Standard Deviation  |
| TAL    | Target Analyte List (metals)         |
| TCL    | Target Compound List (organics)      |



## *Appendix A*

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### *Validated Analytical Results*



## CEN TEK 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

Lynn Zicari  
Ravi Engineering & Land Surveying, P.C.  
2110 South Clinton Avenue, Suite 1  
Rochester, NY 14618

Monday, April 23, 2018  
Order No.: C1804026

TEL: (585) 223-3660

FAX

RE: 690 Portland Ave

Dear Lynn Zicari:

Centek Laboratories, LLC received 4 sample(s) on 4/16/2018 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.

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.

Centek Laboratories is distinctively qualified to meet your needs for precise and timely volatile organic compound analysis. We perform all analyses according to EPA, NIOSH or OSHA-approved analytical methods. Centek Laboratories is dedicated to providing quality analyses and exceptional customer service. Samples were analyzed using the methods outlined in the following references:

Compendium of Methods for the Determination of Toxic Organic Compounds, Compendium Method TO-15, January 1999.

Centek Laboratories SOP TS-80

Analytical results relate to samples as received at laboratory. 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.

This report cannot 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 silicon 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](http://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.



**CEN TEK LABORATORIES, LLC**

Date: 18-May-18

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**CLIENT:** Ravi Engineering & Land Surveying, P.C.

**Project:** 690 Portland Ave

**Lab Order:** C1804026

## **CASE NARRATIVE**

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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 ( $\pm 2"$ , 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 ( $\pm 1"$ , vacuum, absolute) for the sample to be valid. Once received at the laboratory, the canister vacuum should be confirmed to be 5" of Hg,  $\pm 1"$ . 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**

143 Midler Park Drive

Syracuse, NY 13206

315-431-0730

[www.CentekLabs.com](http://www.CentekLabs.com)

### Vapor Intrusion & IAQ

Site Name: 690 Portland Ave

Project: *Former TML Optical, Inc*

PO#:

Quote # Q-

Canister Order #:

### Detection Limit

**Septor**

149/13

1.49419 + 0.2 NYS

### Report Level

Level 1

## Level II

Cat "B" Like

[illegible]

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

**CEN TEK LABORATORIES, LLC**

Date: 18-May-18

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**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Project:** 690 Portland Ave  
**Lab Order:** C1804026

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**Work Order Sample Summary**

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| Lab Sample ID | Client Sample ID | Tag Number | Collection Date | Date Received |
|---------------|------------------|------------|-----------------|---------------|
| C1804026-001A | 1A-702-20180413  | 101.385    | 4/12/2018       | 4/16/2018     |
| C1804026-002A | 1A-708-20180413  | 367.396    | 4/12/2018       | 4/16/2018     |
| C1804026-003A | 1A-714-20180413  | 327.453    | 4/12/2018       | 4/16/2018     |
| C1804026-004A | OA-20180413      | 1182.432   | 4/12/2018       | 4/16/2018     |

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## Centek Laboratories, LLC

Date: 16-May-18

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1804026  
**Project:** 690 Portland Ave  
**Lab ID:** C1804026-001A

**Client Sample ID:** IA-702-20180413  
**Tag Number:** 101385  
**Collection Date:** 4/12/2018  
**Matrix:** AIR

| Analyses                                       | Result  | **Limit      | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|---------|--------------|------|---------------------|----|----------------------|
| <b>FIELD PARAMETERS</b>                        |         | <b>FLD</b>   |      | <b>Analyst:</b>     |    |                      |
| Lab Vacuum In                                  | -1      |              |      | "Hg                 |    | 4/16/2018            |
| Lab Vacuum Out                                 | -30     |              |      | "Hg                 |    | 4/16/2018            |
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |         | <b>TC-15</b> |      | <b>Analyst: RJP</b> |    |                      |
| 1,1,1-Trichloroethane                          | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| 1,1,2,2-Tetrachloroethane                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| 1,1,2-Trichloroethane                          | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| 1,1-Dichloroethane                             | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| 1,1-Dichloroethene                             | < 0.040 | 0.040        |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| 1,2,4-Trichlorobenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| 1,2,4-Trimethylbenzene                         | 6.7     | 1.5          |      | ppbV                | 10 | 4/18/2018 2:38:00 PM |
| 1,2-Dibromoethane                              | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| 1,2-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| 1,2-Dichloroethene                             | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| 1,2-Dichloropropane                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| 1,3,5-Trimethylbenzene                         | 2.5     | 1.5          |      | ppbV                | 10 | 4/18/2018 2:38:00 PM |
| 1,3-butadiene                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| 1,3-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| 1,4-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| 1,4-Dioxane                                    | < 0.30  | 0.30         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| 2,2,4-trimethylpentane                         | 26      | 6.0          |      | ppbV                | 40 | 4/20/2018 4:01:00 PM |
| 4-ethyltoluene                                 | 2.6     | 1.5          |      | ppbV                | 10 | 4/18/2018 2:38:00 PM |
| Acetone                                        | 7.0     | 3.0          |      | ppbV                | 10 | 4/18/2018 2:38:00 PM |
| Allyl chloride                                 | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Benzene                                        | 20      | 1.5          |      | ppbV                | 10 | 4/18/2018 2:38:00 PM |
| Benzyl chloride                                | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Bromodichloromethane                           | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Bromoform                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Bromomethane                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Carbon disulfide                               | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Carbon tetrachloride                           | < 0.030 | 0.030        |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Chlorobenzene                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Chloroethane                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Chloroform                                     | 0.44    | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Chloromethane                                  | 0.55    | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| cis-1,2-Dichloroethene                         | < 0.040 | 0.040        |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| cis-1,3-Dichloropropene                        | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Cyclohexane                                    | 15      | 1.5          |      | ppbV                | 10 | 4/18/2018 2:38:00 PM |
| Dibromochloromethane                           | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |
| Ethyl acetate                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 3:09:00 PM |

**Qualifiers:** \*\* Quantitation Limit  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 JN Non-routine analyte. Quantitation estimated.  
 S Spike Recovery outside accepted recovery limits

. Results reported are not blank corrected  
 E Estimated Value above quantitation range  
 J Analyte detected below quantitation limit  
 ND Not Detected at the Limit of Detection

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## Centek Laboratories, LLC

Date: 16-May-18

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Lab Order: C1804026  
 Project: 690 Portland Ave  
 Lab ID: C1804026-001A

Client Sample ID: IA-702-20180413  
 Tag Number: 101.385  
 Collection Date: 4/12/2018  
 Matrix: AIR

| Analyses                                | Result  | **Limit | Qual | Units        | DF | Date Analyzed        |
|-----------------------------------------|---------|---------|------|--------------|----|----------------------|
| 1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE |         | TO-15   |      | Analyst: RJP |    |                      |
| Ethylbenzene                            | 14      | 1.5     |      | ppbV         | 10 | 4/18/2018 2:38:00 PM |
| Freon 11                                | 0.24    | 0.15    |      | ppbV         | 1  | 4/20/2018 3:09:00 PM |
| Freon 113                               | < 0.15  | 0.15    |      | ppbV         | 1  | 4/20/2018 3:09:00 PM |
| Freon 114                               | < 0.15  | 0.15    |      | ppbV         | 1  | 4/20/2018 3:09:00 PM |
| Freon 12                                | 0.44    | 0.15    |      | ppbV         | 1  | 4/20/2018 3:09:00 PM |
| Heptane                                 | 21      | 1.5     |      | ppbV         | 10 | 4/18/2018 2:38:00 PM |
| Hexachloro-1,3-butadiene                | < 0.15  | 0.15    |      | ppbV         | 1  | 4/20/2018 3:09:00 PM |
| Hexane                                  | 35      | 6.0     |      | ppbV         | 40 | 4/20/2018 4:01:00 PM |
| Isopropyl alcohol                       | 13      | 1.5     | JN   | ppbV         | 10 | 4/18/2018 2:38:00 PM |
| m&p-Xylene                              | 42      | 12      |      | ppbV         | 40 | 4/20/2018 4:01:00 PM |
| Methyl Butyl Ketone                     | < 0.30  | 0.30    |      | ppbV         | 1  | 4/20/2018 3:09:00 PM |
| Methyl Ethyl Ketone                     | 1.5     | 0.30    |      | ppbV         | 1  | 4/20/2018 3:09:00 PM |
| Methyl Isobutyl Ketone                  | < 0.30  | 0.30    |      | ppbV         | 1  | 4/20/2018 3:09:00 PM |
| Methyl tert-butyl ether                 | < 0.15  | 0.15    |      | ppbV         | 1  | 4/20/2018 3:09:00 PM |
| Methylene chloride                      | < 0.15  | 0.15    |      | ppbV         | 1  | 4/20/2018 3:09:00 PM |
| o-Xylene                                | 17      | 1.5     |      | ppbV         | 10 | 4/18/2018 2:38:00 PM |
| Propylene                               | < 0.15  | 0.15    |      | ppbV         | 1  | 4/20/2018 3:09:00 PM |
| Styrene                                 | 0.71    | 0.15    |      | ppbV         | 1  | 4/20/2018 3:09:00 PM |
| Tetrachloroethylene                     | < 0.15  | 0.15    |      | ppbV         | 1  | 4/20/2018 3:09:00 PM |
| Tetrahydrofuran                         | < 0.15  | 0.15    |      | ppbV         | 1  | 4/20/2018 3:09:00 PM |
| Toluene                                 | 94      | 6.0     |      | ppbV         | 40 | 4/20/2018 4:01:00 PM |
| trans-1,2-Dichloroethene                | < 0.15  | 0.15    |      | ppbV         | 1  | 4/20/2018 3:09:00 PM |
| trans-1,3-Dichloropropene               | < 0.15  | 0.15    |      | ppbV         | 1  | 4/20/2018 3:09:00 PM |
| Trichloroethene                         | < 0.030 | 0.030   |      | ppbV         | 1  | 4/20/2018 3:09:00 PM |
| Vinyl acetate                           | < 0.15  | 0.15    |      | ppbV         | 1  | 4/20/2018 3:09:00 PM |
| Vinyl Bromide                           | < 0.15  | 0.15    |      | ppbV         | 1  | 4/20/2018 3:09:00 PM |
| Vinyl chloride                          | < 0.040 | 0.040   |      | ppbV         | 1  | 4/20/2018 3:09:00 PM |
| Surr: Bromofluorobenzene                | 102     | 70-130  |      | %REC         | 1  | 4/20/2018 3:09:00 PM |

## Qualifiers:

\*\* Quantitation Limit

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

JN Non-routine analyte, Quantitation estimated.

S Spike Recovery outside accepted recovery limits

. Results reported are not blank corrected

E Estimated Value above quantitation range

J Analyte detected below quantitation limit

ND Not Detected at the Limit of Detection

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## Centek Laboratories, LLC

Date: 16-May-18

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Lab Order: C1804026  
 Project: 690 Portland Ave  
 Lab ID: C1804026-002A

Client Sample ID: 1A-708-20180413  
 Tag Number: 367.396  
 Collection Date: 4/12/2018  
 Matrix: AIR

| Analyses                                       | Result  | **Limit | Qual | Units | DF | Date Analyzed         |
|------------------------------------------------|---------|---------|------|-------|----|-----------------------|
| <b>FIELD PARAMETERS</b>                        |         |         |      |       |    |                       |
| Lab Vacuum In                                  | -3      |         |      | "Hg   |    | Analyst:<br>4/18/2018 |
| Lab Vacuum Out                                 | -30     |         |      | "Hg   |    | 4/18/2018             |
| <b>1UG/M3 W/ 0.2UG/M3 CT-TOE-VC-DCE-1,1DCE</b> |         |         |      |       |    |                       |
|                                                |         |         | FLD  |       |    | Analyst: RJP          |
| 1,1,1-Trichloroethane                          | < 0.15  | 0.15    |      | ppbV  | 1  | 4/20/2018 4:45:00 PM  |
| 1,1,2,2-Tetrachloroethane                      | < 0.15  | 0.15    |      | ppbV  | 1  | 4/20/2018 4:45:00 PM  |
| 1,1,2-Trichloroethane                          | < 0.15  | 0.15    |      | ppbV  | 1  | 4/20/2018 4:45:00 PM  |
| 1,1-Dichloroethane                             | < 0.15  | 0.15    |      | ppbV  | 1  | 4/20/2018 4:45:00 PM  |
| 1,1-Dichloroethane                             | < 0.040 | 0.040   |      | ppbV  | 1  | 4/20/2018 4:45:00 PM  |
| 1,2,4-Trichlorobenzene                         | < 0.15  | 0.15    |      | ppbV  | 1  | 4/20/2018 4:45:00 PM  |
| 1,2,4-Trimethylbenzene                         | 0.22    | 0.15    |      | ppbV  | 1  | 4/20/2018 4:45:00 PM  |
| 1,2-Dibromoethane                              | < 0.15  | 0.15    |      | ppbV  | 1  | 4/20/2018 4:45:00 PM  |
| 1,2-Dichlorobenzene                            | < 0.15  | 0.15    |      | ppbV  | 1  | 4/20/2018 4:45:00 PM  |
| 1,2-Dichloroethane                             | < 0.15  | 0.15    |      | ppbV  | 1  | 4/20/2018 4:45:00 PM  |
| 1,2-Dichloropropane                            | < 0.15  | 0.15    |      | ppbV  | 1  | 4/20/2018 4:45:00 PM  |
| 1,3,5-Trimethylbenzene                         | 0.15    | 0.15    |      | ppbV  | 1  | 4/20/2018 4:45:00 PM  |
| 1,3-butadiene                                  | < 0.15  | 0.15    |      | ppbV  | 1  | 4/20/2018 4:45:00 PM  |
| 1,3-Dichlorobenzene                            | < 0.15  | 0.15    |      | ppbV  | 1  | 4/20/2018 4:45:00 PM  |
| 1,4-Dichlorobenzene                            | < 0.15  | 0.15    |      | ppbV  | 1  | 4/20/2018 4:45:00 PM  |
| 1,4-Dioxane                                    | < 0.30  | 0.30    |      | ppbV  | 1  | 4/20/2018 4:45:00 PM  |
| 2,2,4-Trimethylpentane                         | 0.11    | 0.15    | J    | ppbV  | 1  | 4/20/2018 4:45:00 PM  |
| 4-ethyltoluene                                 | < 0.15  | 0.15    |      | ppbV  | 1  | 4/20/2018 4:45:00 PM  |
| Acetone                                        | 11      | 3.0     |      | ppbV  | 10 | 4/18/2018 3:15:00 PM  |
| Allyl chloride                                 | < 0.15  | 0.15    |      | ppbV  | 1  | 4/20/2018 4:45:00 PM  |
| Benzene                                        | 0.30    | 0.15    |      | ppbV  | 1  | 4/20/2018 4:45:00 PM  |
| Benzyl chloride                                | < 0.15  | 0.15    |      | ppbV  | 1  | 4/20/2018 4:45:00 PM  |
| Bromodichloromethane                           | < 0.15  | 0.15    |      | ppbV  | 1  | 4/20/2018 4:45:00 PM  |
| Bromoform                                      | < 0.15  | 0.15    |      | ppbV  | 1  | 4/20/2018 4:45:00 PM  |
| Bromomethane                                   | < 0.15  | 0.15    |      | ppbV  | 1  | 4/20/2018 4:45:00 PM  |
| Carbon disulfide                               | < 0.15  | 0.15    |      | ppbV  | 1  | 4/20/2018 4:45:00 PM  |
| Carbon tetrachloride                           | 0.10    | 0.030   |      | ppbV  | 1  | 4/20/2018 4:45:00 PM  |
| Chlorobenzene                                  | < 0.15  | 0.15    |      | ppbV  | 1  | 4/20/2018 4:45:00 PM  |
| Chloroethane                                   | < 0.15  | 0.15    |      | ppbV  | 1  | 4/20/2018 4:45:00 PM  |
| Chloroform                                     | 0.14    | 0.15    | J    | ppbV  | 1  | 4/20/2018 4:45:00 PM  |
| Chloromethane                                  | 0.48    | 0.15    |      | ppbV  | 1  | 4/20/2018 4:45:00 PM  |
| cis-1,2-Dichloroethane                         | < 0.040 | 0.040   |      | ppbV  | 1  | 4/20/2018 4:45:00 PM  |
| cis-1,3-Dichloropropene                        | < 0.15  | 0.15    |      | ppbV  | 1  | 4/20/2018 4:45:00 PM  |
| Cyclohexane                                    | < 0.15  | 0.15    |      | ppbV  | 1  | 4/20/2018 4:45:00 PM  |
| Dibromochloromethane                           | < 0.15  | 0.15    |      | ppbV  | 1  | 4/20/2018 4:45:00 PM  |
| Ethyl acetate                                  | 0.49    | 0.15    |      | ppbV  | 1  | 4/20/2018 4:45:00 PM  |

Qualifiers: \*\* Quantitation Limit  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 JN Non-routine analyte, Quantitation estimated  
 S Spike Recovery outside accepted recovery limits

Results reported are not blank corrected  
 E Estimated Value above quantitation range  
 J Analyte detected below quantitation limit  
 ND Not Detected at the Limit of Detection

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## Centek Laboratories, LLC

Date: 16-May-18

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Lab Order: C1804026  
 Project: 690 Portland Ave  
 Lab ID: C1804026-002A

Client Sample ID: IA-708-20180413  
 Tag Number: 367.396  
 Collection Date: 4/12/2018  
 Matrix: AIR

| Analyses                                | Result  | **Limit | Qual  | Units | DF | Date Analyzed        |
|-----------------------------------------|---------|---------|-------|-------|----|----------------------|
| 1UG/M3 WW 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE |         |         | TO-15 |       |    | Analyst: RJP         |
| Ethylbenzene                            | 0.14    | 0.15    | J     | ppbV  | 1  | 4/20/2018 4:45:00 PM |
| Freon 11                                | 0.23    | 0.15    |       | ppbV  | 1  | 4/20/2018 4:45:00 PM |
| Freon 113                               | < 0.15  | 0.15    |       | ppbV  | 1  | 4/20/2018 4:45:00 PM |
| Freon 114                               | < 0.15  | 0.15    |       | ppbV  | 1  | 4/20/2018 4:45:00 PM |
| Freon 12                                | 0.48    | 0.15    |       | ppbV  | 1  | 4/20/2018 4:45:00 PM |
| Heptane                                 | 0.39    | 0.15    |       | ppbV  | 1  | 4/20/2018 4:45:00 PM |
| Hexachloro-1,3-butadiene                | < 0.15  | 0.15    |       | ppbV  | 1  | 4/20/2018 4:45:00 PM |
| Hexane                                  | 0.18    | 0.15    |       | ppbV  | 1  | 4/20/2018 4:45:00 PM |
| Isopropyl alcohol                       | 1.1     | 0.15    |       | ppbV  | 1  | 4/20/2018 4:45:00 PM |
| m&p-Xylene                              | 0.48    | 0.30    |       | ppbV  | 1  | 4/20/2018 4:45:00 PM |
| Methyl Butyl Ketone                     | < 0.30  | 0.30    |       | ppbV  | 1  | 4/20/2018 4:45:00 PM |
| Methyl Ethyl Ketone                     | 0.70    | 0.30    |       | ppbV  | 1  | 4/20/2018 4:45:00 PM |
| Methyl Isobutyl Ketone                  | < 0.30  | 0.30    |       | ppbV  | 1  | 4/20/2018 4:45:00 PM |
| Methyl tert-butyl ether                 | < 0.15  | 0.15    |       | ppbV  | 1  | 4/20/2018 4:45:00 PM |
| Methylene chloride                      | 0.79    | 0.15    |       | ppbV  | 1  | 4/20/2018 4:45:00 PM |
| o-Xylene                                | 0.21    | 0.15    |       | ppbV  | 1  | 4/20/2018 4:45:00 PM |
| Propylene                               | < 0.15  | 0.15    |       | ppbV  | 1  | 4/20/2018 4:45:00 PM |
| Styrene                                 | < 0.15  | 0.15    |       | ppbV  | 1  | 4/20/2018 4:45:00 PM |
| Tetrachloroethylene                     | < 0.15  | 0.15    |       | ppbV  | 1  | 4/20/2018 4:45:00 PM |
| Tetrahydrofuran                         | < 0.15  | 0.15    |       | ppbV  | 1  | 4/20/2018 4:45:00 PM |
| Toluene                                 | 0.61    | 0.15    |       | ppbV  | 1  | 4/20/2018 4:45:00 PM |
| trans-1,2-Dichloroethene                | < 0.15  | 0.15    |       | ppbV  | 1  | 4/20/2018 4:45:00 PM |
| trans-1,3-Dichloropropene               | < 0.15  | 0.15    |       | ppbV  | 1  | 4/20/2018 4:45:00 PM |
| Trichloroethene                         | 0.050   | 0.030   |       | ppbV  | 1  | 4/20/2018 4:45:00 PM |
| Vinyl acetate                           | < 0.15  | 0.15    |       | ppbV  | 1  | 4/20/2018 4:45:00 PM |
| Vinyl Bromide                           | < 0.15  | 0.15    |       | ppbV  | 1  | 4/20/2018 4:45:00 PM |
| Vinyl chloride                          | < 0.040 | 0.040   |       | ppbV  | 1  | 4/20/2018 4:45:00 PM |
| Surr: Bromofluorobenzene                | 95.0    | 70-130  |       | %REC  | 1  | 4/20/2018 4:45:00 PM |

Qualifiers: \*\* Quantitation Limit  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 JN Non-routine analyte, Quantitation estimated.  
 S Spike: Recovery outside accepted recovery limits

- Results reported are not blank corrected  
 E Estimated Value above quantitation range  
 J Analyte detected below quantitation limit  
 ND Not Detected at the Limit of Detection

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mnp 10/20/18

## Centek Laboratories, LLC

Date: 16-May-18

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Lab Order: C1804026  
 Project: 690 Portland Ave  
 Lab ID: C1804026-003A

Client Sample ID: IA-714-20180413  
 Tag Number: 327.453  
 Collection Date: 4/12/2018  
 Matrix: AIR

| Analyses                                       | Result  | **Limit      | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|---------|--------------|------|---------------------|----|----------------------|
| <b>FIELD PARAMETERS</b>                        |         | <b>FLD</b>   |      | <b>Analyst:</b>     |    |                      |
| Lab Vacuum In                                  | -2      |              |      | "Hg                 |    | 4/16/2018            |
| Lab Vacuum Out                                 | -30     |              |      | "Hg                 |    | 4/16/2018            |
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |         | <b>TO-15</b> |      | <b>Analyst: RJP</b> |    |                      |
| 1,1,1-Trichloroethane                          | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| 1,1,2,2-Tetrachloroethane                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| 1,1,2-Trichloroethane                          | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| 1,1-Dichloroethane                             | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| 1,1-Dichloroethene                             | < 0.040 | 0.040        |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| 1,2,4-Trichlorobenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| 1,2,4-Trimethylbenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| 1,2-Dibromoethane                              | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| 1,2-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| 1,2-Dichloroethane                             | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| 1,2-Dichloropropane                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| 1,3,5-Trimethylbenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| 1,3-butadiene                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| 1,3-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| 1,4-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| 1,4-Dioxane                                    | < 0.30  | 0.30         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| 2,2,4-trimethylpentane                         | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| 4-ethyltoluene                                 | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Acetone                                        | 26      | 6.0          |      | ppbV                | 20 | 4/20/2018 6:13:00 PM |
| Allyl chloride                                 | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Benzene                                        | 0.22    | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Benzyl chloride                                | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Bromodichloromethane                           | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Bromoform                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Bromomethane                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Carbon disulfide                               | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Carbon tetrachloride                           | 0.10    | 0.030        |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Chlorobenzene                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Chloroethane                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Chloroform                                     | 0.17    | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Chloromethane                                  | 0.52    | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| cis-1,2-Dichloroethene                         | < 0.040 | 0.040        |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| cis-1,3-Dichloropropene                        | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Cyclohexane                                    | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Dibromochloromethane                           | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |
| Ethyl acetate                                  | 0.39    | 0.15         |      | ppbV                | 1  | 4/20/2018 5:36:00 PM |

Qualifiers: \*\* Quantitation Limit  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 N Non-routine analyte. Quantitation estimated.  
 S Spike Recovery outside accepted recovery limits

. Results reported are not blank corrected  
 E Estimated Value above quantitation range  
 J Analyte detected below quantitation limit  
 ND Not Detected at the Limit of Detection

## Centek Laboratories, LLC

Date: 16-May-18

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Lab Order: C1804026  
 Project: 690 Portland Ave  
 Lab ID: C1804026-003A

Client Sample ID: 1A-714-20180413  
 Tag Number: 327.453  
 Collection Date: 4/12/2018  
 Matrix: AIR

| Analyses                                | Result  | **Limit | Qual  | Units | DF | Date Analyzed        |
|-----------------------------------------|---------|---------|-------|-------|----|----------------------|
| 1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE |         |         | TO-15 |       |    | Analyst: RJP         |
| Ethylbenzene                            | 0.12    | 0.15    | J     | ppbV  | 1  | 4/20/2018 5:36:00 PM |
| Freon 11                                | 0.24    | 0.15    |       | ppbV  | 1  | 4/20/2018 5:36:00 PM |
| Freon 113                               | < 0.15  | 0.15    |       | ppbV  | 1  | 4/20/2018 5:36:00 PM |
| Freon 114                               | < 0.15  | 0.15    |       | ppbV  | 1  | 4/20/2018 5:36:00 PM |
| Freon 12                                | 0.50    | 0.15    |       | ppbV  | 1  | 4/20/2018 5:36:00 PM |
| Heptane                                 | 0.22    | 0.15    |       | ppbV  | 1  | 4/20/2018 5:36:00 PM |
| Hexachloro-1,3-butadiene                | < 0.15  | 0.15    |       | ppbV  | 1  | 4/20/2018 5:36:00 PM |
| Hexane                                  | 0.14    | 0.15    | J     | ppbV  | 1  | 4/20/2018 5:36:00 PM |
| Isopropyl alcohol                       | 5.2 SN  | 3.0     |       | ppbV  | 20 | 4/20/2018 6:13:00 PM |
| m&p-Xylene                              | 0.35    | 0.30    |       | ppbV  | 1  | 4/20/2018 5:36:00 PM |
| Methyl Butyl Ketone                     | < 0.30  | 0.30    |       | ppbV  | 1  | 4/20/2018 5:36:00 PM |
| Methyl Ethyl Ketone                     | 0.43    | 0.30    |       | ppbV  | 1  | 4/20/2018 5:36:00 PM |
| Methyl isobutyl Ketone                  | < 0.30  | 0.30    |       | ppbV  | 1  | 4/20/2018 5:36:00 PM |
| Methyl tert-butyl ether                 | < 0.15  | 0.15    |       | ppbV  | 1  | 4/20/2018 5:36:00 PM |
| Methylene chloride                      | 1.2     | 0.15    |       | ppbV  | 1  | 4/20/2018 5:36:00 PM |
| o-Xylene                                | 0.15    | 0.15    |       | ppbV  | 1  | 4/20/2018 5:36:00 PM |
| Propylene                               | < 0.15  | 0.15    |       | ppbV  | 1  | 4/20/2018 5:36:00 PM |
| Styrene                                 | < 0.15  | 0.15    |       | ppbV  | 1  | 4/20/2018 5:36:00 PM |
| Tetrachloroethylene                     | < 0.15  | 0.15    |       | ppbV  | 1  | 4/20/2018 5:36:00 PM |
| Tetrahydrofuran                         | < 0.15  | 0.15    |       | ppbV  | 1  | 4/20/2018 5:36:00 PM |
| Toluene                                 | 0.41    | 0.15    |       | ppbV  | 1  | 4/20/2018 5:36:00 PM |
| trans-1,2-Dichloroethene                | < 0.15  | 0.15    |       | ppbV  | 1  | 4/20/2018 5:36:00 PM |
| trans-1,3-Dichloropropene               | < 0.15  | 0.15    |       | ppbV  | 1  | 4/20/2018 5:36:00 PM |
| Trichloroethene                         | < 0.030 | 0.030   |       | ppbV  | 1  | 4/20/2018 5:36:00 PM |
| Vinyl acetate                           | < 0.15  | 0.15    |       | ppbV  | 1  | 4/20/2018 5:36:00 PM |
| Vinyl Bromide                           | < 0.15  | 0.15    |       | ppbV  | 1  | 4/20/2018 5:36:00 PM |
| Vinyl chloride                          | < 0.040 | 0.040   |       | ppbV  | 1  | 4/20/2018 5:36:00 PM |
| Surf. Bromofluorobenzene                | 87.0    | 70-130  |       | %REC  | 1  | 4/20/2018 5:36:00 PM |

Qualifiers: \*\* Quantitation Limit  
 B Analyte detected in the associated Method Blank  
 N Holding times for preparation or analysis exceeded  
 N Non-routine analyte. Quantitation estimated.  
 S Spike Recovery outside accepted recovery limits

Results reported are not blank corrected  
 E Estimated Value above quantitation range  
 J Analyte detected below quantitation limit  
 ND Not Detected at the Limit of Detection

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## Centek Laboratories, LLC

Date: 16-May-18

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Lab Order: C1804026  
 Project: 690 Portland Ave  
 Lab ID: C1804026-004A

Client Sample ID: OA-20180413  
 Tag Number: 1182.432  
 Collection Date: 4/12/2018  
 Matrix: AIR

| Analyses                                       | Result  | **Limit      | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|---------|--------------|------|---------------------|----|----------------------|
| <b>FIELD PARAMETERS</b>                        |         | <b>FLD</b>   |      | <b>Analyst:</b>     |    |                      |
| Lab Vacuum In                                  | -1      |              |      | "Hg                 |    | 4/16/2018            |
| Lab Vacuum Out                                 | -30     |              |      | "Hg                 |    | 4/16/2018            |
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |         | <b>TO-15</b> |      | <b>Analyst: RJP</b> |    |                      |
| 1,1,1-Trichloroethane                          | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| 1,1,2,2-Tetrachloroethane                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| 1,1,2-Trichloroethane                          | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| 1,1-Dichloroethane                             | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| 1,1-Dichloroethene                             | < 0.040 | 0.040        |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| 1,2,4-Trichlorobenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| 1,2,4-Trimethylbenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| 1,2-Dibromoethane                              | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| 1,2-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| 1,2-Dichloroethane                             | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| 1,2-Dichloropropane                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| 1,3,5-Trimethylbenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| 1,3-butadiene                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| 1,3-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| 1,4-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| 1,4-Dioxane                                    | < 0.30  | 0.30         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| 2,2,4-trimethylpentane                         | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| 4-ethyltoluene                                 | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Acetone                                        | 6.3     | 3.0          |      | ppbV                | 10 | 4/18/2018 4:28:00 PM |
| Allyl chloride                                 | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Benzene                                        | 0.22    | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Benzyl chloride                                | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Bromodichloromethane                           | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Bromoform                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Bromomethane                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Carbon disulfide                               | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Carbon tetrachloride                           | 0.11    | 0.030        |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Chlorobenzene                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Chloroethane                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Chloroform                                     | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Chloromethane                                  | 0.39    | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| cis-1,2-Dichloroethene                         | < 0.040 | 0.040        |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| cis-1,3-Dichloropropene                        | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Cyclohexane                                    | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Dibromochloromethane                           | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |
| Ethyl acetate                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 4/20/2018 7:30:00 PM |

Qualifiers: \*\* Quantitation Limit  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 JN Non-routine analyte. Quantitation estimated.  
 S Spike Recovery outside accepted recovery limits

. Results reported are not blank corrected  
 E Estimated Value above quantitation range  
 J Analyte detected below quantitation limit  
 ND Not Detected at the Limit of Detection

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## Centek Laboratories, LLC

Date: 16-May-18

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Lab Order: C1804026  
 Project: 690 Portland Ave  
 Lab ID: C1804026-004A

Client Sample ID: OA-20180413  
 Tag Number: 1182.432  
 Collection Date: 4/12/2018  
 Matrix: AIR

| Analyses                                | Result  | **Limit | Qual | Units        | DF | Date Analyzed        |
|-----------------------------------------|---------|---------|------|--------------|----|----------------------|
| 1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE |         | TO-15   |      | Analyst: RJP |    |                      |
| Ethylbenzene                            | < 0.15  | 0.15    |      | ppbV         | 1  | 4/20/2018 7:30:00 PM |
| Freon 11                                | 0.25    | 0.15    |      | ppbV         | 1  | 4/20/2018 7:30:00 PM |
| Freon 113                               | < 0.15  | 0.15    |      | ppbV         | 1  | 4/20/2018 7:30:00 PM |
| Freon 114                               | < 0.15  | 0.15    |      | ppbV         | 1  | 4/20/2018 7:30:00 PM |
| Freon 12                                | 0.50    | 0.15    |      | ppbV         | 1  | 4/20/2018 7:30:00 PM |
| Heptane                                 | 0.11    | 0.15    | J    | ppbV         | 1  | 4/20/2018 7:30:00 PM |
| Hexachloro-1,3-butadiene                | < 0.15  | 0.15    |      | ppbV         | 1  | 4/20/2018 7:30:00 PM |
| Hexane                                  | 0.15    | 0.15    |      | ppbV         | 1  | 4/20/2018 7:30:00 PM |
| Isopropyl alcohol                       | 1.2 JN  | 0.15    |      | ppbV         | 1  | 4/20/2018 7:30:00 PM |
| m&p-Xylene                              | 0.19    | 0.30    | J    | ppbV         | 1  | 4/20/2018 7:30:00 PM |
| Methyl Butyl Ketone                     | < 0.30  | 0.30    |      | ppbV         | 1  | 4/20/2018 7:30:00 PM |
| Methyl Ethyl Ketone                     | 0.32    | 0.30    |      | ppbV         | 1  | 4/20/2018 7:30:00 PM |
| Methyl Isobutyl Ketone                  | < 0.30  | 0.30    |      | ppbV         | 1  | 4/20/2018 7:30:00 PM |
| Methyl tert-butyl ether                 | < 0.15  | 0.15    |      | ppbV         | 1  | 4/20/2018 7:30:00 PM |
| Methylene chloride                      | 0.62    | 0.15    |      | ppbV         | 1  | 4/20/2018 7:30:00 PM |
| o-Xylene                                | < 0.15  | 0.15    |      | ppbV         | 1  | 4/20/2018 7:30:00 PM |
| Propylene                               | < 0.15  | 0.15    |      | ppbV         | 1  | 4/20/2018 7:30:00 PM |
| Styrene                                 | < 0.15  | 0.15    |      | ppbV         | 1  | 4/20/2018 7:30:00 PM |
| Tetrachloroethylene                     | < 0.15  | 0.15    |      | ppbV         | 1  | 4/20/2018 7:30:00 PM |
| Tetrahydrofuran                         | < 0.15  | 0.15    |      | ppbV         | 1  | 4/20/2018 7:30:00 PM |
| Toluene                                 | 0.31    | 0.15    |      | ppbV         | 1  | 4/20/2018 7:30:00 PM |
| trans-1,2-Dichloroethene                | < 0.15  | 0.15    |      | ppbV         | 1  | 4/20/2018 7:30:00 PM |
| trans-1,3-Dichloropropene               | < 0.15  | 0.15    |      | ppbV         | 1  | 4/20/2018 7:30:00 PM |
| Trichloroethene                         | 0.080   | 0.030   |      | ppbV         | 1  | 4/20/2018 7:30:00 PM |
| Vinyl acetate                           | < 0.15  | 0.15    |      | ppbV         | 1  | 4/20/2018 7:30:00 PM |
| Vinyl Bromide                           | < 0.15  | 0.15    |      | ppbV         | 1  | 4/20/2018 7:30:00 PM |
| Vinyl chloride                          | < 0.040 | 0.040   |      | ppbV         | 1  | 4/20/2018 7:30:00 PM |
| Sum: Bromofluorobenzene                 | 93.0    | 70-130  |      | %REC         | 1  | 4/20/2018 7:30:00 PM |

Qualifiers: \*\* Quantitation Limit  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 JN Non-routine analyte. Quantitation estimated.  
 S Spike Recovery outside accepted recovery limits

. Results reported are not blank corrected  
 E Estimated Value above quantitation range  
 J Analyte detected below quantitation limit  
 ND Not Detected at the Limit of Detection

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## *Appendix B*

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### *Laboratory QC Documentation*

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Work Order: C1804026  
 Project: 690 Portland Ave

TestCode: 0.20\_NYS

|                           |                  |                    |             |                          |               |          |           |             |      |          |      |
|---------------------------|------------------|--------------------|-------------|--------------------------|---------------|----------|-----------|-------------|------|----------|------|
| Sample ID: ALCS1UG-042018 | SampType: LCS    | TestCode: 0.20_NYS | Units: ppbV | Prep Date:               | RunNo: 13548  |          |           |             |      |          |      |
| Client ID: ZZZZZ          | Batch ID: R13548 | TestNo: TO-15      |             | Analysis Date: 4/20/2018 | SeqNo: 156886 |          |           |             |      |          |      |
| Analyte                   | Result           | PQL                | SPK value   | SPK Ref Val              | %REC          | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Toluene                   | 1.040            | 0.15               | 1           | 0                        | 104           | 70       | 130       |             |      |          |      |
| trans-1,2-Dichloroethane  | 0.9300           | 0.15               | 1           | 0                        | 93.0          | 70       | 130       |             |      |          |      |
| trans-1,3-Dichloropropene | 1.130            | 0.15               | 1           | 0                        | 113           | 70       | 130       |             |      |          |      |
| Trichloroethane           | 0.9900           | 0.030              | 1           | 0                        | 99.0          | 70       | 130       |             |      |          |      |
| Vinyl acetate             | 0.8900           | 0.15               | 1           | 0                        | 89.0          | 70       | 130       |             |      |          |      |
| Vinyl Bromide             | 0.9500           | 0.15               | 1           | 0                        | 95.0          | 70       | 130       |             |      |          |      |
| Vinyl chloride            | 0.8400           | 0.040              | 1           | 0                        | 84.0          | 70       | 130       |             |      |          |      |

| Sample ID: ALC81UG-041818 | SampType: LCS    | TestCode: 0.20_NYS | Units: ppbV | Prep Date:               | RunNo: 13548  |          |           |             |      |          |      |
|---------------------------|------------------|--------------------|-------------|--------------------------|---------------|----------|-----------|-------------|------|----------|------|
| Client ID: ZZZZZ          | Batch ID: R13548 | TestNo: TO-15      |             | Analysis Date: 4/18/2018 | SeqNo: 156804 |          |           |             |      |          |      |
| Analyte                   | Result           | PQL                | SPK value   | SPK Ref Val              | %REC          | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| 1,1,1-Trichloroethane     | 1.020            | 0.15               | 1           | 0                        | 102           | 70       | 130       |             |      |          |      |
| 1,1,2,2-Tetrachloroethane | 1.100            | 0.15               | 1           | 0                        | 110           | 70       | 130       |             |      |          |      |
| 1,1,2-Trichloroethane     | 1.120            | 0.15               | 1           | 0                        | 112           | 70       | 130       |             |      |          |      |
| 1,1-Dichloroethane        | 0.9300           | 0.15               | 1           | 0                        | 93.0          | 70       | 130       |             |      |          |      |
| 1,1-Dichloroethane        | 0.8600           | 0.040              | 1           | 0                        | 86.0          | 70       | 130       |             |      |          |      |
| 1,2,4-Trichlorobenzene    | 1.390            | 0.15               | 1           | 0                        | 139           | 70       | 130       |             |      |          | S    |
| 1,2,4-Trimethylbenzene    | 1.140            | 0.15               | 1           | 0                        | 114           | 70       | 130       |             |      |          |      |
| 1,2-Dibromoethane         | 1.130            | 0.15               | 1           | 0                        | 113           | 70       | 130       |             |      |          |      |
| 1,2-Dichlorobenzene       | 1.220            | 0.15               | 1           | 0                        | 122           | 70       | 130       |             |      |          |      |
| 1,2-Dichloroethane        | 0.9400           | 0.15               | 1           | 0                        | 94.0          | 70       | 130       |             |      |          |      |
| 1,2-Dichloropropane       | 0.9900           | 0.15               | 1           | 0                        | 99.0          | 70       | 130       |             |      |          |      |
| 1,3,5-Trimethylbenzene    | 1.170            | 0.15               | 1           | 0                        | 117           | 70       | 130       |             |      |          |      |
| 1,3-butadiene             | 0.9400           | 0.15               | 1           | 0                        | 94.0          | 70       | 130       |             |      |          |      |
| 1,3-Dichlorobenzene       | 1.200            | 0.15               | 1           | 0                        | 120           | 70       | 130       |             |      |          |      |
| 1,4-Dichlorobenzene       | 1.230            | 0.15               | 1           | 0                        | 123           | 70       | 130       |             |      |          |      |
| 1,4-Dioxane               | 1.180            | 0.30               | 1           | 0                        | 118           | 70       | 130       |             |      |          |      |
| 2,2,4-trimethylpentane    | 0.9700           | 0.15               | 1           | 0                        | 97.0          | 70       | 130       |             |      |          |      |
| 4-ethyltoluene            | 1.140            | 0.15               | 1           | 0                        | 114           | 70       | 130       |             |      |          |      |

|             |                                                 |    |                                          |   |                                                    |
|-------------|-------------------------------------------------|----|------------------------------------------|---|----------------------------------------------------|
| Qualifiers: | Results reported are not blank corrected        | E  | Estimated Value above quantitation range | H | Holding times for preparation or analysis exceeded |
| J           | Analyte detected below quantitation limit       | ND | Not Detected at the Limit of Detection   | R | RPD outside accepted recovery limits               |
| S           | Spike Recovery outside accepted recovery limits |    |                                          |   |                                                    |





Date: 16-May-18

# ANALYTICAL QC SUMMARY REPORT

CLIENT: Ravi Engineering & Land Surveying, P.C.  
Work Order: C1804026  
Project: 690 Portland Ave

TestCode: 0.20\_NYS

| Sample ID: ALC81UGD-042018 | SampType: LCSD   | TestCode: 0.20_NYS | Units: ppbV | Prep Date:               | RunNo: 13546  |          |           |             |      |          |      |
|----------------------------|------------------|--------------------|-------------|--------------------------|---------------|----------|-----------|-------------|------|----------|------|
| Client ID: ZZZZZ           | Batch ID: R13546 | TestNo: TO-16      |             | Analysis Date: 4/21/2018 | SeqNo: 156886 |          |           |             |      |          |      |
| Analyte                    | Result           | PQL                | SPK value   | SPK Ref Val              | %REC          | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| 1,1,1-Trichloroethane      | 1.150            | 0.15               | 1           | 0                        | 115           | 70       | 130       | 1.05        | 9.09 | 30       |      |
| 1,1,2,2-Tetrachloroethane  | 1.240            | 0.15               | 1           | 0                        | 124           | 70       | 130       | 1.11        | 11.1 | 30       |      |
| 1,1,2-Trichloroethane      | 1.220            | 0.15               | 1           | 0                        | 122           | 70       | 130       | 1.09        | 11.3 | 30       |      |
| 1,1-Dichloroethane         | 0.9400           | 0.15               | 1           | 0                        | 94.0          | 70       | 130       | 0.9         | 4.35 | 30       |      |
| 1,1-Dichloroethene         | 0.7700           | 0.040              | 1           | 0                        | 77.0          | 70       | 130       | 0.83        | 7.50 | 30       |      |
| 1,2,4-Trichlorobenzene     | 1.340            | 0.15               | 1           | 0                        | 134           | 70       | 130       | 1.28        | 6.15 | 30       | S    |
| 1,2,4-Trimethylbenzene     | 1.250            | 0.15               | 1           | 0                        | 125           | 70       | 130       | 1.14        | 9.21 | 30       |      |
| 1,2-Dibromoethane          | 1.200            | 0.15               | 1           | 0                        | 120           | 70       | 130       | 1.15        | 4.26 | 30       |      |
| 1,2-Dichlorobenzene        | 1.350            | 0.15               | 1           | 0                        | 135           | 70       | 130       | 1.23        | 9.30 | 30       | S    |
| 1,2-Dichloroethane         | 0.9900           | 0.15               | 1           | 0                        | 99.0          | 70       | 130       | 0.92        | 7.33 | 30       |      |
| 1,2-Dichloropropane        | 1.070            | 0.15               | 1           | 0                        | 107           | 70       | 130       | 0.98        | 8.78 | 30       |      |
| 1,3,5-Trimethylbenzene     | 1.290            | 0.15               | 1           | 0                        | 129           | 70       | 130       | 1.18        | 8.91 | 30       |      |
| 1,3-butadiene              | 1.010            | 0.15               | 1           | 0                        | 101           | 70       | 130       | 0.97        | 4.04 | 30       |      |
| 1,3-Dichlorobenzene        | 1.350            | 0.15               | 1           | 0                        | 135           | 70       | 130       | 1.22        | 10.1 | 30       | S    |
| 1,4-Dichlorobenzene        | 1.300            | 0.15               | 1           | 0                        | 130           | 70       | 130       | 1.22        | 6.35 | 30       |      |
| 1,4-Dioxane                | 1.290            | 0.30               | 1           | 0                        | 129           | 70       | 130       | 1.02        | 23.4 | 30       |      |
| 2,2,4-trimethylpentane     | 1.020            | 0.15               | 1           | 0                        | 102           | 70       | 130       | 0.95        | 7.11 | 30       |      |
| 4-ethyltoluene             | 1.280            | 0.15               | 1           | 0                        | 128           | 70       | 130       | 1.15        | 10.7 | 30       |      |
| Acetone                    | 0.9100           | 0.30               | 1           | 0                        | 91.0          | 70       | 130       | 0.98        | 7.41 | 30       |      |
| Allyl chloride             | 0.8100           | 0.15               | 1           | 0                        | 81.0          | 70       | 130       | 0.87        | 7.14 | 30       |      |
| Benzene                    | 1.080            | 0.15               | 1           | 0                        | 108           | 70       | 130       | 1.02        | 5.71 | 30       |      |
| Benzyl chloride            | 1.280            | 0.15               | 1           | 0                        | 128           | 70       | 130       | 1.17        | 8.98 | 30       |      |
| Bromodichloromethane       | 1.190            | 0.15               | 1           | 0                        | 119           | 70       | 130       | 1.1         | 7.86 | 30       |      |
| Bromoform                  | 1.300            | 0.15               | 1           | 0                        | 130           | 70       | 130       | 1.17        | 10.5 | 30       |      |
| Bromomethane               | 0.9800           | 0.15               | 1           | 0                        | 98.0          | 70       | 130       | 0.91        | 7.41 | 30       |      |

Qualifiers: . Results reported are not blank corrected E Estimated Value above quantitation range H Holding times for preparation or analysis exceeded  
J Analyte detected below quantitation limit ND Not Detected at the Limit of Detection R RPD outside accepted recovery limits  
S Spike Recovery outside accepted recovery limits

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Work Order: C1804026  
 Project: 690 Portland Ave

TestCode: 0.20\_NYS

|                            |                  |                    |             |                          |               |          |           |             |      |          |      |
|----------------------------|------------------|--------------------|-------------|--------------------------|---------------|----------|-----------|-------------|------|----------|------|
| Sample ID: ALC51UGD-042018 | SampType: LCSD   | TestCode: 0.20_NYS | Units: ppbV | Prep Date:               | RunNo: 12546  |          |           |             |      |          |      |
| Client ID: ZZZZZ           | Batch ID: R13546 | TestNo: TO-15      |             | Analysis Date: 4/21/2018 | SeqNo: 166698 |          |           |             |      |          |      |
| Analyte                    | Result           | PQL                | SPK value   | SPK Ref Val              | %REC          | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Carbon disulfide           | 0.9400           | 0.15               | 1           | 0                        | 94.0          | 70       | 130       | 0.95        | 1.05 | 30       |      |
| Carbon tetrachloride       | 1.110            | 0.030              | 1           | 0                        | 111           | 70       | 130       | 1           | 10.4 | 30       |      |
| Chlorobenzene              | 1.200            | 0.15               | 1           | 0                        | 120           | 70       | 130       | 1.11        | 7.79 | 30       |      |
| Chloroethane               | 0.9900           | 0.15               | 1           | 0                        | 99.0          | 70       | 130       | 0.92        | 7.33 | 30       |      |
| Chloroform                 | 1.020            | 0.15               | 1           | 0                        | 102           | 70       | 130       | 0.95        | 6.05 | 30       |      |
| Chloromethane              | 1.050            | 0.15               | 1           | 0                        | 105           | 70       | 130       | 0.95        | 8.95 | 30       |      |
| cis-1,2-Dichloroethene     | 0.8300           | 0.040              | 1           | 0                        | 83.0          | 70       | 130       | 0.81        | 2.44 | 30       |      |
| cis-1,3-Dichloropropene    | 1.150            | 0.15               | 1           | 0                        | 115           | 70       | 130       | 1.05        | 8.14 | 30       |      |
| Cyclohexane                | 1.020            | 0.15               | 1           | 0                        | 102           | 70       | 130       | 0.95        | 6.05 | 30       |      |
| Dibromochloromethane       | 1.270            | 0.15               | 1           | 0                        | 127           | 70       | 130       | 1.15        | 9.05 | 30       |      |
| Ethyl acetate              | 0.8900           | 0.15               | 1           | 0                        | 89.0          | 70       | 130       | 0.92        | 3.31 | 30       |      |
| Ethylbenzene               | 1.130            | 0.15               | 1           | 0                        | 113           | 70       | 130       | 1.05        | 6.39 | 30       |      |
| Freon 11                   | 1.050            | 0.15               | 1           | 0                        | 105           | 70       | 130       | 0.92        | 13.2 | 30       |      |
| Freon 113                  | 0.9700           | 0.15               | 1           | 0                        | 97.0          | 70       | 130       | 0.98        | 1.03 | 30       |      |
| Freon 114                  | 1.040            | 0.15               | 1           | 0                        | 104           | 70       | 130       | 0.94        | 10.1 | 30       |      |
| Freon 12                   | 1.050            | 0.15               | 1           | 0                        | 105           | 70       | 130       | 0.98        | 7.84 | 30       |      |
| Heptane                    | 0.9700           | 0.15               | 1           | 0                        | 97.0          | 70       | 130       | 0.92        | 5.29 | 30       |      |
| Hexachloro-1,3-butadiene   | 1.410            | 0.15               | 1           | 0                        | 141           | 70       | 130       | 1.25        | 12.0 | 30       | S    |
| Hexane                     | 0.8400           | 0.15               | 1           | 0                        | 84.0          | 70       | 130       | 0.88        | 4.65 | 30       |      |
| Isopropyl alcohol          | 0.9500           | 0.15               | 1           | 0                        | 95.0          | 70       | 130       | 0.94        | 2.11 | 30       |      |
| m&p-Xylene                 | 2.430            | 0.30               | 2           | 0                        | 122           | 70       | 130       | 2.21        | 9.48 | 30       |      |
| Methyl Butyl Ketone        | 1.020            | 0.30               | 1           | 0                        | 102           | 70       | 130       | 0.91        | 11.4 | 30       |      |
| Methyl Ethyl Ketone        | 0.9500           | 0.30               | 1           | 0                        | 95.0          | 70       | 130       | 0.93        | 3.17 | 30       |      |
| Methyl Isobutyl Ketone     | 1.060            | 0.30               | 1           | 0                        | 106           | 70       | 130       | 0.85        | 22.0 | 30       |      |
| Methyl tert-butyl ether    | 0.9200           | 0.15               | 1           | 0                        | 92.0          | 70       | 130       | 0.89        | 3.31 | 30       |      |
| Methylene chloride         | 1.000            | 0.15               | 1           | 0                        | 100           | 70       | 130       | 0.97        | 3.05 | 30       |      |
| o-Xylene                   | 1.270            | 0.15               | 1           | 0                        | 127           | 70       | 130       | 1.12        | 12.6 | 30       |      |
| Propylene                  | 0.9300           | 0.15               | 1           | 0                        | 93.0          | 70       | 130       | 0.9         | 3.28 | 30       |      |
| Styrene                    | 1.250            | 0.15               | 1           | 0                        | 125           | 70       | 130       | 1.15        | 7.47 | 30       |      |
| Tetrachloroethylene        | 1.240            | 0.15               | 1           | 0                        | 124           | 70       | 130       | 1.15        | 7.53 | 30       |      |
| Tetrahydrofuran            | 0.8700           | 0.15               | 1           | 0                        | 87.0          | 70       | 130       | 0.84        | 3.51 | 30       |      |

Qualifiers: , Results reported are not blank corrected  
 I Analyte detected below quantitation limit  
 S Spike Recovery outside accepted recovery limits

E Estimated Value above quantitation range  
 ND Not Detected at the Limit of Detection

H Holding times for preparation or analysis exceeded  
 R RPD outside accepted recovery limits

## *Appendix C*

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### *Validator Qualifications*

**KENNETH R. APPLIN**  
**Geochemist/Data Validator**

Ph.D., Geochemistry and Mineralogy, The Pennsylvania State University

M.S., Geochemistry and Mineralogy, The Pennsylvania State University

B.A., Geological Sciences, SUNY at Geneseo, NY

Dr. Applin has over 35 years of experience working with the geochemistry of natural waters. His prior experience includes working as an Assistant Professor of Geology at the University of Missouri-Columbia and as Chief Hydrogeologist and Geochemist with a leading engineering firm in Rochester, NY. In 1993, he established KR Applin and Associates, a small consulting business that focuses on the geochemistry of natural waters, especially as applied to problems involving the contamination of groundwater and surface water.

Dr. Applin is also an experienced analytical data validator and has provided data validation services since 1994 to a variety of clients performing brownfield cleanup projects, hazardous waste remediation, groundwater monitoring at solid waste facilities, and other projects requiring third-party data validation. Dr. Applin has several years of hands-on experience with the laboratory analysis of natural waters and has successfully completed the USEPA Region II certification courses for performing inorganic and organic analytical data validation.

**MICHAEL K. PERRY**  
**Chemist/Data Validator**

B.S. Chemistry, Georgia State University, Atlanta, GA

A.A.S., Chemical Technology, Alfred State College, Alfred, NY

Mr. Perry has over 30 years of experience in the analytical laboratory business. During his early career, he spent several years as a laboratory analyst performing the analysis of soil, water, and air samples for inorganic and organic chemical parameters. During his last 20 years in the environmental laboratory business, he managed and directed two major analytical laboratories in Rochester, NY. His management responsibilities included oversight of the daily operations of the lab, staff training and supervision, the selection, purchase, and maintenance of analytical instruments, the introduction of new laboratory methods, analytical quality assurance and quality control, data acquisition and management, and other business-related activities.

Mr. Perry has an extensive working knowledge of the methods and procedures used for sampling and analyzing both inorganic and organic analytes in soil, water, and air. He is an accomplished laboratory chemist and is familiar with the analytical methods and procedures established under the USEPA Contract Laboratory Protocols (CLP), the NYSDEC Analytical Services Protocols (ASP), and the NYSDOH Environmental Laboratory Approval Program (ELAP).

# **DATA USABILITY SUMMARY REPORT (DUSR)**

**690 Portland Ave.  
Rochester, NY  
NYSDEC BCP # C 828151**

**SDG: C1904041**  
4 Air Samples

Prepared for:

**Ravi Engineering & Land Surveying, P.C.  
2110 South Clinton Ave  
Rochester, NY 14618**

**May 2019**



Environmental Data Usability 10028 Deer Park Dr. Dansville, NY 14437 585.991.9156

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| <b>APPENDIX A</b> | Validated Analytical Results |
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### ***Tables***

|           |                                                                    |
|-----------|--------------------------------------------------------------------|
| Table 4-1 | Data Validation Guidance Documents                                 |
| Table 4-2 | Quality Control Criteria for Validating Laboratory Analytical Data |

### **Summaries of Validated Results**

|           |       |
|-----------|-------|
| Table 6-1 | TO-15 |
|-----------|-------|

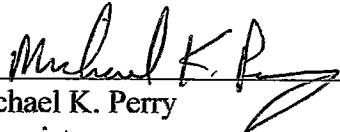
**REVIEWER'S NARRATIVE**  
**SDG C1904041**

The data associated with this Sample Delivery Group (SDG) C1904041, analyzed by Centek Laboratories, LLC Syracuse, NY have been reviewed in accordance with assessment criteria provided by the New York State Department of Environmental Conservation following the review procedures provided in the USEPA Functional Guidelines for evaluating organic and inorganic data.

All analytical results reported by the laboratory are considered valid and acceptable except results that have been qualified as rejected, "R". Results qualified as estimated "J", or as non-detects, "U", are considered usable for the purpose of evaluating water and/or soil quality. However, these qualifiers indicate that the accuracy and/or precision of the analytical result is questionable. A summary of all data that have been qualified and the reasons for qualification are provided in the following data usability summary report (DUSR).

Two facts should be noted by all data users. First, the "R" qualifier means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the analyte is present or not. Values qualified with an "R" should not appear on the final data tables because they cannot be relied upon, even as the last resort. Second, no analyte concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error.

Reviewer's Signature: \_\_\_\_\_

  
Michael K. Perry  
Chemist

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

5/7/19



## 1.0 SUMMARY

**SITE:** 690 Portland Avenue  
Rochester, NY

**SAMPLING DATE:** April 10, 2019

**SAMPLE TYPE:** 4 air samples

**LABORATORY:** Centek Laboratories, LLC  
Syracuse, NY

**SDG No.:** C1904041

## 2.0 INTRODUCTION

This data usability summary report (DUSR) was prepared in accordance with guidance provided by the New York State Department of Environmental Conservation (NYSDEC). The DUSR is based on a review and evaluation of the laboratory analytical data package. Specifically, the NYSDEC guidance recommends review and evaluation of the following elements of the data package:

- Completeness of the data package as defined under the requirements of the NYSDEC Analytical Services Protocols (ASP) Category B or the United States Environmental Protection Agency (USEPA) Contract Laboratory Program (CLP) deliverables,
- Compliance with established analyte holding times,
- Adherence to quality control (QC) limits and specifications for blanks, instrument tuning and calibration, surrogate recoveries, spike recoveries, laboratory duplicate analyses, and other QC criteria,
- Adherence to established analytical protocols,
- Conformance of data summary sheets with raw analytical data, and
- Use of correct data qualifiers.

Data deficiencies, analytical protocol deviations, and quality control problems identified using the review criteria above and their effect on the analytical results are discussed in this report.

### **3.0 SAMPLE AND ANALYSIS SUMMARY**

The data package consists of analytical results for 4 air samples collected on April 10, 2019. These samples were analyzed for TO-15 volatile organic compounds.

All laboratory analyses were performed by Centek Laboratories, LLC, Syracuse, NY and analyzed as SDG C1904041. The analytical results were provided in NYSDEC ASP Category B format, which includes all raw analytical data and laboratory QC data.

### **4.0 GUIDANCE DOCUMENTS AND DATA REVIEW CRITERIA**

The guidance documents used for reviewing laboratory quality control (QC) data and assigning data qualifiers (flags) to analytical results are listed in Table 4-1. The QC limits established in the documents applicable to this data review were used to assess the quality of the analytical results. In some cases, however, QC limits established internally by the laboratory were taken into account to determine data quality.

The QC criteria considered for assessing the usability of the reported analytical results provided for each analyte type (i.e. VOCs, SVOCs, metals, etc.) are listed in Table 4-2. These criteria may vary with the analytical method utilized by the laboratory. These criteria comply with the guidance recommended in Section 2.0 above.

### **5.0 DATA VALIDATION QUALIFIERS**

The letter qualifiers (flags) used to define data usability are described briefly below. These letters are assigned by the data validator to analytical results having questionable accuracy and/or precision as determined by reviewing the laboratory QC data associated with the analytical results.

**TABLE 4-1****DATA VALIDATION GUIDANCE DOCUMENTS**

| <b>Analyte Type</b>                     | <b>Validation Guidance</b>                                                                                                                                                                                                                                                             |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| VOCs                                    | USEPA, 2008, Validating Volatile Organic Compounds By Gas Chromatography/Mass Spectrometry; SW-846 Method 8260B; SOP # HW-24, Rev. 2.<br><br>USEPA, 2008, Statement of Work for Organic Analysis of Low/Medium Concentration of Volatile Organic Compounds SOM01.2; SOP HW-33, Rev. 2. |
| SVOCs                                   | USEPA, 2007, Statement of Work for Organic Analysis of Low/Medium Concentration of Semivolatile Organic Compounds SOM01.2; SOP HW-35, Rev. 1.                                                                                                                                          |
| Pesticides/PCBs                         | USEPA, 2006, CLP Organics Data Review and Preliminary Review (CLP/SOW OLMO 4.3); SOP # HW-6, Rev. 14, Part C.                                                                                                                                                                          |
| Metals                                  | USEPA, 2006, Validation of Metals for the Contract Laboratory Program (CLP) based on SOW ILMO 5.3 (SOP Revision 13), SOP # HW-2, Rev. 13.                                                                                                                                              |
| Gen Chemistry                           | NYSDEC, 2005, Analytical Services Protocols (ASP)                                                                                                                                                                                                                                      |
| VOCs<br>(Ambient air)                   | USEPA, 2006, Validating Air Samples, Volatile Organic Analysis of Ambient Air in Canister by Method TO-15; SOP # HW-31, Rev. 4.                                                                                                                                                        |
| Perfluoroalkyl<br>Substances<br>(PFASs) | USEPA, 2018, Data Review and Validation Guidelines for Perfluoroalkyl Substances (PFASs) Analyzed Using EPA Method 537                                                                                                                                                                 |

**TABLE 4-2**

**QUALITY CONTROL CRITERIA USED FOR VALIDATING  
LABORATORY ANALYTICAL DATA**

| <b>VOCs</b>                                                                                                                                                                                                                                                                    | <b>SVOCs</b>                                                                                                                                                                                                                                                         | <b>Pesticides/PCBs</b>                                                                                                                                                                                       | <b>Metals</b>                                                                                                                                                                                                                                                                       | <b>Gen Chemistry</b>                                                                                                                              | <b>Method TO-15</b>                                                                                                                                                                                                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Completeness of Pkg<br>Sample Preservation<br>Holding Time<br>System Monitoring<br>Compounds<br>Lab Control Sample<br>Matrix Spikes<br>Blanks<br>Instrument Tuning<br>Internal Standards<br>Initial Calibration<br>Continuing Calibration<br>Lab Qualifiers<br>Field Duplicate | Completeness of Pkg<br>Sample Preservation<br>Holding Time<br>Surrogate Recoveries<br>Lab Control Sample<br>Matrix Spikes<br>Blanks<br>Instrument Tuning<br>Internal Standards<br>Initial Calibration<br>Continuing Calibration<br>Lab Qualifiers<br>Field Duplicate | Completeness of Pkg<br>Sample Preservation<br>Holding Time<br>Surrogate Recoveries<br>Matrix Spikes<br>Blanks<br>Instrument Calibration<br>& Verification<br>Analyte ID<br>Lab Qualifiers<br>Field Duplicate | Completeness of Pkg<br>Sample Preservation<br>Holding Time<br>Initial/Continuing<br>Calibration<br>CRDL Standards<br>Blanks<br>Interference Check<br>Sample<br>Spike Recoveries<br>Lab Duplicate<br>Lab Control Sample<br>ICP Serial Dilutions<br>Lab Qualifiers<br>Field Duplicate | Completeness of Pkg<br>Sample Preservation<br>Holding Times<br>Calibration<br>Lab Control Samples<br>Blanks<br>Spike Recoveries<br>Lab Duplicates | Completeness of Pkg<br>Sample Preservation<br>Holding Time<br>Canister Certification<br>Lab Control Sample<br>Instrument Tuning<br>Blanks<br>Initial Calibration &<br>System Performance<br>Daily Calibration<br>Field Duplicate |

| <b>PFASs</b>                                                                                                                                                                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Completeness of Pkg<br>Sample Preservation<br>Holding Time<br>Instr Performance Check<br>Initial Calibration<br>Continuing Calibration<br>Blanks<br>Surrogates<br>Lab Fortified Blank<br>Matrix Spikes<br>Internal Standards |

The laboratory may also use various letters and symbols to flag analytical results generated when QC limits were exceeded. The meanings of these flags may differ from those used by the independent data validator. Those used by the laboratory are provided with the analytical results.

**NOTE:** The assignment of data qualifiers by the data reviewer (validator) to laboratory analytical results should not necessarily be interpreted by the data user as a measure of laboratory ability or proficiency. Rather, the qualifiers are intended to provide a measure of data accuracy and precision to the data user, which, for example, may provide a level of confidence in determining whether or not standards or cleanup objectives have been met.

- U** The analyte was analyzed for but was not detected at or above the sample quantitation limit.
- J** The analyte was positively identified; the associated numerical value is the *approximate* concentration of the analyte in the sample. (The magnitude of any  $\pm$  value associated with the result is not determined by data validation).
- UJ** The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is *approximate* and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R** The sample result is rejected (i.e., is unusable) due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
- N** The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification".
- JN** The analyte is considered to be "presumptively present." The associated numerical value represents its *approximate* concentration.

The validated analytical results are attached to this report. Validation qualifiers (flags) are indicated using red ink. Data sheets having qualified data are signed and dated by the data reviewer.

## **6.0 RESULTS OF THE DATA REVIEW**

The results of the data review are summarized in Table 6-1. The table lists the samples where QC criteria were found to exceed acceptable limits and the actions taken to qualify the associated analytical results.

## **7.0 TOTAL USABLE DATA**

For SDG C1904041, four samples were analyzed and results were reported for 256 analyses. Even though some results were flagged with a “J” as estimated, all results (100%) are considered usable. See the summary table for the flagged analytes and the associated QC reasons.

C1904041

**Table 6-1**      **TO-15**

| <b>SAMPLES<br/>AFFECTED</b> | <b>ANALYTES</b>                            | <b>ACTION</b>               | <b>QC VIOLATION</b>                                          | <b>COMMENTS</b>                                                   |
|-----------------------------|--------------------------------------------|-----------------------------|--------------------------------------------------------------|-------------------------------------------------------------------|
| All samples                 | 1,4-Dioxane<br>Methyl Butyl Ketone<br>MIBK | J detects<br>UJ non-detects | LCSD < QC limit                                              | Data is estimated                                                 |
| All samples                 | Isopropyl Alcohol                          | JN detects                  | Relative Intensity of<br>characteristic ions not +/-<br>30 % | Compounds are tentatively identified and<br>results are estimated |

## ACRONYMS

|        |                                      |
|--------|--------------------------------------|
| BSP    | Blank Spike                          |
| CCAL   | Continuing Calibration               |
| CCB    | Continuing Calibration Blank         |
| CCV    | Continuing Calibration Verification  |
| CRDL   | Contract Required Detection Limit    |
| CRQL   | Contract Required Quantitation Limit |
| %D     | Percent Difference                   |
| ICAL   | Initial Calibration                  |
| ICB    | Initial Calibration Blank            |
| IS     | Internal Standard                    |
| LCS    | Laboratory Control Sample            |
| MS/MSD | Matrix Spike/Matrix Spike Duplicate  |
| QA     | Quality Assurance                    |
| QC     | Quality Control                      |
| %R     | Percent recovery                     |
| RPD    | Relative Percent Difference          |
| RRF    | Relative Response Factor             |
| %RSD   | Percent Relative Standard Deviation  |
| TAL    | Target Analyte List (metals)         |
| TCL    | Target Compound List (organics)      |



## *Appendix A*

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### *Validated Analytical Results*



## 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**

Lynn Zicari  
Ravi Engineering & Land Surveying, P.C.  
2110 South Clinton Avenue, Suite 1  
Rochester, NY 14618

Friday, April 19, 2019  
Order No.: C1904041

TEL: (585) 223-3660

FAX

RE: 690 Portland Ave

Dear Lynn Zicari:

Centek Laboratories, LLC received 4 sample(s) on 4/12/2019 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.

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.

Centek Laboratories is distinctively qualified to meet your needs for precise and timely volatile organic compound analysis. We perform all analyses according to EPA, NIOSH or OSHA-approved analytical methods. Centek Laboratories is dedicated to providing quality analyses and exceptional customer service. Samples were analyzed using the methods outlined in the following references:

Compendium of Methods for the Determination of Toxic Organic Compounds, Compendium Method TO-15, January 1999.

Centek Laboratories SOP TS-80

Analytical results relate to samples as received at laboratory. 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.



## CENTEK LABORATORIES, LLC

Date: 25-Apr-19

CLIENT: Ravi Engineering & Land Surveying, P.C.  
Project: 690 Portland Ave  
Lab Order: C1904041

### 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 ( $\pm 2$ ", 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 ( $\pm 1$ ", vacuum, absolute) for the sample to be valid. Once received at the laboratory, the canister vacuum should be confirmed to be 5" of Hg,  $\pm 1$ ". 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.

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



**CENTEK LABORATORIES, LLC**

Date: 25-Apr-19

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Project:** 690 Portland Ave  
**Lab Order:** C1904041

**Work Order Sample Summary**

| Lab Sample ID | Client Sample ID | Tag Number | Collection Date | Date Received |
|---------------|------------------|------------|-----------------|---------------|
| C1904041-001A | 702-20190410     | 595,434    | 4/10/2019       | 4/12/2019     |
| C1904041-002A | 708-20190410     | 589,450    | 4/10/2019       | 4/12/2019     |
| C1904041-003A | 714-20190410     | 603,396    | 4/10/2019       | 4/12/2019     |
| C1904041-004A | 0A-20190410      | 641,388    | 4/10/2019       | 4/12/2019     |

# Centek Laboratories, LLC

Date: 22-Apr-19

CLIENT: Ravi Engineering & Land Surveying, P.C.  
Lab Order: C1904041  
Project: 690 Portland Ave  
Lab ID: C1904041-001A

Client Sample ID: 702-20190410  
Tag Number: 595,434  
Collection Date: 4/10/2019  
Matrix: AIR

| Analyses                                       | Result  | **Limit | Qual  | Units | DF | Date Analyzed         |
|------------------------------------------------|---------|---------|-------|-------|----|-----------------------|
| <b>FIELD PARAMETERS</b>                        |         |         |       |       |    |                       |
| Lab Vacuum In                                  | -2      |         | FLD   | "Hg   |    | Analyst: 4/12/2019    |
| Lab Vacuum Out                                 | -30     |         |       | "Hg   |    | 4/12/2019             |
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |         |         |       |       |    |                       |
|                                                |         |         | TO-15 |       |    | Analyst: RJP          |
| 1,1,1-Trichloroethane                          | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 6:00:00 AM  |
| 1,1,2,2-Tetrachloroethane                      | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 6:00:00 AM  |
| 1,1,2-Trichloroethane                          | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 6:00:00 AM  |
| 1,1-Dichloroethane                             | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 6:00:00 AM  |
| 1,1-Dichloroethene                             | < 0.040 | 0.040   |       | ppbV  | 1  | 4/17/2019 6:00:00 AM  |
| 1,2,4-Trichlorobenzene                         | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 6:00:00 AM  |
| 1,2,4-Trimethylbenzene                         | 0.13    | 0.15    | J     | ppbV  | 1  | 4/17/2019 6:00:00 AM  |
| 1,2-Dibromoethane                              | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 6:00:00 AM  |
| 1,2-Dichlorobenzene                            | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 6:00:00 AM  |
| 1,2-Dichloroethane                             | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 6:00:00 AM  |
| 1,2-Dichloropropane                            | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 6:00:00 AM  |
| 1,3,5-Trimethylbenzene                         | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 6:00:00 AM  |
| 1,3-butadiene                                  | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 6:00:00 AM  |
| 1,3-Dichlorobenzene                            | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 6:00:00 AM  |
| 1,4-Dichlorobenzene                            | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 6:00:00 AM  |
| 1,4-Dioxane                                    | < 0.30  | 0.30    | UJ    | ppbV  | 1  | 4/17/2019 6:00:00 AM  |
| 2,2,4-trimethylpentane                         | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 6:00:00 AM  |
| 4-ethyltoluene                                 | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 6:00:00 AM  |
| Acetone                                        | 11      | 1.5     |       | ppbV  | 5  | 4/18/2019 12:16:00 AM |
| Allyl chloride                                 | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 6:00:00 AM  |
| Benzene                                        | 0.33    | 0.15    |       | ppbV  | 1  | 4/17/2019 6:00:00 AM  |
| Benzyl chloride                                | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 6:00:00 AM  |
| Bromodichloromethane                           | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 6:00:00 AM  |
| Bromoform                                      | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 6:00:00 AM  |
| Bromomethane                                   | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 6:00:00 AM  |
| Carbon disulfide                               | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 6:00:00 AM  |
| Carbon tetrachloride                           | 0.080   | 0.030   |       | ppbV  | 1  | 4/17/2019 6:00:00 AM  |
| Chlorobenzene                                  | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 6:00:00 AM  |
| Chloroethane                                   | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 6:00:00 AM  |
| Chloroform                                     | 0.31    | 0.15    |       | ppbV  | 1  | 4/17/2019 6:00:00 AM  |
| Chloromethane                                  | 0.47    | 0.15    |       | ppbV  | 1  | 4/17/2019 6:00:00 AM  |
| cis-1,2-Dichloroethene                         | < 0.040 | 0.040   |       | ppbV  | 1  | 4/17/2019 6:00:00 AM  |
| cis-1,3-Dichloropropene                        | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 6:00:00 AM  |
| Cyclohexane                                    | 0.52    | 0.15    |       | ppbV  | 1  | 4/17/2019 6:00:00 AM  |
| Dibromochloromethane                           | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 6:00:00 AM  |
| Ethyl acetate                                  | 0.43    | 0.15    |       | ppbV  | 1  | 4/17/2019 6:00:00 AM  |

Qualifiers: \*\* Quantitation Limit  
B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
JN Non-routine analyte. Quantitation estimated.  
S Spike Recovery outside accepted recovery limits

Results reported are not blank corrected  
E Estimated Value above quantitation range  
J Analyte detected below quantitation limit  
ND Not Detected at the Limit of Detection

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mkp 5/6/19

# Centek Laboratories, LLC

Date: 22-Apr-19

CLIENT: Ravi Engineering & Land Surveying, P.C.  
Lab Order: C1904041  
Project: 690 Portland Ave  
Lab ID: C1904041-001A

Client Sample ID: 702-20190410  
Tag Number: 595,434  
Collection Date: 4/10/2019  
Matrix: AIR

| Analyses                                | Result  | **Limit | Qual | Units        | DF | Date Analyzed         |
|-----------------------------------------|---------|---------|------|--------------|----|-----------------------|
| 1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE |         | TO-15   |      | Analyst: RJP |    |                       |
| Ethylbenzene                            | 0.15    | 0.15    |      | ppbV         | 1  | 4/17/2019 6:00:00 AM  |
| Freon 11                                | 0.23    | 0.15    |      | ppbV         | 1  | 4/17/2019 6:00:00 AM  |
| Freon 113                               | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 6:00:00 AM  |
| Freon 114                               | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 6:00:00 AM  |
| Freon 12                                | 0.49    | 0.15    |      | ppbV         | 1  | 4/17/2019 6:00:00 AM  |
| Heptane                                 | 0.21    | 0.15    |      | ppbV         | 1  | 4/17/2019 6:00:00 AM  |
| Hexachloro-1,3-butadiene                | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 6:00:00 AM  |
| Hexane                                  | 0.36    | 0.15    |      | ppbV         | 1  | 4/17/2019 6:00:00 AM  |
| Isopropyl alcohol                       | 11      | 0.75    |      | ppbV         | 5  | 4/18/2019 12:16:00 AM |
| m&p-Xylene                              | 0.53    | 0.30    |      | ppbV         | 1  | 4/17/2019 6:00:00 AM  |
| Methyl Butyl Ketone                     | < 0.30  | 0.30    |      | ppbV         | 1  | 4/17/2019 6:00:00 AM  |
| Methyl Ethyl Ketone                     | 0.38    | 0.30    |      | ppbV         | 1  | 4/17/2019 6:00:00 AM  |
| Methyl Isobutyl Ketone                  | < 0.30  | 0.30    |      | ppbV         | 1  | 4/17/2019 6:00:00 AM  |
| Methyl tert-butyl ether                 | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 6:00:00 AM  |
| Methylene chloride                      | 0.55    | 0.15    |      | ppbV         | 1  | 4/17/2019 6:00:00 AM  |
| o-Xylene                                | 0.20    | 0.15    |      | ppbV         | 1  | 4/17/2019 6:00:00 AM  |
| Propylene                               | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 6:00:00 AM  |
| Styrene                                 | 0.84    | 0.15    |      | ppbV         | 1  | 4/17/2019 6:00:00 AM  |
| Tetrachloroethylene                     | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 6:00:00 AM  |
| Tetrahydrofuran                         | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 6:00:00 AM  |
| Toluene                                 | 1.6     | 0.15    |      | ppbV         | 1  | 4/17/2019 6:00:00 AM  |
| trans-1,2-Dichloroethene                | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 6:00:00 AM  |
| trans-1,3-Dichloropropene               | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 6:00:00 AM  |
| Trichloroethene                         | < 0.030 | 0.030   |      | ppbV         | 1  | 4/17/2019 6:00:00 AM  |
| Vinyl acetate                           | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 6:00:00 AM  |
| Vinyl Bromide                           | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 6:00:00 AM  |
| Vinyl chloride                          | < 0.040 | 0.040   |      | ppbV         | 1  | 4/17/2019 6:00:00 AM  |
| Surr: Bromofluorobenzene                | 95.0    | 70-130  |      | %REC         | 1  | 4/17/2019 6:00:00 AM  |

Qualifiers: \*\* Quantitation Limit  
B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
IN Non-routine analyte, Quantitation estimated.  
S Spike Recovery outside accepted recovery limits

. Results reported are not blank corrected  
E Estimated Value above quantitation range  
J Analyte detected below quantitation limit  
ND Not Detected at the Limit of Detection

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mep5/6/19

# Centek Laboratories, LLC

Date: 22-Apr-19

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1904041  
**Project:** 690 Portland Ave  
**Lab ID:** C1904041-002A

**Client Sample ID:** 708-20190410  
**Tag Number:** 589,450  
**Collection Date:** 4/10/2019  
**Matrix:** AIR

| Analyses                                       | Result  | **Limit | Qual       | Units | DF | Date Analyzed         |
|------------------------------------------------|---------|---------|------------|-------|----|-----------------------|
| <b>FIELD PARAMETERS</b>                        |         |         |            |       |    |                       |
| Lab Vacuum In                                  | -3      |         |            | "Hg   |    | Analyst: 4/12/2019    |
| Lab Vacuum Out                                 | -30     |         |            | "Hg   |    | 4/12/2019             |
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |         |         |            |       |    |                       |
|                                                |         |         | <b>FLD</b> |       |    | <b>Analyst: RJP</b>   |
| 1,1,1-Trichloroethane                          | < 0.15  | 0.15    |            | ppbV  | 1  | 4/17/2019 6:40:00 AM  |
| 1,1,2,2-Tetrachloroethane                      | < 0.15  | 0.15    |            | ppbV  | 1  | 4/17/2019 6:40:00 AM  |
| 1,1,2-Trichloroethane                          | < 0.15  | 0.15    |            | ppbV  | 1  | 4/17/2019 6:40:00 AM  |
| 1,1-Dichloroethane                             | < 0.15  | 0.15    |            | ppbV  | 1  | 4/17/2019 6:40:00 AM  |
| 1,1-Dichloroethane                             | < 0.040 | 0.040   |            | ppbV  | 1  | 4/17/2019 6:40:00 AM  |
| 1,2,4-Trichlorobenzene                         | < 0.15  | 0.15    |            | ppbV  | 1  | 4/17/2019 6:40:00 AM  |
| 1,2,4-Trimethylbenzene                         | < 0.15  | 0.15    |            | ppbV  | 1  | 4/17/2019 6:40:00 AM  |
| 1,2-Dibromoethane                              | < 0.15  | 0.15    |            | ppbV  | 1  | 4/17/2019 6:40:00 AM  |
| 1,2-Dichlorobenzene                            | < 0.15  | 0.15    |            | ppbV  | 1  | 4/17/2019 6:40:00 AM  |
| 1,2-Dichloroethane                             | < 0.15  | 0.15    |            | ppbV  | 1  | 4/17/2019 6:40:00 AM  |
| 1,2-Dichloropropane                            | < 0.15  | 0.15    |            | ppbV  | 1  | 4/17/2019 6:40:00 AM  |
| 1,3,5-Trimethylbenzene                         | < 0.15  | 0.15    |            | ppbV  | 1  | 4/17/2019 6:40:00 AM  |
| 1,3-butadiene                                  | < 0.15  | 0.15    |            | ppbV  | 1  | 4/17/2019 6:40:00 AM  |
| 1,3-Dichlorobenzene                            | < 0.15  | 0.15    |            | ppbV  | 1  | 4/17/2019 6:40:00 AM  |
| 1,4-Dichlorobenzene                            | < 0.15  | 0.15    |            | ppbV  | 1  | 4/17/2019 6:40:00 AM  |
| 1,4-Dioxane                                    | < 0.30  | 0.30    |            | ppbV  | 1  | 4/17/2019 6:40:00 AM  |
| 2,2,4-trimethylpentane                         | < 0.15  | 0.15    |            | ppbV  | 1  | 4/17/2019 6:40:00 AM  |
| 4-ethyltoluene                                 | < 0.15  | 0.15    |            | ppbV  | 1  | 4/17/2019 6:40:00 AM  |
| Acetone                                        | 7.8     | 1.5     |            | ppbV  | 5  | 4/18/2019 12:54:00 AM |
| Allyl chloride                                 | < 0.15  | 0.15    |            | ppbV  | 1  | 4/17/2019 6:40:00 AM  |
| Benzene                                        | 0.19    | 0.15    |            | ppbV  | 1  | 4/17/2019 6:40:00 AM  |
| Benzyl chloride                                | < 0.15  | 0.15    |            | ppbV  | 1  | 4/17/2019 6:40:00 AM  |
| Bromodichloromethane                           | < 0.15  | 0.15    |            | ppbV  | 1  | 4/17/2019 6:40:00 AM  |
| Bromoforn                                      | < 0.15  | 0.15    |            | ppbV  | 1  | 4/17/2019 6:40:00 AM  |
| Bromomethane                                   | < 0.15  | 0.15    |            | ppbV  | 1  | 4/17/2019 6:40:00 AM  |
| Carbon disulfide                               | < 0.15  | 0.15    |            | ppbV  | 1  | 4/17/2019 6:40:00 AM  |
| Carbon tetrachloride                           | 0.080   | 0.030   |            | ppbV  | 1  | 4/17/2019 6:40:00 AM  |
| Chlorobenzene                                  | < 0.15  | 0.15    |            | ppbV  | 1  | 4/17/2019 6:40:00 AM  |
| Chloroethane                                   | < 0.15  | 0.15    |            | ppbV  | 1  | 4/17/2019 6:40:00 AM  |
| Chloroform                                     | 0.11    | 0.15    | J          | ppbV  | 1  | 4/17/2019 6:40:00 AM  |
| Chloromethane                                  | 0.42    | 0.15    |            | ppbV  | 1  | 4/17/2019 6:40:00 AM  |
| cis-1,2-Dichloroethane                         | < 0.040 | 0.040   |            | ppbV  | 1  | 4/17/2019 6:40:00 AM  |
| cis-1,3-Dichloropropane                        | < 0.15  | 0.15    |            | ppbV  | 1  | 4/17/2019 6:40:00 AM  |
| Cyclohexane                                    | 0.67    | 0.15    |            | ppbV  | 1  | 4/17/2019 6:40:00 AM  |
| Dibromochloromethane                           | < 0.15  | 0.15    |            | ppbV  | 1  | 4/17/2019 6:40:00 AM  |
| Ethyl acetate                                  | 0.34    | 0.15    |            | ppbV  | 1  | 4/17/2019 6:40:00 AM  |

**Qualifiers:** \*\* Quantitation Limit  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 N Non-routine analyte. Quantitation estimated.  
 S Spike Recovery outside accepted recovery limits

- Results reported are not blank corrected  
 E Estimated Value above quantitation range  
 J Analyte detected below quantitation limit  
 ND Not Detected at the Limit of Detection

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WHP 5/16/19



# Centek Laboratories, LLC

Date: 22-Apr-19

CLIENT: Ravi Engineering & Land Surveying, P.C.  
Lab Order: C1904041  
Project: 690 Portland Ave  
Lab ID: C1904041-002A

Client Sample ID: 708-20190410  
Tag Number: 589,450  
Collection Date: 4/10/2019  
Matrix: AIR

| Analyses                                | Result  | **Limit | Qual | Units        | DF | Date Analyzed        |
|-----------------------------------------|---------|---------|------|--------------|----|----------------------|
| 1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE |         | TO-15   |      | Analyst: RJP |    |                      |
| Ethylbenzene                            | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 6:40:00 AM |
| Freon 11                                | 0.24    | 0.15    |      | ppbV         | 1  | 4/17/2019 6:40:00 AM |
| Freon 113                               | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 6:40:00 AM |
| Freon 114                               | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 6:40:00 AM |
| Freon 12                                | 0.49    | 0.15    |      | ppbV         | 1  | 4/17/2019 6:40:00 AM |
| Heptane                                 | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 6:40:00 AM |
| Hexachloro-1,3-butadiene                | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 6:40:00 AM |
| Hexane                                  | 0.11    | 0.15    | J    | ppbV         | 1  | 4/17/2019 6:40:00 AM |
| Isopropyl alcohol                       | 1.7     | JN      |      | ppbV         | 1  | 4/17/2019 6:40:00 AM |
| m&p-Xylene                              | 0.16    | 0.30    | J    | ppbV         | 1  | 4/17/2019 6:40:00 AM |
| Methyl Butyl Ketone                     | < 0.30  | 0.30    |      | ppbV         | 1  | 4/17/2019 6:40:00 AM |
| Methyl Ethyl Ketone                     | 0.37    | 0.30    |      | ppbV         | 1  | 4/17/2019 6:40:00 AM |
| Methyl Isobutyl Ketone                  | < 0.30  | 0.30    |      | ppbV         | 1  | 4/17/2019 6:40:00 AM |
| Methyl tert-butyl ether                 | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 6:40:00 AM |
| Methylene chloride                      | 0.27    | 0.15    |      | ppbV         | 1  | 4/17/2019 6:40:00 AM |
| o-Xylene                                | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 6:40:00 AM |
| Propylene                               | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 6:40:00 AM |
| Styrene                                 | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 6:40:00 AM |
| Tetrachloroethylene                     | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 6:40:00 AM |
| Tetrahydrofuran                         | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 6:40:00 AM |
| Toluene                                 | 0.42    | 0.15    |      | ppbV         | 1  | 4/17/2019 6:40:00 AM |
| trans-1,2-Dichloroethene                | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 6:40:00 AM |
| trans-1,3-Dichloropropene               | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 6:40:00 AM |
| Trichloroethene                         | < 0.030 | 0.030   |      | ppbV         | 1  | 4/17/2019 6:40:00 AM |
| Vinyl acetate                           | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 6:40:00 AM |
| Vinyl Bromide                           | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 6:40:00 AM |
| Vinyl chloride                          | < 0.040 | 0.040   |      | ppbV         | 1  | 4/17/2019 6:40:00 AM |
| Sum: Bromofluorobenzene                 | 94.0    | 70-130  |      | %REC         | 1  | 4/17/2019 6:40:00 AM |

Qualifiers: \*\* Quantitation Limit  
B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
JN Non-routine analyte. Quantitation estimated.  
S Spike Recovery outside accepted recovery limits

- Results reported are not blank corrected  
E Estimated Value above quantitation range  
J Analyte detected below quantitation limit  
ND Not Detected at the Limit of Detection

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# Centek Laboratories, LLC

Date: 22-Apr-19

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1904041  
**Project:** 690 Portland Ave  
**Lab ID:** C1904041-003A

**Client Sample ID:** 714-20190410  
**Tag Number:** 603,396  
**Collection Date:** 4/10/2019  
**Matrix:** AIR

| Analyses                                       | Result  | **Limit    | Qual | Units | DF | Date Analyzed        |
|------------------------------------------------|---------|------------|------|-------|----|----------------------|
| <b>FIELD PARAMETERS</b>                        |         |            |      |       |    |                      |
| Lab Vacuum In                                  | -2      |            |      | Hg    |    | Analyst: 4/12/2019   |
| Lab Vacuum Out                                 | -30     |            |      | Hg    |    | 4/12/2019            |
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |         |            |      |       |    |                      |
|                                                |         | <b>FLD</b> |      |       |    | Analyst: RJP         |
| 1,1,1-Trichloroethane                          | < 0.15  | 0.15       |      | ppbV  | 1  | 4/17/2019 7:20:00 AM |
| 1,1,2,2-Tetrachloroethane                      | < 0.15  | 0.15       |      | ppbV  | 1  | 4/17/2019 7:20:00 AM |
| 1,1,2-Trichloroethane                          | < 0.15  | 0.15       |      | ppbV  | 1  | 4/17/2019 7:20:00 AM |
| 1,1-Dichloroethane                             | < 0.15  | 0.15       |      | ppbV  | 1  | 4/17/2019 7:20:00 AM |
| 1,1-Dichloroethene                             | < 0.040 | 0.040      |      | ppbV  | 1  | 4/17/2019 7:20:00 AM |
| 1,2,4-Trichlorobenzene                         | < 0.15  | 0.15       |      | ppbV  | 1  | 4/17/2019 7:20:00 AM |
| 1,2,4-Trimethylbenzene                         | 0.11    | 0.15       | J    | ppbV  | 1  | 4/17/2019 7:20:00 AM |
| 1,2-Dibromoethane                              | < 0.15  | 0.15       |      | ppbV  | 1  | 4/17/2019 7:20:00 AM |
| 1,2-Dichlorobenzene                            | < 0.15  | 0.15       |      | ppbV  | 1  | 4/17/2019 7:20:00 AM |
| 1,2-Dichloroethane                             | < 0.15  | 0.15       |      | ppbV  | 1  | 4/17/2019 7:20:00 AM |
| 1,2-Dichloropropane                            | < 0.15  | 0.15       |      | ppbV  | 1  | 4/17/2019 7:20:00 AM |
| 1,3,5-Trimethylbenzene                         | < 0.15  | 0.15       |      | ppbV  | 1  | 4/17/2019 7:20:00 AM |
| 1,3-butadiene                                  | < 0.15  | 0.15       |      | ppbV  | 1  | 4/17/2019 7:20:00 AM |
| 1,3-Dichlorobenzene                            | < 0.15  | 0.15       |      | ppbV  | 1  | 4/17/2019 7:20:00 AM |
| 1,4-Dichlorobenzene                            | < 0.15  | 0.15       |      | ppbV  | 1  | 4/17/2019 7:20:00 AM |
| 1,4-Dioxane                                    | < 0.30  | 0.30       | WJ   | ppbV  | 1  | 4/17/2019 7:20:00 AM |
| 2,2,4-trimethylpentane                         | < 0.15  | 0.15       |      | ppbV  | 1  | 4/17/2019 7:20:00 AM |
| 4-ethyltoluene                                 | < 0.15  | 0.15       |      | ppbV  | 1  | 4/17/2019 7:20:00 AM |
| Acetone                                        | 9.2     | 1.5        |      | ppbV  | 5  | 4/18/2019 1:32:00 AM |
| Allyl chloride                                 | < 0.15  | 0.15       |      | ppbV  | 1  | 4/17/2019 7:20:00 AM |
| Benzene                                        | 0.20    | 0.15       |      | ppbV  | 1  | 4/17/2019 7:20:00 AM |
| Benzyl chloride                                | < 0.15  | 0.15       |      | ppbV  | 1  | 4/17/2019 7:20:00 AM |
| Bromedichloromethane                           | < 0.15  | 0.15       |      | ppbV  | 1  | 4/17/2019 7:20:00 AM |
| Bromoform                                      | < 0.15  | 0.15       |      | ppbV  | 1  | 4/17/2019 7:20:00 AM |
| Bromomethane                                   | < 0.15  | 0.15       |      | ppbV  | 1  | 4/17/2019 7:20:00 AM |
| Carbon disulfide                               | < 0.15  | 0.15       |      | ppbV  | 1  | 4/17/2019 7:20:00 AM |
| Carbon tetrachloride                           | 0.090   | 0.030      |      | ppbV  | 1  | 4/17/2019 7:20:00 AM |
| Chlorobenzene                                  | < 0.15  | 0.15       |      | ppbV  | 1  | 4/17/2019 7:20:00 AM |
| Chloroethane                                   | < 0.15  | 0.15       |      | ppbV  | 1  | 4/17/2019 7:20:00 AM |
| Chloroform                                     | 0.15    | 0.15       |      | ppbV  | 1  | 4/17/2019 7:20:00 AM |
| Chloromethane                                  | 0.44    | 0.15       |      | ppbV  | 1  | 4/17/2019 7:20:00 AM |
| cis-1,2-Dichloroethene                         | < 0.040 | 0.040      |      | ppbV  | 1  | 4/17/2019 7:20:00 AM |
| cis-1,3-Dichloropropene                        | < 0.15  | 0.15       |      | ppbV  | 1  | 4/17/2019 7:20:00 AM |
| Cyclohexane                                    | 0.60    | 0.15       |      | ppbV  | 1  | 4/17/2019 7:20:00 AM |
| Dibromochloromethane                           | < 0.15  | 0.15       |      | ppbV  | 1  | 4/17/2019 7:20:00 AM |
| Ethyl acetate                                  | 0.41    | 0.15       |      | ppbV  | 1  | 4/17/2019 7:20:00 AM |

**Qualifiers:** \*\* Quantitation Limit  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 JN Non-routine analyte, Quantitation estimated.  
 S Spike Recovery outside accepted recovery limits

. Results reported are not blank corrected  
 E Estimated Value above quantitation range  
 J Analyte detected below quantitation limit  
 ND Not Detected at the Limit of Detection

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# Centek Laboratories, LLC

Date: 22-Apr-19

CLIENT: Ravi Engineering & Land Surveying, P.C.  
Lab Order: C1904041  
Project: 690 Portland Ave  
Lab ID: C1904041-003A

Client Sample ID: 714-20190410  
Tag Number: 603,396  
Collection Date: 4/10/2019  
Matrix: AIR

| Analyses                                | Result  | **Limit | Qual | Units        | DF | Date Analyzed        |
|-----------------------------------------|---------|---------|------|--------------|----|----------------------|
| 1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE |         | TO-15   |      | Analyst: RJP |    |                      |
| Ethylbenzene                            | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 7:20:00 AM |
| Freon 11                                | 0.26    | 0.15    |      | ppbV         | 1  | 4/17/2019 7:20:00 AM |
| Freon 113                               | 0.11    | 0.15    | J    | ppbV         | 1  | 4/17/2019 7:20:00 AM |
| Freon 114                               | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 7:20:00 AM |
| Freon 12                                | 0.52    | 0.15    |      | ppbV         | 1  | 4/17/2019 7:20:00 AM |
| Heptane                                 | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 7:20:00 AM |
| Hexachloro-1,3-butadiene                | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 7:20:00 AM |
| Hexane                                  | 0.14    | 0.15    | J    | ppbV         | 1  | 4/17/2019 7:20:00 AM |
| Isopropyl alcohol                       | 1.9     | 0.15    | JN   | ppbV         | 1  | 4/17/2019 7:20:00 AM |
| m&p-Xylene                              | 0.20    | 0.30    | J    | ppbV         | 1  | 4/17/2019 7:20:00 AM |
| Methyl Butyl Ketone                     | < 0.30  | 0.30    |      | ppbV         | 1  | 4/17/2019 7:20:00 AM |
| Methyl Ethyl Ketone                     | 0.41    | 0.30    |      | ppbV         | 1  | 4/17/2019 7:20:00 AM |
| Methyl Isobutyl Ketone                  | < 0.30  | 0.30    |      | ppbV         | 1  | 4/17/2019 7:20:00 AM |
| Methyl tert-butyl ether                 | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 7:20:00 AM |
| Methylene chloride                      | 0.24    | 0.15    |      | ppbV         | 1  | 4/17/2019 7:20:00 AM |
| o-Xylene                                | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 7:20:00 AM |
| Propylene                               | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 7:20:00 AM |
| Styrene                                 | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 7:20:00 AM |
| Tetrachloroethylene                     | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 7:20:00 AM |
| Tetrahydrofuran                         | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 7:20:00 AM |
| Toluene                                 | 0.45    | 0.15    |      | ppbV         | 1  | 4/17/2019 7:20:00 AM |
| trans-1,2-Dichloroethene                | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 7:20:00 AM |
| trans-1,3-Dichloropropane               | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 7:20:00 AM |
| Trichloroethene                         | < 0.030 | 0.030   |      | ppbV         | 1  | 4/17/2019 7:20:00 AM |
| Vinyl acetate                           | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 7:20:00 AM |
| Vinyl Bromide                           | < 0.15  | 0.15    |      | ppbV         | 1  | 4/17/2019 7:20:00 AM |
| Vinyl chloride                          | < 0.040 | 0.040   |      | ppbV         | 1  | 4/17/2019 7:20:00 AM |
| Sum: Bromofluorobenzene                 | 95.0    | 70-130  |      | %REC         | 1  | 4/17/2019 7:20:00 AM |

Qualifiers: \*\* Quantitation Limit  
B Analyte detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
JN Non-routine analyte. Quantitation estimated.  
S Spike Recovery outside accepted recovery limits

- Results reported are not blank corrected  
E Estimated Value above quantitation range  
J Analyte detected below quantitation limit  
ND Not Detected at the Limit of Detection

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mvp 5/6/19

# Centek Laboratories, LLC

Date: 22-Apr-19

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Lab Order:** C1904041  
**Project:** 690 Portland Ave  
**Lab ID:** C1904041-004A

**Client Sample ID:** OA-20190410  
**Tag Number:** 641,388  
**Collection Date:** 4/10/2019  
**Matrix:** AIR

| Analyses                                       | Result  | **Limit | Qual  | Units | DF | Date Analyzed        |
|------------------------------------------------|---------|---------|-------|-------|----|----------------------|
| <b>FIELD PARAMETERS</b>                        |         |         |       |       |    |                      |
| Lab Vacuum In                                  | -1      |         | FLD   | "Hg   |    | Analyst:             |
| Lab Vacuum Out                                 | -30     |         |       | "Hg   |    | 4/12/2019            |
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |         |         |       |       |    |                      |
|                                                |         |         | TO-15 |       |    | Analyst: RJP         |
| 1,1,1-Trichloroethane                          | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 8:00:00 AM |
| 1,1,2,2-Tetrachloroethane                      | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 8:00:00 AM |
| 1,1,2-Trichloroethane                          | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 8:00:00 AM |
| 1,1-Dichloroethane                             | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 8:00:00 AM |
| 1,1-Dichloroethene                             | < 0.040 | 0.040   |       | ppbV  | 1  | 4/17/2019 8:00:00 AM |
| 1,2,4-Trichlorobenzene                         | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 8:00:00 AM |
| 1,2,4-Trimethylbenzene                         | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 8:00:00 AM |
| 1,2-Dibromoethane                              | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 8:00:00 AM |
| 1,2-Dichlorobenzene                            | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 8:00:00 AM |
| 1,2-Dichloroethane                             | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 8:00:00 AM |
| 1,2-Dichloropropane                            | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 8:00:00 AM |
| 1,3,5-Trimethylbenzene                         | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 8:00:00 AM |
| 1,3-butadiene                                  | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 8:00:00 AM |
| 1,3-Dichlorobenzene                            | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 8:00:00 AM |
| 1,4-Dichlorobenzene                            | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 8:00:00 AM |
| 1,4-Dioxane                                    | < 0.30  | 0.30    |       | ppbV  | 1  | 4/17/2019 8:00:00 AM |
| 2,2,4-trimethylpentane                         | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 8:00:00 AM |
| 4-ethyltoluene                                 | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 8:00:00 AM |
| Acetone                                        | 7.0     | 1.5     |       | ppbV  | 5  | 4/18/2019 2:10:00 AM |
| Allyl chloride                                 | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 8:00:00 AM |
| Benzene                                        | 0.14    | 0.15    | J     | ppbV  | 1  | 4/17/2019 8:00:00 AM |
| Benzyl chloride                                | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 8:00:00 AM |
| Bromodichloromethane                           | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 8:00:00 AM |
| Bromoform                                      | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 8:00:00 AM |
| Bromomethane                                   | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 8:00:00 AM |
| Carbon disulfide                               | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 8:00:00 AM |
| Carbon tetrachloride                           | 0.080   | 0.030   |       | ppbV  | 1  | 4/17/2019 8:00:00 AM |
| Chlorobenzene                                  | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 8:00:00 AM |
| Chloroethane                                   | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 8:00:00 AM |
| Chloroform                                     | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 8:00:00 AM |
| Chloromethane                                  | 0.50    | 0.15    |       | ppbV  | 1  | 4/17/2019 8:00:00 AM |
| cis-1,2-Dichloroethene                         | < 0.040 | 0.040   |       | ppbV  | 1  | 4/17/2019 8:00:00 AM |
| cis-1,3-Dichloropropane                        | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 8:00:00 AM |
| Cyclohexane                                    | 0.26    | 0.15    |       | ppbV  | 1  | 4/17/2019 8:00:00 AM |
| Dibromochloromethane                           | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 8:00:00 AM |
| Ethyl acetate                                  | < 0.15  | 0.15    |       | ppbV  | 1  | 4/17/2019 8:00:00 AM |

**Qualifiers:** \*\* Quantitation Limit  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 JN Non-routine analysis, Quantitation estimated.  
 S Spike Recovery outside accepted recovery limits

Results reported are not blank corrected  
 E Estimated Value above quantitation range  
 J Analyte detected below quantitation limit  
 ND Not Detected at the Limit of Detection

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# Centek Laboratories, LLC

Date: 22-Apr-19

CLIENT: Ravi Engineering & Land Surveying, P.C.  
Lab Order: C1904041  
Project: 690 Portland Ave  
Lab ID: C1904041-004A

Client Sample ID: OA-20190410  
Tag Number: 641,388  
Collection Date: 4/10/2019  
Matrix: AIR

| Analyses                                       | Result    | **Limit | Qual | Units        | DF           | Date Analyzed        |
|------------------------------------------------|-----------|---------|------|--------------|--------------|----------------------|
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |           |         |      |              |              |                      |
|                                                |           |         |      | <b>TO-15</b> | Analyst: RJP |                      |
| Ethylbenzene                                   | < 0.15    | 0.15    |      | ppbV         | 1            | 4/17/2019 8:00:00 AM |
| Freon 11                                       | 0.25      | 0.15    |      | ppbV         | 1            | 4/17/2019 8:00:00 AM |
| Freon 113                                      | < 0.15    | 0.15    |      | ppbV         | 1            | 4/17/2019 8:00:00 AM |
| Freon 114                                      | < 0.15    | 0.15    |      | ppbV         | 1            | 4/17/2019 8:00:00 AM |
| Freon 12                                       | 0.53      | 0.15    |      | ppbV         | 1            | 4/17/2019 8:00:00 AM |
| Heptane                                        | < 0.15    | 0.15    |      | ppbV         | 1            | 4/17/2019 8:00:00 AM |
| Hexachloro-1,3-butadiene                       | < 0.15    | 0.15    |      | ppbV         | 1            | 4/17/2019 8:00:00 AM |
| Hexane                                         | < 0.15    | 0.15    |      | ppbV         | 1            | 4/17/2019 8:00:00 AM |
| Isopropyl alcohol                              | 0.68 JN   | 0.15    |      | ppbV         | 1            | 4/17/2019 8:00:00 AM |
| m&p-Xylene                                     | 0.11      | 0.30 J  |      | ppbV         | 1            | 4/17/2019 8:00:00 AM |
| Methyl Butyl Ketone                            | < 0.30 MJ | 0.30    |      | ppbV         | 1            | 4/17/2019 8:00:00 AM |
| Methyl Ethyl Ketone                            | 0.27      | 0.30 J  |      | ppbV         | 1            | 4/17/2019 8:00:00 AM |
| Methyl Isobutyl Ketone                         | < 0.30 MJ | 0.30    |      | ppbV         | 1            | 4/17/2019 8:00:00 AM |
| Methyl tert-butyl ether                        | < 0.15    | 0.15    |      | ppbV         | 1            | 4/17/2019 8:00:00 AM |
| Methylene chloride                             | 0.23      | 0.15    |      | ppbV         | 1            | 4/17/2019 8:00:00 AM |
| o-Xylene                                       | < 0.15    | 0.15    |      | ppbV         | 1            | 4/17/2019 8:00:00 AM |
| Propylene                                      | < 0.15    | 0.15    |      | ppbV         | 1            | 4/17/2019 8:00:00 AM |
| Styrene                                        | < 0.15    | 0.15    |      | ppbV         | 1            | 4/17/2019 8:00:00 AM |
| Tetrachloroethylene                            | < 0.15    | 0.15    |      | ppbV         | 1            | 4/17/2019 8:00:00 AM |
| Tetrahydrofuran                                | < 0.15    | 0.15    |      | ppbV         | 1            | 4/17/2019 8:00:00 AM |
| Toluene                                        | 0.23      | 0.15    |      | ppbV         | 1            | 4/17/2019 8:00:00 AM |
| trans-1,2-Dichloroethene                       | < 0.15    | 0.15    |      | ppbV         | 1            | 4/17/2019 8:00:00 AM |
| trans-1,3-Dichloropropene                      | < 0.15    | 0.15    |      | ppbV         | 1            | 4/17/2019 8:00:00 AM |
| Trichloroethene                                | < 0.030   | 0.030   |      | ppbV         | 1            | 4/17/2019 8:00:00 AM |
| Vinyl acetate                                  | < 0.15    | 0.15    |      | ppbV         | 1            | 4/17/2019 8:00:00 AM |
| Vinyl Bromide                                  | < 0.15    | 0.15    |      | ppbV         | 1            | 4/17/2019 8:00:00 AM |
| Vinyl chloride                                 | < 0.040   | 0.040   |      | ppbV         | 1            | 4/17/2019 8:00:00 AM |
| Sum: Bromofluorobenzene                        | 91.0      | 70-130  |      | %REC         | 1            | 4/17/2019 8:00:00 AM |

Qualifiers: \*\* Quantitation Limit  
B Analytic detected in the associated Method Blank  
H Holding times for preparation or analysis exceeded  
JN Non-routine analytic. Quantitation estimated.  
S Spike Recovery outside accepted recovery limits

- Results reported are not blank corrected  
E Estimated Value above quantitation range  
J Analyte detected below quantitation limit  
ND Not Detected at the Limit of Detection

Page 8 of 8

## *Appendix B*

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### *Laboratory QC Documentation*



CENTEK LABORATORIES, LLC

Date: 22-Apr-19

## ANALYTICAL QC SUMMARY REPORT

CLIENT: Ravi Engineering &amp; Land Surveying, P.C.

Work Order: C1904041

Project: 690 Portland Ave

TestCode: 0.20\_NYS

| Sample ID: ALC81UGD-041619 | Sample Type: LCSO | TestCode: 0.20_NYS | Units: ppbV | Prep Date:               | RunNo: 14684  |          |           |             |      |          |      |
|----------------------------|-------------------|--------------------|-------------|--------------------------|---------------|----------|-----------|-------------|------|----------|------|
| Client ID: ZZZZZ           | Batch ID: R14864  | TestNo: TO-15      |             | Analysis Date: 4/17/2019 | SeqNo: 171082 |          |           |             |      |          |      |
| Analyte                    | Result            | PQL                | SPK value   | SPK Ref Val              | %REC          | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| 1,1,1-Trichloroethane      | 1.000             | 0.15               | 1           | 0                        | 100           | 70       | 130       | 0.98        | 2.02 | 30       |      |
| 1,1,2,2-Tetrachloroethane  | 0.6900            | 0.15               | 1           | 0                        | 69.0          | 70       | 130       | 0.99        | 10.6 | 30       |      |
| 1,1,2-Trichloroethane      | 0.9400            | 0.15               | 1           | 0                        | 94.0          | 70       | 130       | 1.01        | 7.18 | 30       |      |
| 1,1-Dichloroethane         | 0.9700            | 0.15               | 1           | 0                        | 97.0          | 70       | 130       | 0.94        | 3.14 | 30       |      |
| 1,1-Dichloroethene         | 0.9300            | 0.040              | 1           | 0                        | 93.0          | 70       | 130       | 0.89        | 4.40 | 30       |      |
| 1,2,4-Trichlorobenzene     | 0.7700            | 0.15               | 1           | 0                        | 77.0          | 70       | 130       | 0.92        | 17.8 | 30       |      |
| 1,2,4-Trimethylbenzene     | 0.9600            | 0.15               | 1           | 0                        | 96.0          | 70       | 130       | 1.01        | 5.08 | 30       |      |
| 1,2-Dibromoethane          | 0.9600            | 0.15               | 1           | 0                        | 96.0          | 70       | 130       | 0.99        | 4.12 | 30       |      |
| 1,2-Dichlorobenzene        | 0.9700            | 0.15               | 1           | 0                        | 97.0          | 70       | 130       | 1.04        | 6.97 | 30       |      |
| 1,2-Dichloroethane         | 0.9600            | 0.15               | 1           | 0                        | 96.0          | 70       | 130       | 0.93        | 3.17 | 30       |      |
| 1,2-Dichloropropane        | 0.9300            | 0.15               | 1           | 0                        | 93.0          | 70       | 130       | 0.99        | 6.25 | 30       |      |
| 1,3,5-Trimethylbenzene     | 0.9600            | 0.15               | 1           | 0                        | 96.0          | 70       | 130       | 1.06        | 9.90 | 30       |      |
| 1,3-Butadiene              | 0.9500            | 0.15               | 1           | 0                        | 95.0          | 70       | 130       | 0.83        | 13.5 | 30       |      |
| 1,3-Dichlorobenzene        | 0.9700            | 0.15               | 1           | 0                        | 97.0          | 70       | 130       | 1.06        | 8.87 | 30       |      |
| 1,4-Dichlorobenzene        | 0.9400            | 0.15               | 1           | 0                        | 94.0          | 70       | 130       | 1.08        | 13.9 | 30       |      |
| 1,4-Dioxane                | 0.2300            | 0.30               | 1           | 0                        | 23.0          | 70       | 130       | 0.81        | 0    | 30       | JS   |
| 2,2,4-trimethylpentane     | 0.9500            | 0.15               | 1           | 0                        | 95.0          | 70       | 130       | 1           | 5.13 | 30       |      |
| 4-ethyltoluene             | 0.9800            | 0.15               | 1           | 0                        | 98.0          | 70       | 130       | 1.04        | 5.94 | 30       |      |
| Acetone                    | 0.7800            | 0.30               | 1           | 0                        | 78.0          | 70       | 130       | 0.92        | 16.5 | 30       |      |
| Allyl chloride             | 0.9400            | 0.15               | 1           | 0                        | 94.0          | 70       | 130       | 0.88        | 6.59 | 30       |      |
| Benzene                    | 0.9400            | 0.15               | 1           | 0                        | 94.0          | 70       | 130       | 0.95        | 1.09 | 30       |      |
| Benzyl chloride            | 0.8900            | 0.15               | 1           | 0                        | 89.0          | 70       | 130       | 1           | 11.6 | 30       |      |
| Bromodichloromethane       | 0.9600            | 0.15               | 1           | 0                        | 96.0          | 70       | 130       | 0.99        | 3.08 | 30       |      |
| Bromoform                  | 0.9200            | 0.15               | 1           | 0                        | 92.0          | 70       | 130       | 1.02        | 10.3 | 30       |      |
| Bromomethane               | 0.8700            | 0.15               | 1           | 0                        | 87.0          | 70       | 130       | 0.83        | 4.71 | 30       |      |

Qualifiers: . Results reported are not blank corrected  
 J Analyte detected below quantitation limit  
 S Spike Recovery outside accepted recovery limits

E Estimated Value above quantitation range  
 ND Not Detected at the Limit of Detection

H Holding times for preparation or analysis exceeded  
 R RPD outside accepted recovery limits

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Work Order: CI904041  
 Project: 690 Portland Ave

TestCode: 0.20\_NYS

| Sample ID: ALCS1UGD-041619 | Sample Type: LCSD | Test Code: 0.20_NYS | Unit: ppbV | Prep Date:               | Run No: 14884  |           |            |             |      |           |      |
|----------------------------|-------------------|---------------------|------------|--------------------------|----------------|-----------|------------|-------------|------|-----------|------|
| Client ID: ZZZZZ           | Batch ID: R14884  | Test No: TC-15      |            | Analysis Date: 4/17/2019 | Seq No: 171082 |           |            |             |      |           |      |
| Analyte                    | Result            | PQL                 | SPK value  | SPK Ref Val              | %REC           | Low Limit | High Limit | RPD Ref Val | %RPD | RPD Limit | Qual |
| Carbon disulfide           | 0.9600            | 0.15                | 1          | 0                        | 96.0           | 70        | 130        | 0.95        | 1.05 | 30        |      |
| Carbon tetrachloride       | 0.8800            | 0.030               | 1          | 0                        | 88.0           | 70        | 130        | 0.88        | 2.30 | 30        |      |
| Chlorobenzene              | 0.9800            | 0.15                | 1          | 0                        | 98.0           | 70        | 130        | 1           | 2.02 | 30        |      |
| Chloroethane               | 0.8900            | 0.15                | 1          | 0                        | 89.0           | 70        | 130        | 0.87        | 2.27 | 30        |      |
| Chloroform                 | 0.9600            | 0.15                | 1          | 0                        | 96.0           | 70        | 130        | 0.95        | 1.05 | 30        |      |
| Chloromethane              | 0.8900            | 0.15                | 1          | 0                        | 89.0           | 70        | 130        | 0.88        | 1.13 | 30        |      |
| cis-1,2-Dichloroethane     | 0.9400            | 0.040               | 1          | 0                        | 94.0           | 70        | 130        | 0.9         | 4.35 | 30        |      |
| cis-1,3-Dichloropropene    | 0.8900            | 0.15                | 1          | 0                        | 89.0           | 70        | 130        | 0.86        | 7.67 | 30        |      |
| Cyclohexane                | 0.9500            | 0.15                | 1          | 0                        | 95.0           | 70        | 130        | 0.95        | 0    | 30        |      |
| Dibromochloromethane       | 0.9400            | 0.15                | 1          | 0                        | 94.0           | 70        | 130        | 0.99        | 6.18 | 30        |      |
| Ethyl acetate              | 0.9000            | 0.15                | 1          | 0                        | 90.0           | 70        | 130        | 0.89        | 1.12 | 30        |      |
| Ethylbenzene               | 0.9600            | 0.15                | 1          | 0                        | 96.0           | 70        | 130        | 0.98        | 2.06 | 30        |      |
| Freon 11                   | 0.9200            | 0.15                | 1          | 0                        | 92.0           | 70        | 130        | 0.93        | 1.08 | 30        |      |
| Freon 113                  | 0.9700            | 0.15                | 1          | 0                        | 97.0           | 70        | 130        | 0.96        | 1.04 | 30        |      |
| Freon 114                  | 0.9200            | 0.15                | 1          | 0                        | 92.0           | 70        | 130        | 0.92        | 0    | 30        |      |
| Freon 12                   | 0.9700            | 0.15                | 1          | 0                        | 97.0           | 70        | 130        | 0.95        | 2.08 | 30        |      |
| Hepane                     | 0.9300            | 0.15                | 1          | 0                        | 93.0           | 70        | 130        | 0.94        | 1.07 | 30        |      |
| Hexachloro-1,3-butadiene   | 0.8100            | 0.15                | 1          | 0                        | 81.0           | 70        | 130        | 0.94        | 14.9 | 30        |      |
| Hexane                     | 0.9400            | 0.15                | 1          | 0                        | 94.0           | 70        | 130        | 0.92        | 2.15 | 30        |      |
| Isopropyl alcohol          | 0.7800            | 0.15                | 1          | 0                        | 78.0           | 70        | 130        | 0.77        | 1.28 | 30        |      |
| m&p-Xylene                 | 2.000             | 0.30                | 2          | 0                        | 100            | 70        | 130        | 2.03        | 1.49 | 30        |      |
| Methyl Butyl Ketone        | < 0.30            | 0.30                | 1          | 0                        | 0              | 70        | 130        | 0.71        | 0    | 30        | S    |
| Methyl Ethyl Ketone        | 0.8700            | 0.30                | 1          | 0                        | 87.0           | 70        | 130        | 0.8         | 8.38 | 30        |      |
| Methyl Isobutyl Ketone     | 0.1400            | 0.30                | 1          | 0                        | 14.0           | 70        | 130        | 0.71        | 0    | 30        | JS   |
| Methyl tert-butyl ether    | 0.9500            | 0.15                | 1          | 0                        | 95.0           | 70        | 130        | 0.92        | 3.21 | 30        |      |
| Methylene chloride         | 0.9400            | 0.15                | 1          | 0                        | 94.0           | 70        | 130        | 0.92        | 2.15 | 30        |      |
| o-Xylene                   | 0.9700            | 0.15                | 1          | 0                        | 97.0           | 70        | 130        | 1.07        | 9.80 | 30        |      |
| Propylene                  | 0.9700            | 0.15                | 1          | 0                        | 97.0           | 70        | 130        | 0.87        | 10.9 | 30        |      |
| Styrene                    | 0.9700            | 0.15                | 1          | 0                        | 97.0           | 70        | 130        | 1.03        | 6.00 | 30        |      |
| Tetrachloroethylene        | 0.9400            | 0.15                | 1          | 0                        | 94.0           | 70        | 130        | 1           | 6.19 | 30        |      |
| Tetrahydrofuran            | 0.8800            | 0.15                | 1          | 0                        | 88.0           | 70        | 130        | 0.92        | 4.44 | 30        |      |

Qualifiers: Results reported are not blank corrected E Estimated Value above quantitation range H Holding times for preparation or analysis exceeded  
 J Analyte detected below quantitation limit ND Not Detected at the Limit of Detection R RPD outside accepted recovery limits  
 S Spike Recovery outside accepted recovery limits



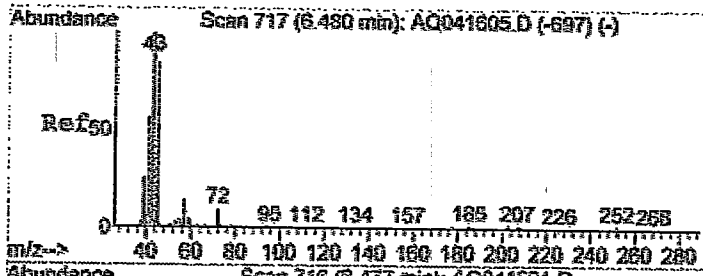
**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Work Order:** C1904041  
**Project:** 690 Portland Ave

**TestCode:** 0.20\_NYS

|                            |                  |                    |             |                          |               |          |           |             |      |          |      |
|----------------------------|------------------|--------------------|-------------|--------------------------|---------------|----------|-----------|-------------|------|----------|------|
| Sample ID: ALCS1UGD-041619 | SampType: LCSD   | TestCode: 0.20_NYS | Units: ppbV | Prep Date:               | RunNo: 14884  |          |           |             |      |          |      |
| Client ID: ZZZZZ           | Batch ID: R14884 | TestNo: TO-15      |             | Analysis Date: 4/17/2019 | SeqNo: 171082 |          |           |             |      |          |      |
| Analyte                    | Result           | PQL                | SPK value   | SPK Ref Val              | %REC          | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Toluene                    | 0.9700           | 0.15               | 1           | 0                        | 97.0          | 70       | 130       | 0.97        | 0    | 30       |      |
| trans-1,2-Dichloroethene   | 0.9900           | 0.15               | 1           | 0                        | 99.0          | 70       | 130       | 0.99        | 4.12 | 30       |      |
| trans-1,3-Dichloropropene  | 0.9600           | 0.15               | 1           | 0                        | 96.0          | 70       | 130       | 0.96        | 2.06 | 30       |      |
| Trichloroethene            | 0.9100           | 0.030              | 1           | 0                        | 91.0          | 70       | 130       | 0.92        | 1.09 | 30       |      |
| Vinyl acetate              | 0.9300           | 0.15               | 1           | 0                        | 93.0          | 70       | 130       | 0.89        | 4.40 | 30       |      |
| Vinyl Bromide              | 0.9300           | 0.15               | 1           | 0                        | 93.0          | 70       | 130       | 0.89        | 4.40 | 30       |      |
| Vinyl chloride             | 0.8800           | 0.040              | 1           | 0                        | 88.0          | 70       | 130       | 0.86        | 2.30 | 30       |      |

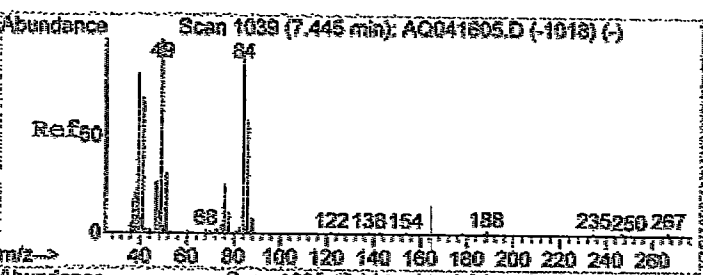
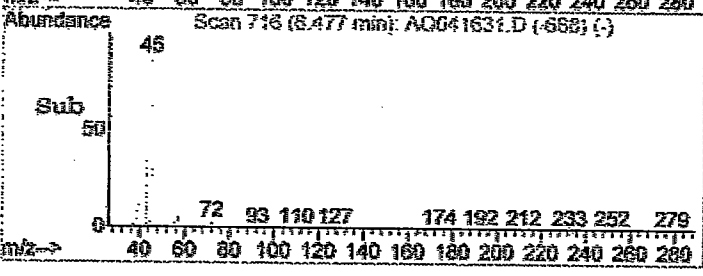
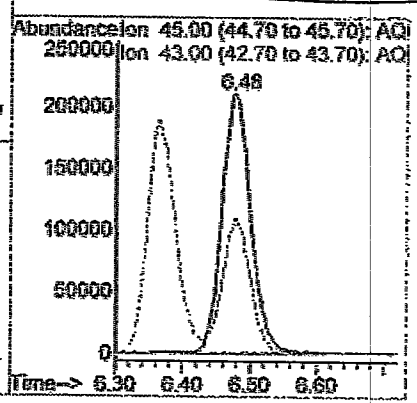
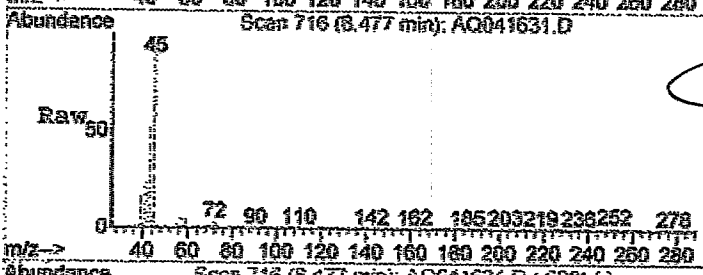
|                            |                  |                    |             |                          |               |          |           |             |       |          |      |
|----------------------------|------------------|--------------------|-------------|--------------------------|---------------|----------|-----------|-------------|-------|----------|------|
| Sample ID: ALCS1UGD-041719 | SampType: LCSD   | TestCode: 0.20_NYS | Units: ppbV | Prep Date:               | RunNo: 14885  |          |           |             |       |          |      |
| Client ID: ZZZZZ           | Batch ID: R14885 | TestNo: TO-15      |             | Analysis Date: 4/18/2019 | SeqNo: 171080 |          |           |             |       |          |      |
| Analyte                    | Result           | PQL                | SPK value   | SPK Ref Val              | %REC          | LowLimit | HighLimit | RPD Ref Val | %RPD  | RPDLimit | Qual |
| 1,1,1-Trichloroethane      | 1.030            | 0.15               | 1           | 0                        | 103           | 70       | 130       | 0.98        | 4.98  | 30       |      |
| 1,1,2,2-Tetrachloroethane  | 0.9600           | 0.15               | 1           | 0                        | 96.0          | 70       | 130       | 0.94        | 2.11  | 30       |      |
| 1,1,2-Trichloroethane      | 0.9400           | 0.15               | 1           | 0                        | 94.0          | 70       | 130       | 0.95        | 1.06  | 30       |      |
| 1,1-Dichloroethane         | 0.9900           | 0.15               | 1           | 0                        | 99.0          | 70       | 130       | 0.98        | 3.06  | 30       |      |
| 1,1-Dichloroethene         | 0.9300           | 0.040              | 1           | 0                        | 93.0          | 70       | 130       | 0.92        | 1.08  | 30       |      |
| 1,2,4-Trichlorobenzene     | 0.9700           | 0.15               | 1           | 0                        | 97.0          | 70       | 130       | 1           | 3.05  | 30       |      |
| 1,2,4-Trimethylbenzene     | 1.080            | 0.15               | 1           | 0                        | 108           | 70       | 130       | 1.05        | 2.82  | 30       |      |
| 1,2-Dibromoethane          | 0.9700           | 0.15               | 1           | 0                        | 97.0          | 70       | 130       | 0.97        | 0     | 30       |      |
| 1,2-Dichlorobenzene        | 1.060            | 0.15               | 1           | 0                        | 106           | 70       | 130       | 1.02        | 3.85  | 30       |      |
| 1,2-Dichloroethane         | 1.050            | 0.15               | 1           | 0                        | 105           | 70       | 130       | 0.98        | 6.50  | 30       |      |
| 1,2-Dichloropropane        | 0.9200           | 0.15               | 1           | 0                        | 92.0          | 70       | 130       | 0.91        | 1.08  | 30       |      |
| 1,3,5-Trimethylbenzene     | 1.090            | 0.15               | 1           | 0                        | 109           | 70       | 130       | 1.07        | 1.85  | 30       |      |
| 1,3-butadiene              | 1.040            | 0.15               | 1           | 0                        | 104           | 70       | 130       | 0.9         | 14.4  | 30       |      |
| 1,3-Dichlorobenzene        | 1.070            | 0.15               | 1           | 0                        | 107           | 70       | 130       | 1.05        | 1.89  | 30       |      |
| 1,4-Dichlorobenzene        | 1.030            | 0.15               | 1           | 0                        | 103           | 70       | 130       | 1.02        | 0.976 | 30       |      |
| 1,4-Dioxane                | 0.7500           | 0.30               | 1           | 0                        | 75.0          | 70       | 130       | 0.8         | 6.46  | 30       |      |
| 2,2,4-trimethylpentane     | 0.9400           | 0.15               | 1           | 0                        | 94.0          | 70       | 130       | 0.93        | 1.07  | 30       |      |
| 4-ethyltoluene             | 1.090            | 0.15               | 1           | 0                        | 109           | 70       | 130       | 1.07        | 1.85  | 30       |      |

|             |   |                                                 |    |                                          |   |                                                    |
|-------------|---|-------------------------------------------------|----|------------------------------------------|---|----------------------------------------------------|
| Qualifiers: | . | Results reported are not blank corrected        | E  | Estimated Value above quantitation range | H | Holding times for preparation or analysis exceeded |
|             | J | Analyte detected below quantitation limit       | ND | Not Detected at the Limit of Detection   | R | RPD outside accepted recovery limits               |
|             | S | Spike Recovery outside accepted recovery limits |    |                                          |   |                                                    |



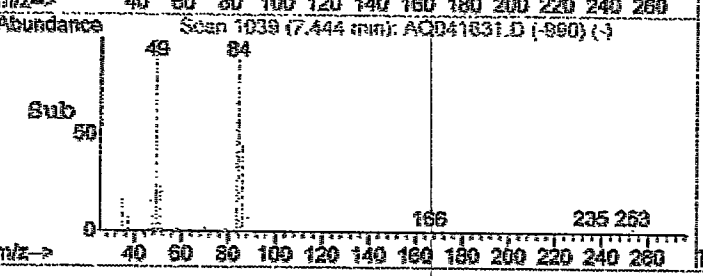
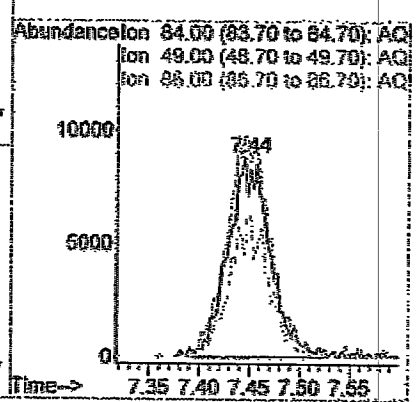
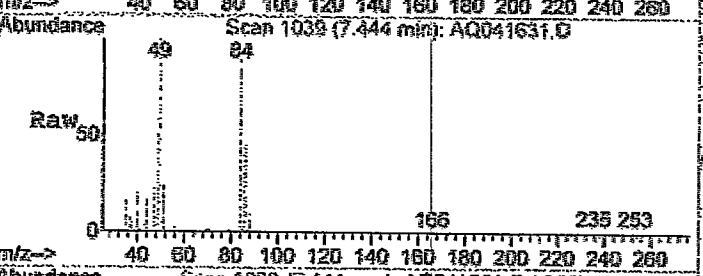
#17  
Isopropyl alcohol  
Concen: 7.23 ppb  
RT: 6.48 min Scan# 716  
Delta R.T. -0.00 min  
Lab File: AQ041631.D  
Acq: 17 Apr 2019 6:00 am

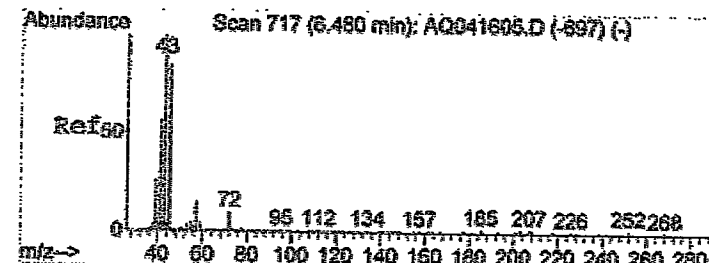
|           |       |       |        |
|-----------|-------|-------|--------|
| Tgt Ion:  | 45    | Resp: | 626957 |
| Ion Ratio | Lower | Upper |        |
| 45        | 100   |       |        |
| 43        | 0.0   | 98.7  | 138.7# |



#21  
Methylene chloride  
Concen: 0.56 ppb  
RT: 7.44 min Scan# 1039  
Delta R.T. -0.00 min  
Lab File: AQ041631.D  
Acq: 17 Apr 2019 6:00 am

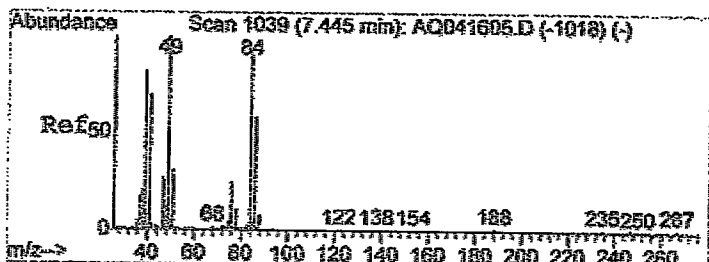
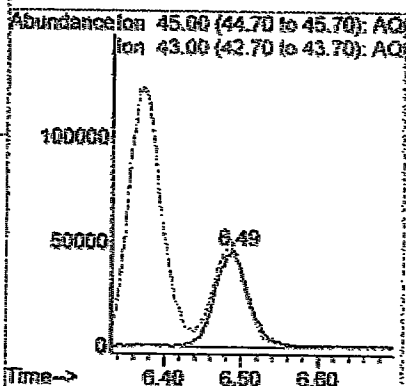
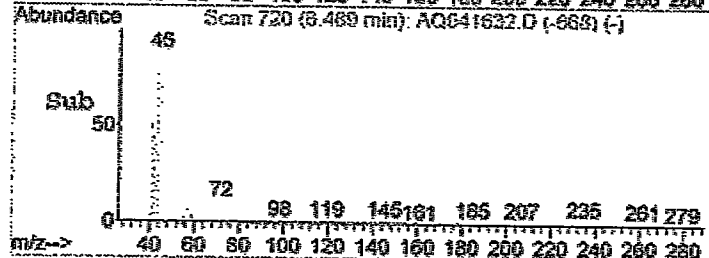
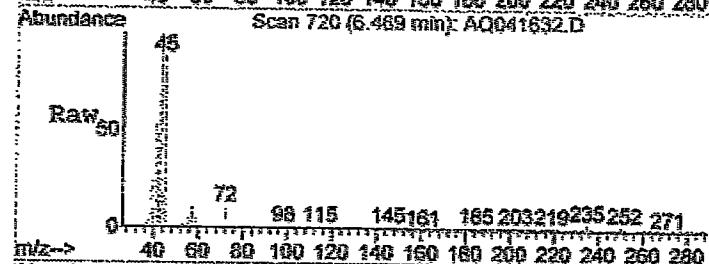
|           |       |       |       |
|-----------|-------|-------|-------|
| Tgt Ion:  | 84    | Resp: | 25849 |
| Ion Ratio | Lower | Upper |       |
| 84        | 100   |       |       |
| 49        | 113.6 | 107.9 | 147.9 |
| 86        | 65.5  | 44.8  | 84.8  |





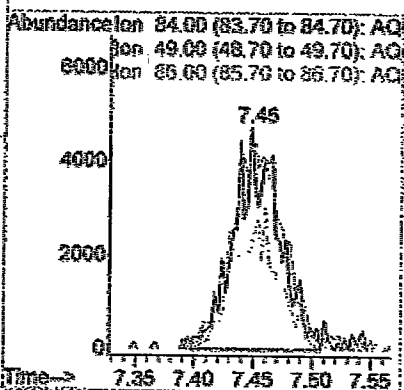
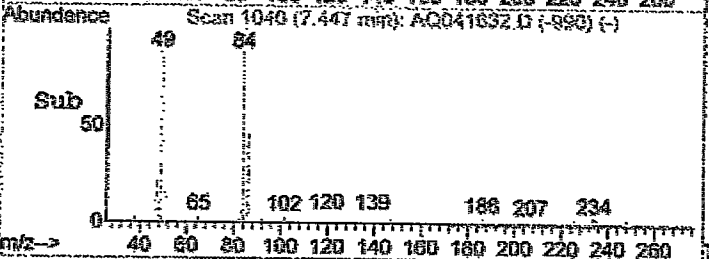
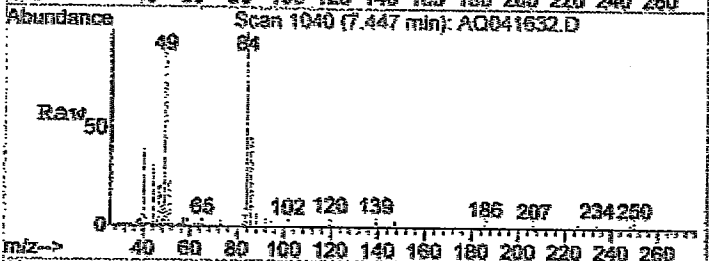
#17  
Isopropyl alcohol  
Concen: 1.68 ppb  
RT: 6.49 min Scan# 720  
Delta R.T. 0.01 min  
Lab File: AQ041632.D  
Acq: 17 Apr 2019 6:40 am

Tgt Ion: 45 Resp: 141215  
Ion Ratio Lower Upper  
45 100  
43 0.0 98.7 138.7#

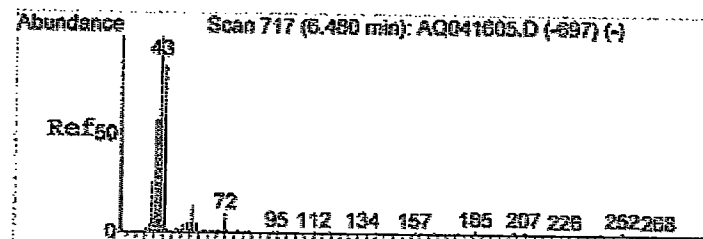


#21  
Methylene chloride  
Concen: 0.27 ppb  
RT: 7.45 min Scan# 1040  
Delta R.T. 0.00 min  
Lab File: AQ041632.D  
Acq: 17 Apr 2019 6:40 am

Tgt Ion: 84 Resp: 12206  
Ion Ratio Lower Upper  
84 100  
49 111.8 107.9 147.9  
86 61.2 44.8 84.8

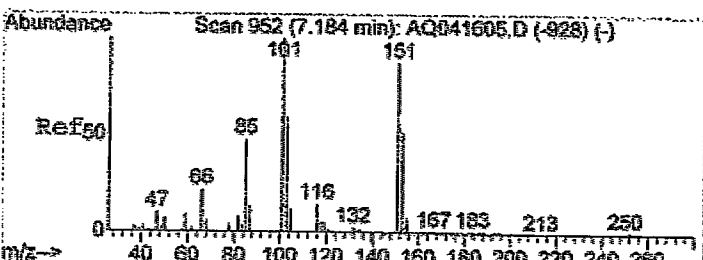
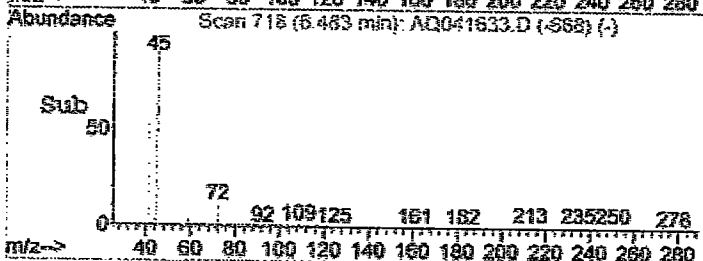
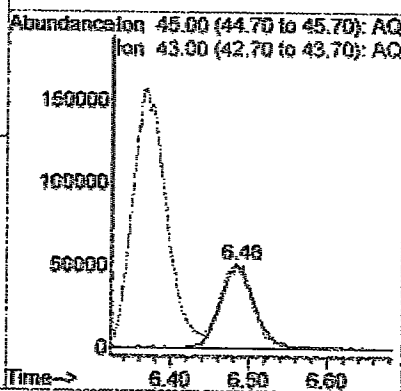
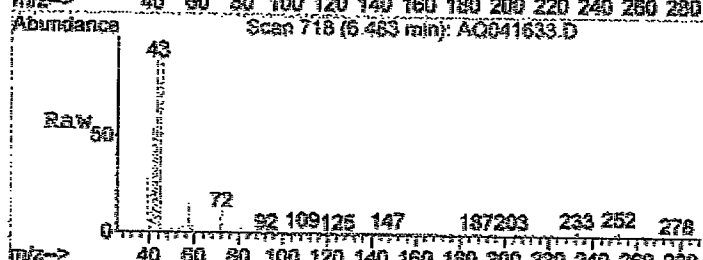


#3



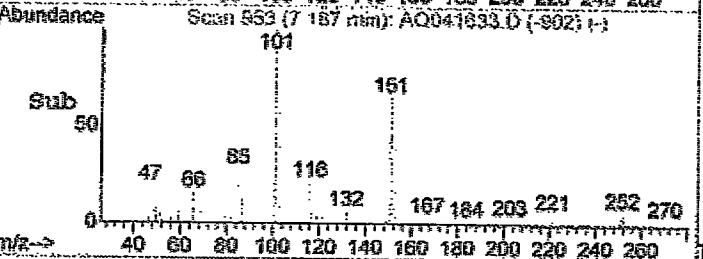
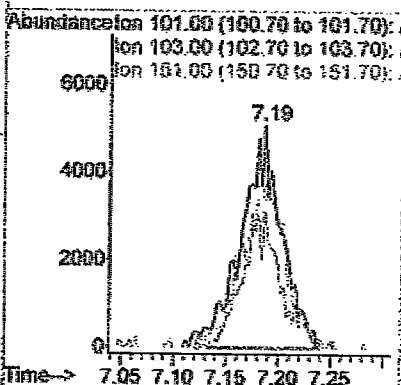
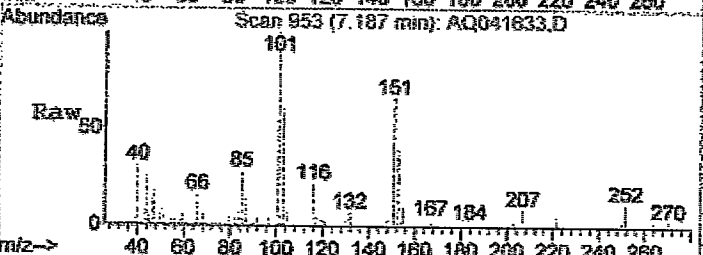
#17  
Isopropyl alcohol  
Concen: 1.93 ppb  
RT: 6.48 min Scan# 718  
Delta R.T. 0.00 min  
Lab File: AQ041633.D  
Acq: 17 Apr 2019 7:20 am

|          |       |       |        |
|----------|-------|-------|--------|
| Tgt Ion: | 45    | Resp: | 152182 |
| Ion      | Ratio | Lower | Upper  |
| 45       | 100   |       |        |
| 43       | 0.0   | 98.7  | 138.7# |

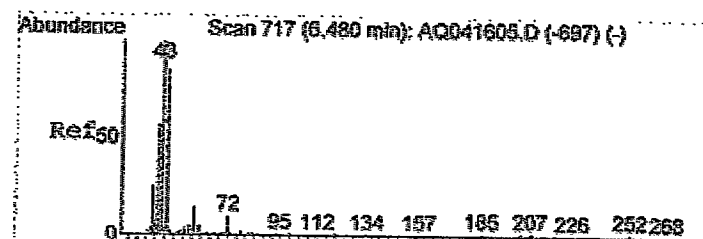


#19  
Freon 113  
Concen: 0.11 ppb  
RT: 7.19 min Scan# 953  
Delta R.T. 0.00 min  
Lab File: AQ041633.D  
Acq: 17 Apr 2019 7:20 am

|          |       |       |       |
|----------|-------|-------|-------|
| Tgt Ion: | 101   | Resp: | 13468 |
| Ion      | Ratio | Lower | Upper |
| 101      | 100   |       |       |
| 103      | 57.3  | 44.2  | 84.2  |
| 151      | 82.8  | 59.9  | 99.9  |

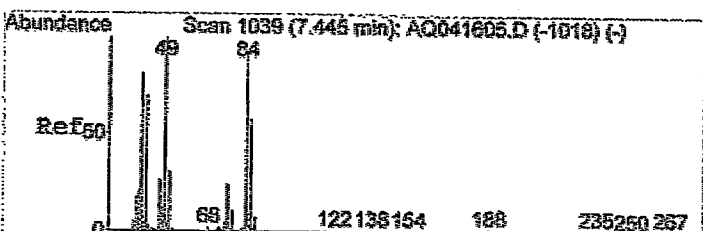
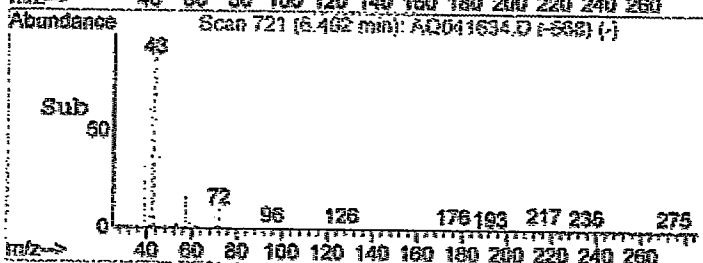
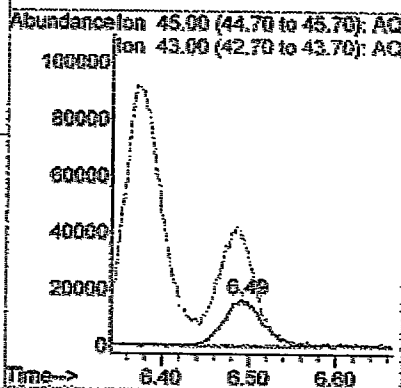
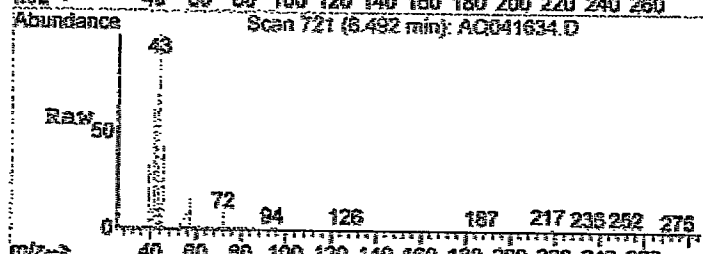


#4



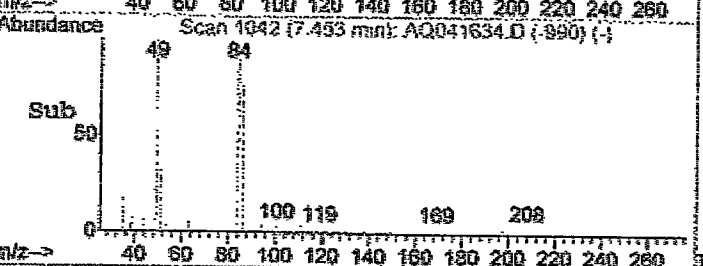
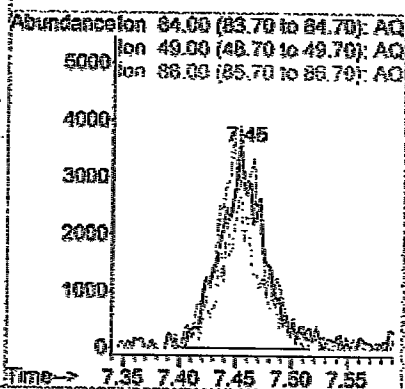
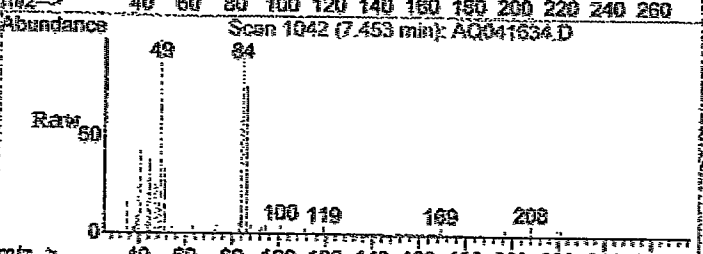
#17  
Isopropyl alcohol  
Concen: 0.68 ppb  
RT: 6.49 min Scan# 721  
Delta R.T. 0.01 min  
Lab File: AQ041634.D  
Acq: 17 Apr 2019 8:00 am

| Tgt Ion:  | 45    | Resp: | 51516  |
|-----------|-------|-------|--------|
| Ion Ratio | Lower | Upper |        |
| 45        | 100   |       |        |
| 43        | 0.0   | 98.7  | 138.7# |



#21  
Methylene chloride  
Concen: 0.23 ppb  
RT: 7.45 min Scan# 1042  
Delta R.T. 0.01 min  
Lab File: AQ041634.D  
Acq: 17 Apr 2019 8:00 am

| Tgt Ion:  | 84    | Resp: | 9365  |
|-----------|-------|-------|-------|
| Ion Ratio | Lower | Upper |       |
| 84        | 100   |       |       |
| 49        | 114.5 | 107.9 | 147.9 |
| 96        | 60.7  | 44.8  | 84.8  |



## *Appendix C*

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### *Validator Qualifications*

**KENNETH R. APPLIN**  
**Geochemist/Data Validator**

Ph.D., Geochemistry and Mineralogy, The Pennsylvania State University

M.S., Geochemistry and Mineralogy, The Pennsylvania State University

B.A., Geological Sciences, SUNY at Geneseo, NY

Dr. Applin has over 35 years of experience working with the geochemistry of natural waters. His prior experience includes working as an Assistant Professor of Geology at the University of Missouri-Columbia and as Chief Hydrogeologist and Geochemist with a leading engineering firm in Rochester, NY. In 1993, he established KR Applin and Associates, a small consulting business that focuses on the geochemistry of natural waters, especially as applied to problems involving the contamination of groundwater and surface water.

Dr. Applin is also an experienced analytical data validator and has provided data validation services since 1994 to a variety of clients performing brownfield cleanup projects, hazardous waste remediation, groundwater monitoring at solid waste facilities, and other projects requiring third-party data validation. Dr. Applin has several years of hands-on experience with the laboratory analysis of natural waters and has successfully completed the USEPA Region II certification courses for performing inorganic and organic analytical data validation.

**MICHAEL K. PERRY**  
**Chemist/Data Validator**

B.S. Chemistry, Georgia State University, Atlanta, GA

A.A.S., Chemical Technology, Alfred State College, Alfred, NY

Mr. Perry has over 30 years of experience in the analytical laboratory business. During his early career, he spent several years as a laboratory analyst performing the analysis of soil, water, and air samples for inorganic and organic chemical parameters. During his last 20 years in the environmental laboratory business, he managed and directed two major analytical laboratories in Rochester, NY. His management responsibilities included oversight of the daily operations of the lab, staff training and supervision, the selection, purchase, and maintenance of analytical instruments, the introduction of new laboratory methods, analytical quality assurance and quality control, data acquisition and management, and other business-related activities.

Mr. Perry has an extensive working knowledge of the methods and procedures used for sampling and analyzing both inorganic and organic analytes in soil, water, and air. He is an accomplished laboratory chemist and is familiar with the analytical methods and procedures established under the USEPA Contract Laboratory Protocols (CLP), the NYSDEC Analytical Services Protocols (ASP), and the NYSDOH Environmental Laboratory Approval Program (ELAP).



# **DATA USABILITY SUMMARY REPORT (DUSR)**

**690 Portland Ave.  
Rochester, NY  
NYSDEC BCP # C 828151**

**SDG: C2002057**  
**3 Air Samples**

Prepared for:

**Ravi Engineering & Land Surveying, P.C.  
2110 South Clinton Ave  
Rochester, NY 14618  
Attention: Lynn Zizari**

**March 2020**



Environmental Data Usability 10028 Deer Park Dr. Dansville, NY 14437 585.991.9156

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## **Summaries of Validated Results**

|           |       |
|-----------|-------|
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|-----------|-------|

## REVIEWER'S NARRATIVE

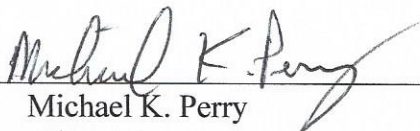
**Ravi Engineering & Land Surveying, P.C. - SDG C2002057**

The data associated with this Sample Delivery Group (SDG) C2002057, analyzed by Centek Laboratories, LLC Syracuse, NY have been reviewed in accordance with assessment criteria provided by the New York State Department of Environmental Conservation following the review procedures provided in the USEPA Functional Guidelines for evaluating organic and inorganic data.

All analytical results reported by the laboratory are considered valid and acceptable except results that have been qualified as rejected, "R". Results qualified as estimated "J", or as non-detects, "U", are considered usable for the purpose of evaluating water and/or soil quality. However, these qualifiers indicate that the accuracy and/or precision of the analytical result is questionable. A summary of all data that have been qualified and the reasons for qualification are provided in the following data usability summary report (DUSR).

Two facts should be noted by all data users. First, the "R" qualifier means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the analyte is present or not. Values qualified with an "R" should not appear on the final data tables because they cannot be relied upon, even as the last resort. Second, no analyte concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error.

Reviewer's Signature: \_\_\_\_\_

  
Michael K. Perry  
Chemist

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

3/27/20

## 1.0 SUMMARY

**SITE:** 690 Portland Avenue  
Rochester, NY

**SAMPLING DATE:** February 26, 2020

**SAMPLE TYPE:** 3 air samples

**LABORATORY:** Centek Laboratories, LLC  
Syracuse, NY

**SDG No.:** C2002057

## 2.0 INTRODUCTION

This data usability summary report (DUSR) was prepared in accordance with guidance provided by the New York State Department of Environmental Conservation (NYSDEC). The DUSR is based on a review and evaluation of the laboratory analytical data package. Specifically, the NYSDEC guidance recommends review and evaluation of the following elements of the data package:

- Completeness of the data package as defined under the requirements of the NYSDEC Analytical Services Protocols (ASP) Category B or the United States Environmental Protection Agency (USEPA) Contract Laboratory Program (CLP) deliverables,
- Compliance with established analyte holding times,
- Adherence to quality control (QC) limits and specifications for blanks, instrument tuning and calibration, surrogate recoveries, spike recoveries, laboratory duplicate analyses, and other QC criteria,
- Adherence to established analytical protocols,
- Conformance of data summary sheets with raw analytical data, and
- Use of correct data qualifiers.



Data deficiencies, analytical protocol deviations, and quality control problems identified using the review criteria above and their effect on the analytical results are discussed in this report.

### **3.0 SAMPLE AND ANALYSIS SUMMARY**

The data package consists of analytical results for three air samples collected on February 26, 2020. These samples were analyzed for TO-15 volatile organic compounds.

All laboratory analyses were performed by Centek Laboratories, LLC, Syracuse, NY and analyzed as SDG C2002057. The analytical results were provided in NYSDEC ASP Category B format, which includes all raw analytical data and laboratory QC data.

### **4.0 GUIDANCE DOCUMENTS AND DATA REVIEW CRITERIA**

The guidance documents used for reviewing laboratory quality control (QC) data and assigning data qualifiers (flags) to analytical results are listed in Table 4-1. The QC limits established in the documents applicable to this data review were used to assess the quality of the analytical results. In some cases, however, QC limits established internally by the laboratory were taken into account to determine data quality.

The QC criteria considered for assessing the usability of the reported analytical results provided for each analyte type (i.e. VOCs, SVOCs, metals, etc.) are listed in Table 4-2. These criteria may vary with the analytical method utilized by the laboratory. These criteria comply with the guidance recommended in Section 2.0 above.

### **5.0 DATA VALIDATION QUALIFIERS**

The letter qualifiers (flags) used to define data usability are described briefly below. These letters are assigned by the data validator to analytical results having questionable accuracy and/or precision as determined by reviewing the laboratory QC data associated with the analytical results.

The laboratory may also use various letters and symbols to flag analytical results generated when QC limits were exceeded. The meanings of these flags may differ from those used by the independent data validator. Those used by the laboratory are provided with the analytical results.

**NOTE:** The assignment of data qualifiers by the data reviewer (validator) to laboratory analytical results should not necessarily be interpreted by the data user as a measure of laboratory ability or proficiency. Rather, the qualifiers are intended to provide a measure of data accuracy and precision to the data user, which, for example, may provide a level of confidence in determining whether or not standards or cleanup objectives have been met.

- U** The analyte was analyzed for but was not detected at or above the sample quantitation limit.
- J** The analyte was positively identified; the associated numerical value is the *approximate* concentration of the analyte in the sample. (The magnitude of any  $\pm$  value associated with the result is not determined by data validation).
- UJ** The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is *approximate* and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R** The sample result is rejected (i.e., is unusable) due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
- N** The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification".
- JN** The analyte is considered to be "presumptively present." The associated numerical value represents its *approximate* concentration.

The validated analytical results are attached to this report. Validation qualifiers (flags) are indicated using red ink. Data sheets having qualified data are signed and dated by the data reviewer.

## **6.0 RESULTS OF THE DATA REVIEW**

The results of the data review are summarized in Table 6-1. The table lists the samples where QC criteria were found to exceed acceptable limits and the actions taken to qualify the associated analytical results.

## **7.0 TOTAL USABLE DATA**

For SDG C2002057, three samples were analyzed and results were reported for 192 analyses. Even though some results were flagged with a “J” as estimated, all results (100%) are considered usable. See the summary table for the flagged analytes and the associated QC reasons.



**TABLE 4-1**

**DATA VALIDATION GUIDANCE DOCUMENTS**

| <b>Analyte Type</b>                     | <b>Validation Guidance</b>                                                                                                                                                                                                                                                             |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| VOCs                                    | USEPA, 2008, Validating Volatile Organic Compounds By Gas Chromatography/Mass Spectrometry; SW-846 Method 8260B; SOP # HW-24, Rev. 2.<br><br>USEPA, 2008, Statement of Work for Organic Analysis of Low/Medium Concentration of Volatile Organic Compounds SOM01.2; SOP HW-33, Rev. 2. |
| SVOCs                                   | USEPA, 2007, Statement of Work for Organic Analysis of Low/Medium Concentration of Semivolatile Organic Compounds SOM01.2; SOP HW-35, Rev. 1.                                                                                                                                          |
| Pesticides/PCBs                         | USEPA, 2006, CLP Organics Data Review and Preliminary Review (CLP/SOW OLMO 4.3); SOP # HW-6, Rev. 14, Part C.                                                                                                                                                                          |
| Metals                                  | USEPA, 2006, Validation of Metals for the Contract Laboratory Program (CLP) based on SOW ILMO 5.3 (SOP Revision 13), SOP # HW-2, Rev. 13.                                                                                                                                              |
| Gen Chemistry                           | NYSDEC, 2005, Analytical Services Protocols (ASP)                                                                                                                                                                                                                                      |
| VOCs<br>(Ambient air)                   | USEPA, 2006, Validating Air Samples, Volatile Organic Analysis of Ambient Air in Canister by Method TO-15; SOP # HW-31, Rev. 4.                                                                                                                                                        |
| Perfluoroalkyl<br>Substances<br>(PFASs) | USEPA, 2018, Data Review and Validation Guidelines for Perfluoroalkyl Substances (PFASs) Analyzed Using EPA Method 537                                                                                                                                                                 |



TABLE 4-2

**QUALITY CONTROL CRITERIA USED FOR VALIDATING  
LABORATORY ANALYTICAL DATA**

| <b>VOCs</b>                                                                                                                                                                                                                                                                    | <b>SVOCs</b>                                                                                                                                                                                                                                                         | <b>Pesticides/PCBs</b>                                                                                                                                                                                       | <b>Metals</b>                                                                                                                                                                                                                                                                       | <b>Gen Chemistry</b>                                                                                                                              | <b>Method TO-15</b>                                                                                                                                                                                                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Completeness of Pkg<br>Sample Preservation<br>Holding Time<br>System Monitoring<br>Compounds<br>Lab Control Sample<br>Matrix Spikes<br>Blanks<br>Instrument Tuning<br>Internal Standards<br>Initial Calibration<br>Continuing Calibration<br>Lab Qualifiers<br>Field Duplicate | Completeness of Pkg<br>Sample Preservation<br>Holding Time<br>Surrogate Recoveries<br>Lab Control Sample<br>Matrix Spikes<br>Blanks<br>Instrument Tuning<br>Internal Standards<br>Initial Calibration<br>Continuing Calibration<br>Lab Qualifiers<br>Field Duplicate | Completeness of Pkg<br>Sample Preservation<br>Holding Time<br>Surrogate Recoveries<br>Matrix Spikes<br>Blanks<br>Instrument Calibration<br>& Verification<br>Analyte ID<br>Lab Qualifiers<br>Field Duplicate | Completeness of Pkg<br>Sample Preservation<br>Holding Time<br>Initial/Continuing<br>Calibration<br>CRDL Standards<br>Blanks<br>Interference Check<br>Sample<br>Spike Recoveries<br>Lab Duplicate<br>Lab Control Sample<br>ICP Serial Dilutions<br>Lab Qualifiers<br>Field Duplicate | Completeness of Pkg<br>Sample Preservation<br>Holding Times<br>Calibration<br>Lab Control Samples<br>Blanks<br>Spike Recoveries<br>Lab Duplicates | Completeness of Pkg<br>Sample Preservation<br>Holding Time<br>Canister Certification<br>Lab Control Sample<br>Instrument Tuning<br>Blanks<br>Initial Calibration &<br>System Performance<br>Daily Calibration<br>Field Duplicate |

| <b>PFASs</b>                                                                                                                                                                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Completeness of Pkg<br>Sample Preservation<br>Holding Time<br>Instr Performance Check<br>Initial Calibration<br>Continuing Calibration<br>Blanks<br>Surrogates<br>Lab Fortified Blank<br>Matrix Spikes<br>Internal Standards |

**Table 6-1 TO-15**

| <b>SAMPLES AFFECTED</b>        | <b>ANALYTES</b>                         | <b>ACTION</b>               | <b>QC VIOLATION</b>                                          | <b>COMMENTS</b>                                                   |
|--------------------------------|-----------------------------------------|-----------------------------|--------------------------------------------------------------|-------------------------------------------------------------------|
| IA708-20200226<br>OAI-20200226 | Acetone                                 | J detects<br>UJ non-detects | Surr. rec < QC limit                                         | Data is estimated for the 10X dilution                            |
| All samples                    | 1,2,4-Trichlorobenzene<br>Vinyl acetate | J detects<br>UJ non-detects | LCS rec < QC limit                                           | Data is estimated                                                 |
| All samples                    | Isopropyl Alcohol                       | JN detects                  | Relative Intensity of<br>characteristic ions not +/-<br>30 % | Compounds are tentatively identified and<br>results are estimated |

## ACRONYMS

|        |                                      |
|--------|--------------------------------------|
| BSP    | Blank Spike                          |
| CCAL   | Continuing Calibration               |
| CCB    | Continuing Calibration Blank         |
| CCV    | Continuing Calibration Verification  |
| CRDL   | Contract Required Detection Limit    |
| CRQL   | Contract Required Quantitation Limit |
| %D     | Percent Difference                   |
| ICAL   | Initial Calibration                  |
| ICB    | Initial Calibration Blank            |
| IS     | Internal Standard                    |
| LCS    | Laboratory Control Sample            |
| MS/MSD | Matrix Spike/Matrix Spike Duplicate  |
| QA     | Quality Assurance                    |
| QC     | Quality Control                      |
| %R     | Percent recovery                     |
| RPD    | Relative Percent Difference          |
| RRF    | Relative Response Factor             |
| %RSD   | Percent Relative Standard Deviation  |
| TAL    | Target Analyte List (metals)         |
| TCL    | Target Compound List (organics)      |

## *Appendix A*

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### *Validated Analytical Results*





## CEN TEK 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**

Pete Morton  
Ravi Engineering & Land Surveying, P.C.  
2110 South Clinton Avenue, Suite 1  
Rochester, NY 14618

Thursday, March 05, 2020

Order No.: C2002057

TEL: (585) 223-3660

FAX

RE: 690 Portland Ave

Dear Pete Morton:

Centek Laboratories, LLC received 3 sample(s) on 2/28/2020 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



**CENTEK LABORATORIES, LLC**

**Date:** 19-Mar-20

---

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Project:** 690 Portland Ave  
**Lab Order:** C2002057

## **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 ( $\pm 2$ ", 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 ( $\pm 1$ ", vacuum, absolute) for the sample to be valid. Once received at the laboratory, the canister vacuum should be confirmed to be 5" of Hg,  $\pm 1$ ". 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

143 Midler Park Drive

Syracuse, NY 13206

315-431-9730

[www.CentekLabs.com](http://www.CentekLabs.com)

### Vapor Intrusion & IAQ

Site Name: 680 Portland Ave.

Project: 45-14-003-P

PO#:

Quote # Q-12

Canister Order #: 8273

### Detection Limit

Spoby

140143

149413 + 02 NYS

Report Level

Level 1

Level II

Cat "B" Like

| TAT               | Check                               | Rush TAT    | Due   |
|-------------------|-------------------------------------|-------------|-------|
| Turnaround Time:  | One                                 | Surcharge % | Date: |
| 5 Business Days   | <input checked="" type="checkbox"/> | 0%          |       |
| 4 Business Days   | <input type="checkbox"/>            | 25%         |       |
| 3 Business Days   | <input type="checkbox"/>            | 50%         |       |
| 2 Business Days   | <input type="checkbox"/>            | 75%         |       |
| *Next Day by 5pm  | <input type="checkbox"/>            | 100%        |       |
| *Next Day by Noon | <input type="checkbox"/>            | 150%        |       |
| *Same Day         | <input type="checkbox"/>            | 200%        |       |

Company: Ravi Engineering  
Report to:  
Address: 2110 South Clinton Av  
City, State, Zip Rochester, NY 14619  
Email: PMorton@ravieng.com  
NMcalpin@ravieng.com  
LTicari@ravieng.com  
Phone: 585-493-2015

|                     |                                     |
|---------------------|-------------------------------------|
| Company:            |                                     |
| Check Here If Same: | <input checked="" type="checkbox"/> |
| Invoice to:         |                                     |
| Address:            |                                     |
| City, State, Zip    |                                     |
| Email:              |                                     |
| Phone:              |                                     |

\*For Same and Next Day TAT Please Notify Lab

[illegible]

|                                 |                               |                                                                                                   |                             |                                                 |
|---------------------------------|-------------------------------|---------------------------------------------------------------------------------------------------|-----------------------------|-------------------------------------------------|
| Chain of Custody<br>Sampled by: | Print Name<br>Whitney McAlpin | Signature<br> | Date/Time<br>02-26-20 10:11 | Courier: CIRCLE ONE<br>FedEx UPS Pickup/Dropoff |
| Relinquished by:                | Whitney McAlpin               |               | 02-27-20 11:50              | *For LAB USE ONLY                               |
| Received at Lab by:             | Robin Gushkin                 | Robin Gushkin                                                                                     | 2-28-20                     | Work Order # 2002057                            |

\*\*\*Chain of Custody must be completed in full. Lack of any missing information will affect your Turn Around Times (TAT)

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

**CEN TEK LABORATORIES, LLC**

Date: 19-Mar-20

---

**CLIENT:** Ravi Engineering & Land Surveying, P.C.  
**Project:** 690 Portland Ave  
**Lab Order:** C2002057

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**Work Order Sample Summary**

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| Lab Sample ID | Client Sample ID | Tag Number | Collection Date | Date Received |
|---------------|------------------|------------|-----------------|---------------|
| C2002057-001A | IA702-20200226   | 158,392    | 2/26/2020       | 2/28/2020     |
| C2002057-002A | I708-20200226    | 328,454    | 2/26/2020       | 2/28/2020     |
| C2002057-003A | OA1-20200226     | 237,381    | 2/26/2020       | 2/28/2020     |

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Lab Order: C2002057  
Client: Ravi Engineering & Land Surveying, P.C.  
Project: 690 Portland Ave

## DATES REPORT

| Sample ID     | Client Sample ID | Collection Date | Matrix | Test Name                               | TCLP Date | Prep Date | Analysis Date |
|---------------|------------------|-----------------|--------|-----------------------------------------|-----------|-----------|---------------|
| C2002057-001A | IA702-20200226   | 2/26/2020       | Air    | 1ug/m3 w/ 0.2ug/M3 CT-TCE-VC-DCE-1,1DCE |           |           | 2/29/2020     |
|               |                  |                 |        | 1ug/m3 w/ 0.2ug/M3 CT-TCE-VC-DCE-1,1DCE |           |           | 2/28/2020     |
| C2002057-002A | I708-20200226    |                 |        | 1ug/m3 w/ 0.2ug/M3 CT-TCE-VC-DCE-1,1DCE |           |           | 2/29/2020     |
|               |                  |                 |        | 1ug/m3 w/ 0.2ug/M3 CT-TCE-VC-DCE-1,1DCE |           |           | 2/28/2020     |
| C2002057-003A | OA1-20200226     |                 |        | 1ug/m3 w/ 0.2ug/M3 CT-TCE-VC-DCE-1,1DCE |           |           | 2/29/2020     |
|               |                  |                 |        | 1ug/m3 w/ 0.2ug/M3 CT-TCE-VC-DCE-1,1DCE |           |           | 2/28/2020     |

## Centek Laboratories, LLC

Date: 10-Mar-20

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Lab Order: C2002057  
 Project: 690 Portland Ave  
 Lab ID: C2002057-001A

Client Sample ID: IA702-20200226  
 Tag Number: 158,392  
 Collection Date: 2/26/2020  
 Matrix: AIR

| Analyses                                       | Result  | DL           | Qual | Units        | DF | Date Analyzed        |
|------------------------------------------------|---------|--------------|------|--------------|----|----------------------|
| <b>FIELD PARAMETERS</b>                        |         | <b>FLD</b>   |      | Analyst:     |    |                      |
| Lab Vacuum In                                  | 0       |              |      | "Hg          |    | 2/28/2020            |
| Lab Vacuum Out                                 | -30     |              |      | "Hg          |    | 2/28/2020            |
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |         | <b>TO-15</b> |      | Analyst: RJP |    |                      |
| 1,1,1-Trichloroethane                          | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |
| 1,1,2,2-Tetrachloroethane                      | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |
| 1,1,2-Trichloroethane                          | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |
| 1,1-Dichloroethane                             | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |
| 1,1-Dichloroethene                             | < 0.040 | 0.040        |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |
| 1,2,4-Trichlorobenzene                         | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |
| 1,2,4-Trimethylbenzene                         | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |
| 1,2-Dibromoethane                              | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |
| 1,2-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |
| 1,2-Dichloroethane                             | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |
| 1,2-Dichloropropane                            | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |
| 1,3,5-Trimethylbenzene                         | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |
| 1,3-butadiene                                  | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |
| 1,3-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |
| 1,4-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |
| 1,4-Dioxane                                    | < 0.30  | 0.30         |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |
| 2,2,4-trimethylpentane                         | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |
| 4-ethyltoluene                                 | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |
| Acetone                                        | 8.7     | 3.0          |      | ppbV         | 10 | 2/29/2020 2:13:00 AM |
| Allyl chloride                                 | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |
| Benzene                                        | 0.36    | 0.15         |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |
| Benzyl chloride                                | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |
| Bromodichloromethane                           | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |
| Bromoform                                      | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |
| Bromomethane                                   | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |
| Carbon disulfide                               | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |
| Carbon tetrachloride                           | 0.070   | 0.030        |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |
| Chlorobenzene                                  | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |
| Chloroethane                                   | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |
| Chloroform                                     | 0.30    | 0.15         |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |
| Chloromethane                                  | 0.51    | 0.15         |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |
| cis-1,2-Dichloroethene                         | < 0.040 | 0.040        |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |
| cis-1,3-Dichloropropene                        | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |
| Cyclohexane                                    | 0.25    | 0.15         |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |
| Dibromochloromethane                           | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |
| Ethyl acetate                                  | 0.48    | 0.15         |      | ppbV         | 1  | 2/28/2020 7:33:00 PM |

Qualifiers: SC Sub-Contracted  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 JN Non-routine analyte. Quantitation estimated.  
 S Spike Recovery outside accepted recovery limits

. Results reported are not blank corrected  
 E Estimated Value above quantitation range  
 J Analyte detected below quantitation limit  
 ND Not Detected at the Limit of Detection  
 DL Detection Limit

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## Centek Laboratories, LLC

Date: 10-Mar-20

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Lab Order: C2002057  
 Project: 690 Portland Ave  
 Lab ID: C2002057-001A

Client Sample ID: IA702-20200226  
 Tag Number: 158,392  
 Collection Date: 2/26/2020  
 Matrix: AIR

| Analyses                                | Result    | DL     | Qual  | Units | DF | Date Analyzed        |
|-----------------------------------------|-----------|--------|-------|-------|----|----------------------|
| 1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE |           |        | TO-15 |       |    | Analyst: RJP         |
| Ethylbenzene                            | 0.12      | 0.15   | J     | ppbV  | 1  | 2/28/2020 7:33:00 PM |
| Freon 11                                | 0.20      | 0.15   |       | ppbV  | 1  | 2/28/2020 7:33:00 PM |
| Freon 113                               | < 0.15    | 0.15   |       | ppbV  | 1  | 2/28/2020 7:33:00 PM |
| Freon 114                               | < 0.15    | 0.15   |       | ppbV  | 1  | 2/28/2020 7:33:00 PM |
| Freon 12                                | 0.49      | 0.15   |       | ppbV  | 1  | 2/28/2020 7:33:00 PM |
| Heptane                                 | 0.19      | 0.15   |       | ppbV  | 1  | 2/28/2020 7:33:00 PM |
| Hexachloro-1,3-butadiene                | < 0.15    | 0.15   |       | ppbV  | 1  | 2/28/2020 7:33:00 PM |
| Hexane                                  | 0.29      | 0.15   |       | ppbV  | 1  | 2/28/2020 7:33:00 PM |
| Isopropyl alcohol                       | 0.78 JN   | 0.15   |       | ppbV  | 1  | 2/28/2020 7:33:00 PM |
| m&p-Xylene                              | 0.34      | 0.30   |       | ppbV  | 1  | 2/28/2020 7:33:00 PM |
| Methyl Butyl Ketone                     | 0.20      | 0.30   | J     | ppbV  | 1  | 2/28/2020 7:33:00 PM |
| Methyl Ethyl Ketone                     | 2.2       | 3.0    | J     | ppbV  | 10 | 2/29/2020 2:13:00 AM |
| Methyl Isobutyl Ketone                  | < 0.30    | 0.30   |       | ppbV  | 1  | 2/28/2020 7:33:00 PM |
| Methyl tert-butyl ether                 | < 0.15    | 0.15   |       | ppbV  | 1  | 2/28/2020 7:33:00 PM |
| Methylene chloride                      | 0.13      | 0.15   | J     | ppbV  | 1  | 2/28/2020 7:33:00 PM |
| o-Xylene                                | 0.13      | 0.15   | J     | ppbV  | 1  | 2/28/2020 7:33:00 PM |
| Propylene                               | < 0.15    | 0.15   |       | ppbV  | 1  | 2/28/2020 7:33:00 PM |
| Styrene                                 | 0.23      | 0.15   |       | ppbV  | 1  | 2/28/2020 7:33:00 PM |
| Tetrachloroethylene                     | < 0.15    | 0.15   |       | ppbV  | 1  | 2/28/2020 7:33:00 PM |
| Tetrahydrofuran                         | 1.8       | 0.15   |       | ppbV  | 1  | 2/28/2020 7:33:00 PM |
| Toluene                                 | 1.4       | 0.15   |       | ppbV  | 1  | 2/28/2020 7:33:00 PM |
| trans-1,2-Dichloroethene                | < 0.15    | 0.15   |       | ppbV  | 1  | 2/28/2020 7:33:00 PM |
| trans-1,3-Dichloropropene               | < 0.15    | 0.15   |       | ppbV  | 1  | 2/28/2020 7:33:00 PM |
| Trichloroethene                         | < 0.030   | 0.030  |       | ppbV  | 1  | 2/28/2020 7:33:00 PM |
| Vinyl acetate                           | < 0.15 UJ | 0.15   |       | ppbV  | 1  | 2/28/2020 7:33:00 PM |
| Vinyl Bromide                           | < 0.15    | 0.15   |       | ppbV  | 1  | 2/28/2020 7:33:00 PM |
| Vinyl chloride                          | < 0.040   | 0.040  |       | ppbV  | 1  | 2/28/2020 7:33:00 PM |
| Surr: Bromofluorobenzene                | 84.0      | 70-130 |       | %REC  | 1  | 2/28/2020 7:33:00 PM |

Qualifiers: SC Sub-Contracted  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 JN Non-routine analyte. Quantitation estimated.  
 S Spike Recovery outside accepted recovery limits

. Results reported are not blank corrected  
 E Estimated Value above quantitation range  
 J Analyte detected below quantitation limit  
 ND Not Detected at the Limit of Detection  
 DL Detection Limit

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mhp 3/25/20



## Centek Laboratories, LLC

Date: 10-Mar-20

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Lab Order: C2002057  
 Project: 690 Portland Ave  
 Lab ID: C2002057-001A

Client Sample ID: IA702-20200226  
 Tag Number: 158,392  
 Collection Date: 2/26/2020  
 Matrix: AIR

| Analyses                                | Result          | DL   | Qual  | Units | DF | Date Analyzed        |
|-----------------------------------------|-----------------|------|-------|-------|----|----------------------|
| 1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE |                 |      | TO-15 |       |    | Analyst: RJP         |
| 1,1,1-Trichloroethane                   | < 0.82          | 0.82 |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| 1,1,2,2-Tetrachloroethane               | < 1.0           | 1.0  |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| 1,1,2-Trichloroethane                   | < 0.82          | 0.82 |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| 1,1-Dichloroethane                      | < 0.61          | 0.61 |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| 1,1-Dichloroethane                      | < 0.16          | 0.16 |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| 1,2,4-Trichlorobenzene                  | < 1.1 <i>WJ</i> | 1.1  |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| 1,2,4-Trimethylbenzene                  | < 0.74          | 0.74 |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| 1,2-Dibromoethane                       | < 1.2           | 1.2  |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| 1,2-Dichlorobenzene                     | < 0.90          | 0.90 |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| 1,2-Dichloroethane                      | < 0.61          | 0.61 |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| 1,2-Dichloropropane                     | < 0.69          | 0.69 |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| 1,3,5-Trimethylbenzene                  | < 0.74          | 0.74 |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| 1,3-butadiene                           | < 0.33          | 0.33 |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| 1,3-Dichlorobenzene                     | < 0.90          | 0.90 |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| 1,4-Dichlorobenzene                     | < 0.90          | 0.90 |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| 1,4-Dioxane                             | < 1.1           | 1.1  |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| 2,2,4-trimethylpentane                  | < 0.70          | 0.70 |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| 4-ethyltoluene                          | < 0.74          | 0.74 |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| Acetone                                 | 21              | 7.1  |       | ug/m3 | 10 | 2/29/2020 2:13:00 AM |
| Allyl chloride                          | < 0.47          | 0.47 |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| Benzene                                 | 1.1             | 0.48 |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| Benzyl chloride                         | < 0.86          | 0.86 |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| Bromodichloromethane                    | < 1.0           | 1.0  |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| Bromoform                               | < 1.6           | 1.6  |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| Bromomethane                            | < 0.58          | 0.58 |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| Carbon disulfide                        | < 0.47          | 0.47 |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| Carbon tetrachloride                    | 0.44            | 0.19 |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| Chlorobenzene                           | < 0.69          | 0.69 |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| Chloroethane                            | < 0.40          | 0.40 |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| Chloroform                              | 1.5             | 0.73 |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| Chloromethane                           | 1.1             | 0.31 |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| cis-1,2-Dichloroethene                  | < 0.16          | 0.16 |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| cis-1,3-Dichloropropene                 | < 0.68          | 0.68 |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| Cyclohexane                             | 0.86            | 0.52 |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| Dibromochloromethane                    | < 1.3           | 1.3  |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| Ethyl acetate                           | 1.7             | 0.54 |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| Ethylbenzene                            | 0.52            | 0.65 | J     | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| Freon 11                                | 1.1             | 0.84 |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| Freon 113                               | < 1.1           | 1.1  |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |
| Freon 114                               | < 1.0           | 1.0  |       | ug/m3 | 1  | 2/28/2020 7:33:00 PM |

Qualifiers: SC Sub-Contracted  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 JN Non-routine analyte. Quantitation estimated.  
 S Spike Recovery outside accepted recovery limits

Results reported are not blank corrected  
 E Estimated Value above quantitation range  
 J Analyte detected below quantitation limit  
 ND Not Detected at the Limit of Detection  
 DL Detection Limit

Page 1 of 6

## Centek Laboratories, LLC

Date: 10-Mar-20

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Lab Order: C2002057  
 Project: 690 Portland Ave  
 Lab ID: C2002057-001A

Client Sample ID: IA702-20200226  
 Tag Number: 158,392  
 Collection Date: 2/26/2020  
 Matrix: AIR

| Analyses                                | Result    | DL    | Qual | Units        | DF | Date Analyzed        |
|-----------------------------------------|-----------|-------|------|--------------|----|----------------------|
| 1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE |           | TO-15 |      | Analyst: RJP |    |                      |
| Freon 12                                | 2.4       | 0.74  |      | ug/m3        | 1  | 2/28/2020 7:33:00 PM |
| Heptane                                 | 0.78      | 0.61  |      | ug/m3        | 1  | 2/28/2020 7:33:00 PM |
| Hexachloro-1,3-butadiene                | < 1.6     | 1.6   |      | ug/m3        | 1  | 2/28/2020 7:33:00 PM |
| Hexane                                  | 1.0       | 0.53  |      | ug/m3        | 1  | 2/28/2020 7:33:00 PM |
| Isopropyl alcohol                       | 1.9 JN    | 0.37  |      | ug/m3        | 1  | 2/28/2020 7:33:00 PM |
| m&p-Xylene                              | 1.5       | 1.3   |      | ug/m3        | 1  | 2/28/2020 7:33:00 PM |
| Methyl Butyl Ketone                     | 0.82      | 1.2   | J    | ug/m3        | 1  | 2/28/2020 7:33:00 PM |
| Methyl Ethyl Ketone                     | 6.5       | 8.8   | J    | ug/m3        | 10 | 2/29/2020 2:13:00 AM |
| Methyl Isobutyl Ketone                  | < 1.2     | 1.2   |      | ug/m3        | 1  | 2/28/2020 7:33:00 PM |
| Methyl tert-butyl ether                 | < 0.54    | 0.54  |      | ug/m3        | 1  | 2/28/2020 7:33:00 PM |
| Methylene chloride                      | 0.45      | 0.52  | J    | ug/m3        | 1  | 2/28/2020 7:33:00 PM |
| o-Xylene                                | 0.56      | 0.65  | J    | ug/m3        | 1  | 2/28/2020 7:33:00 PM |
| Propylene                               | < 0.26    | 0.26  |      | ug/m3        | 1  | 2/28/2020 7:33:00 PM |
| Styrene                                 | 0.98      | 0.64  |      | ug/m3        | 1  | 2/28/2020 7:33:00 PM |
| Tetrachloroethylene                     | < 1.0     | 1.0   |      | ug/m3        | 1  | 2/28/2020 7:33:00 PM |
| Tetrahydrofuran                         | 5.3       | 0.44  |      | ug/m3        | 1  | 2/28/2020 7:33:00 PM |
| Toluene                                 | 5.2       | 0.57  |      | ug/m3        | 1  | 2/28/2020 7:33:00 PM |
| trans-1,2-Dichloroethene                | < 0.59    | 0.59  |      | ug/m3        | 1  | 2/28/2020 7:33:00 PM |
| trans-1,3-Dichloropropene               | < 0.68    | 0.68  |      | ug/m3        | 1  | 2/28/2020 7:33:00 PM |
| Trichloroethene                         | < 0.16    | 0.16  |      | ug/m3        | 1  | 2/28/2020 7:33:00 PM |
| Vinyl acetate                           | < 0.53 NJ | 0.53  |      | ug/m3        | 1  | 2/28/2020 7:33:00 PM |
| Vinyl Bromide                           | < 0.66    | 0.66  |      | ug/m3        | 1  | 2/28/2020 7:33:00 PM |
| Vinyl chloride                          | < 0.10    | 0.10  |      | ug/m3        | 1  | 2/28/2020 7:33:00 PM |

Qualifiers: SC Sub-Contracted  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 JN Non-routine analyte. Quantitation estimated.  
 S Spike Recovery outside accepted recovery limits

Results reported are not blank corrected  
 E Estimated Value above quantitation range  
 J Analyte detected below quantitation limit  
 ND Not Detected at the Limit of Detection  
 DL Detection Limit

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mwp 3/25/20



## Centek Laboratories, LLC

Date: 19-Mar-20

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Lab Order: C2002057  
 Project: 690 Portland Ave  
 Lab ID: C2002057-002A

Client Sample ID: IA708-20200226  
 Tag Number: 328,454  
 Collection Date: 2/26/2020  
 Matrix: AIR

| Analyses                                       | Result  | DL           | Qual | Units               | DF | Date Analyzed        |
|------------------------------------------------|---------|--------------|------|---------------------|----|----------------------|
| <b>FIELD PARAMETERS</b>                        |         | <b>FLD</b>   |      | <b>Analyst:</b>     |    |                      |
| Lab Vacuum In                                  | -4      |              |      | "Hg                 |    | 2/28/2020            |
| Lab Vacuum Out                                 | -30     |              |      | "Hg                 |    | 2/28/2020            |
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |         | <b>TO-15</b> |      | <b>Analyst: RJP</b> |    |                      |
| 1,1,1-Trichloroethane                          | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| 1,1,2,2-Tetrachloroethane                      | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| 1,1,2-Trichloroethane                          | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| 1,1-Dichloroethane                             | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| 1,1-Dichloroethene                             | < 0.040 | 0.040        |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| 1,2,4-Trichlorobenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| 1,2,4-Trimethylbenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| 1,2-Dibromoethane                              | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| 1,2-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| 1,2-Dichloroethane                             | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| 1,2-Dichloropropane                            | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| 1,3,5-Trimethylbenzene                         | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| 1,3-butadiene                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| 1,3-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| 1,4-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| 1,4-Dioxane                                    | < 0.30  | 0.30         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| 2,2,4-trimethylpentane                         | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| 4-ethyltoluene                                 | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Acetone                                        | 3.3     | 3.0          |      | ppbV                | 10 | 2/29/2020 2:59:00 AM |
| Allyl chloride                                 | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Benzene                                        | 0.18    | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Benzyl chloride                                | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Bromodichloromethane                           | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Bromoform                                      | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Bromomethane                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Carbon disulfide                               | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Carbon tetrachloride                           | 0.070   | 0.030        |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Chlorobenzene                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Chloroethane                                   | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Chloroform                                     | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Chloromethane                                  | 0.55    | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| cis-1,2-Dichloroethene                         | < 0.040 | 0.040        |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| cis-1,3-Dichloropropene                        | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Cyclohexane                                    | 0.23    | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Dibromochloromethane                           | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |
| Ethyl acetate                                  | < 0.15  | 0.15         |      | ppbV                | 1  | 2/28/2020 8:19:00 PM |

Qualifiers: SC Sub-Contracted  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 JN Non-routine analyte. Quantitation estimated.  
 S Spike Recovery outside accepted recovery limits

- Results reported are not blank corrected  
 E Estimated Value above quantitation range  
 J Analyte detected below quantitation limit  
 ND Not Detected at the Limit of Detection  
 DL Detection Limit

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## Centek Laboratories, LLC

Date: 19-Mar-20

|                   |                                         |                          |                |
|-------------------|-----------------------------------------|--------------------------|----------------|
| <b>CLIENT:</b>    | Ravi Engineering & Land Surveying, P.C. | <b>Client Sample ID:</b> | IA708-20200226 |
| <b>Lab Order:</b> | C2002057                                | <b>Tag Number:</b>       | 328,454        |
| <b>Project:</b>   | 690 Portland Ave                        | <b>Collection Date:</b>  | 2/26/2020      |
| <b>Lab ID:</b>    | C2002057-002A                           | <b>Matrix:</b>           | AIR            |

| Analyses                                | Result    | DL     | Qual | Units        | DF | Date Analyzed        |
|-----------------------------------------|-----------|--------|------|--------------|----|----------------------|
| 1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE |           | TO-15  |      | Analyst: RJP |    |                      |
| Ethylbenzene                            | < 0.15    | 0.15   |      | ppbV         | 1  | 2/28/2020 8:19:00 PM |
| Freon 11                                | 0.21      | 0.15   |      | ppbV         | 1  | 2/28/2020 8:19:00 PM |
| Freon 113                               | < 0.15    | 0.15   |      | ppbV         | 1  | 2/28/2020 8:19:00 PM |
| Freon 114                               | < 0.15    | 0.15   |      | ppbV         | 1  | 2/28/2020 8:19:00 PM |
| Freon 12                                | 0.51      | 0.15   |      | ppbV         | 1  | 2/28/2020 8:19:00 PM |
| Heptane                                 | < 0.15    | 0.15   |      | ppbV         | 1  | 2/28/2020 8:19:00 PM |
| Hexachloro-1,3-butadiene                | < 0.15    | 0.15   |      | ppbV         | 1  | 2/28/2020 8:19:00 PM |
| Hexane                                  | < 0.15    | 0.15   |      | ppbV         | 1  | 2/28/2020 8:19:00 PM |
| Isopropyl alcohol                       | 0.62 JN   | 0.15   |      | ppbV         | 1  | 2/28/2020 8:19:00 PM |
| m&p-Xylene                              | < 0.30    | 0.30   |      | ppbV         | 1  | 2/28/2020 8:19:00 PM |
| Methyl Butyl Ketone                     | < 0.30    | 0.30   |      | ppbV         | 1  | 2/28/2020 8:19:00 PM |
| Methyl Ethyl Ketone                     | 0.24      | 0.30   | J    | ppbV         | 1  | 2/28/2020 8:19:00 PM |
| Methyl Isobutyl Ketone                  | < 0.30    | 0.30   |      | ppbV         | 1  | 2/28/2020 8:19:00 PM |
| Methyl tert-butyl ether                 | < 0.15    | 0.15   |      | ppbV         | 1  | 2/28/2020 8:19:00 PM |
| Methylene chloride                      | 0.14      | 0.15   | J    | ppbV         | 1  | 2/28/2020 8:19:00 PM |
| o-Xylene                                | < 0.15    | 0.15   |      | ppbV         | 1  | 2/28/2020 8:19:00 PM |
| Propylene                               | < 0.15    | 0.15   |      | ppbV         | 1  | 2/28/2020 8:19:00 PM |
| Styrene                                 | < 0.15    | 0.15   |      | ppbV         | 1  | 2/28/2020 8:19:00 PM |
| Tetrachloroethylene                     | < 0.15    | 0.15   |      | ppbV         | 1  | 2/28/2020 8:19:00 PM |
| Tetrahydrofuran                         | < 0.15    | 0.15   |      | ppbV         | 1  | 2/28/2020 8:19:00 PM |
| Toluene                                 | 0.21      | 0.15   |      | ppbV         | 1  | 2/28/2020 8:19:00 PM |
| trans-1,2-Dichloroethene                | < 0.15    | 0.15   |      | ppbV         | 1  | 2/28/2020 8:19:00 PM |
| trans-1,3-Dichloropropene               | < 0.15    | 0.15   |      | ppbV         | 1  | 2/28/2020 8:19:00 PM |
| Trichloroethene                         | < 0.030   | 0.030  |      | ppbV         | 1  | 2/28/2020 8:19:00 PM |
| Vinyl acetate                           | < 0.15 u5 | 0.15   |      | ppbV         | 1  | 2/28/2020 8:19:00 PM |
| Vinyl Bromide                           | < 0.15    | 0.15   |      | ppbV         | 1  | 2/28/2020 8:19:00 PM |
| Vinyl chloride                          | < 0.040   | 0.040  |      | ppbV         | 1  | 2/28/2020 8:19:00 PM |
| Surr: Bromofluorobenzene                | 71.0      | 70-130 |      | %REC         | 1  | 2/28/2020 8:19:00 PM |

|                    |    |                                                    |    |                                           |
|--------------------|----|----------------------------------------------------|----|-------------------------------------------|
| <b>Qualifiers:</b> | SC | Sub-Contracted                                     | .  | 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    | DL | Detection Limit                           |

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## Centek Laboratories, LLC

Date: 19-Mar-20

|                   |                                         |                          |                |
|-------------------|-----------------------------------------|--------------------------|----------------|
| <b>CLIENT:</b>    | Ravi Engineering & Land Surveying, P.C. | <b>Client Sample ID:</b> | IA708-20200226 |
| <b>Lab Order:</b> | C2002057                                | <b>Tag Number:</b>       | 328,454        |
| <b>Project:</b>   | 690 Portland Ave                        | <b>Collection Date:</b>  | 2/26/2020      |
| <b>Lab ID:</b>    | C2002057-002A                           | <b>Matrix:</b>           | AIR            |

| Analyses                                | Result          | DL    | Qual | Units        | DF | Date Analyzed        |
|-----------------------------------------|-----------------|-------|------|--------------|----|----------------------|
| 1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE |                 | TO-15 |      | Analyst: RJP |    |                      |
| 1,1,1-Trichloroethane                   | < 0.82          | 0.82  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| 1,1,2,2-Tetrachloroethane               | < 1.0           | 1.0   |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| 1,1,2-Trichloroethane                   | < 0.82          | 0.82  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| 1,1-Dichloroethane                      | < 0.61          | 0.61  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| 1,1-Dichloroethane                      | < 0.16          | 0.16  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| 1,2,4-Trichlorobenzene                  | < 1.1 <i>UJ</i> | 1.1   |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| 1,2,4-Trimethylbenzene                  | < 0.74          | 0.74  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| 1,2-Dibromoethane                       | < 1.2           | 1.2   |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| 1,2-Dichlorobenzene                     | < 0.90          | 0.90  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| 1,2-Dichloroethane                      | < 0.61          | 0.61  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| 1,2-Dichloropropane                     | < 0.69          | 0.69  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| 1,3,5-Trimethylbenzene                  | < 0.74          | 0.74  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| 1,3-butadiene                           | < 0.33          | 0.33  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| 1,3-Dichlorobenzene                     | < 0.90          | 0.90  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| 1,4-Dichlorobenzene                     | < 0.90          | 0.90  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| 1,4-Dioxane                             | < 1.1           | 1.1   |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| 2,2,4-trimethylpentane                  | < 0.70          | 0.70  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| 4-ethyltoluene                          | < 0.74          | 0.74  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Acetone                                 | 7.8 <i>J</i>    | 7.1   |      | ug/m3        | 10 | 2/29/2020 2:59:00 AM |
| Allyl chloride                          | < 0.47          | 0.47  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Benzene                                 | 0.57            | 0.48  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Benzyl chloride                         | < 0.86          | 0.86  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Bromodichloromethane                    | < 1.0           | 1.0   |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Bromoform                               | < 1.6           | 1.6   |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Bromomethane                            | < 0.58          | 0.58  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Carbon disulfide                        | < 0.47          | 0.47  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Carbon tetrachloride                    | 0.44            | 0.19  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Chlorobenzene                           | < 0.69          | 0.69  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Chloroethane                            | < 0.40          | 0.40  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Chloroform                              | < 0.73          | 0.73  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Chloromethane                           | 1.1             | 0.31  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| cis-1,2-Dichloroethene                  | < 0.16          | 0.16  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| cis-1,3-Dichloropropene                 | < 0.68          | 0.68  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Cyclohexane                             | 0.79            | 0.52  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Dibromochloromethane                    | < 1.3           | 1.3   |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Ethyl acetate                           | < 0.54          | 0.54  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Ethylbenzene                            | < 0.65          | 0.65  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Freon 11                                | 1.2             | 0.84  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Freon 113                               | < 1.1           | 1.1   |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Freon 114                               | < 1.0           | 1.0   |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |

**Qualifiers:**

|    |                                                    |
|----|----------------------------------------------------|
| SC | Sub-Contracted                                     |
| B  | Analyte detected in the associated Method Blank    |
| H  | Holding times for preparation or analysis exceeded |
| JN | Non-routine analyte. Quantitation estimated.       |
| S  | Spike Recovery outside accepted recovery limits    |

|    |                                           |
|----|-------------------------------------------|
| .  | Results reported are not blank corrected  |
| E  | Estimated Value above quantitation range  |
| J  | Analyte detected below quantitation limit |
| ND | Not Detected at the Limit of Detection    |
| DL | Detection Limit                           |

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mwp 3/25/20



## Centek Laboratories, LLC

Date: 19-Mar-20

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Lab Order: C2002057  
 Project: 690 Portland Ave  
 Lab ID: C2002057-002A

Client Sample ID: IA708-20200226  
 Tag Number: 328,454  
 Collection Date: 2/26/2020  
 Matrix: AIR

| Analyses                                | Result    | DL    | Qual | Units        | DF | Date Analyzed        |
|-----------------------------------------|-----------|-------|------|--------------|----|----------------------|
| 1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE |           | TO-15 |      | Analyst: RJP |    |                      |
| Freon 12                                | 2.5       | 0.74  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Heptane                                 | < 0.61    | 0.61  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Hexachloro-1,3-butadiene                | < 1.6     | 1.6   |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Hexane                                  | < 0.53    | 0.53  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Isopropyl alcohol                       | 1.5 JN    | 0.37  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| m&p-Xylene                              | < 1.3     | 1.3   |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Methyl Butyl Ketone                     | < 1.2     | 1.2   |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Methyl Ethyl Ketone                     | 0.71      | 0.88  | J    | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Methyl Isobutyl Ketone                  | < 1.2     | 1.2   |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Methyl tert-butyl ether                 | < 0.54    | 0.54  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Methylene chloride                      | 0.49      | 0.52  | J    | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| o-Xylene                                | < 0.65    | 0.65  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Propylene                               | < 0.26    | 0.26  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Styrene                                 | < 0.64    | 0.64  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Tetrachloroethylene                     | < 1.0     | 1.0   |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Tetrahydrofuran                         | < 0.44    | 0.44  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Toluene                                 | 0.79      | 0.57  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| trans-1,2-Dichloroethene                | < 0.59    | 0.59  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| trans-1,3-Dichloropropene               | < 0.68    | 0.68  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Trichloroethene                         | < 0.16    | 0.16  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Vinyl acetate                           | < 0.53 UJ | 0.53  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Vinyl Bromide                           | < 0.66    | 0.66  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |
| Vinyl chloride                          | < 0.10    | 0.10  |      | ug/m3        | 1  | 2/28/2020 8:19:00 PM |

Qualifiers: SC Sub-Contracted  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 JN Non-routine analyte. Quantitation estimated.  
 S Spike Recovery outside accepted recovery limits

Results reported are not blank corrected  
 E Estimated Value above quantitation range  
 J Analyte detected below quantitation limit  
 ND Not Detected at the Limit of Detection  
 DL Detection Limit

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## Centek Laboratories, LLC

Date: 10-Mar-20

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Lab Order: C2002057  
 Project: 690 Portland Ave  
 Lab ID: C2002057-003A

Client Sample ID: OAI-20200226  
 Tag Number: 237,381  
 Collection Date: 2/26/2020  
 Matrix: AIR

| Analyses                                       | Result  | DL           | Qual | Units        | DF | Date Analyzed        |
|------------------------------------------------|---------|--------------|------|--------------|----|----------------------|
| <b>FIELD PARAMETERS</b>                        |         | <b>FLD</b>   |      | Analyst:     |    |                      |
| Lab Vacuum In                                  | 0       |              |      | "Hg          |    | 2/28/2020            |
| Lab Vacuum Out                                 | -30     |              |      | "Hg          |    | 2/28/2020            |
| <b>1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE</b> |         | <b>TO-15</b> |      | Analyst: RJP |    |                      |
| 1,1,1-Trichloroethane                          | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| 1,1,2,2-Tetrachloroethane                      | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| 1,1,2-Trichloroethane                          | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| 1,1-Dichloroethane                             | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| 1,1-Dichloroethene                             | < 0.040 | 0.040        |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| 1,2,4-Trichlorobenzene                         | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| 1,2,4-Trimethylbenzene                         | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| 1,2-Dibromoethane                              | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| 1,2-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| 1,2-Dichloroethane                             | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| 1,2-Dichloropropane                            | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| 1,3,5-Trimethylbenzene                         | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| 1,3-butadiene                                  | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| 1,3-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| 1,4-Dichlorobenzene                            | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| 1,4-Dioxane                                    | < 0.30  | 0.30         |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| 2,2,4-trimethylpentane                         | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| 4-ethyltoluene                                 | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Acetone                                        | 3.4     | 3.0          |      | ppbV         | 10 | 2/29/2020 3:44:00 AM |
| Allyl chloride                                 | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Benzene                                        | 0.17    | 0.15         |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Benzyl chloride                                | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Bromodichloromethane                           | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Bromoform                                      | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Bromomethane                                   | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Carbon disulfide                               | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Carbon tetrachloride                           | 0.080   | 0.030        |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Chlorobenzene                                  | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Chloroethane                                   | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Chloroform                                     | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Chloromethane                                  | 0.47    | 0.15         |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| cis-1,2-Dichloroethene                         | < 0.040 | 0.040        |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| cis-1,3-Dichloropropene                        | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Cyclohexane                                    | 0.11    | 0.15         |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Dibromochloromethane                           | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Ethyl acetate                                  | < 0.15  | 0.15         |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |

Qualifiers: SC Sub-Contracted  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 JN Non-routine analyte. Quantitation estimated.  
 S Spike Recovery outside accepted recovery limits

Results reported are not blank corrected  
 E Estimated Value above quantitation range  
 J Analyte detected below quantitation limit  
 ND Not Detected at the Limit of Detection  
 DL Detection Limit

Page 5 of 6



## Centek Laboratories, LLC

Date: 10-Mar-20

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Lab Order: C2002057  
 Project: 690 Portland Ave  
 Lab ID: C2002057-003A

Client Sample ID: OA1-20200226  
 Tag Number: 237,381  
 Collection Date: 2/26/2020  
 Matrix: AIR

| Analyses                                | Result    | DL     | Qual | Units        | DF | Date Analyzed        |
|-----------------------------------------|-----------|--------|------|--------------|----|----------------------|
| 1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE |           | TO-15  |      | Analyst: RJP |    |                      |
| Ethylbenzene                            | < 0.15    | 0.15   |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Freon 11                                | 0.21      | 0.15   |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Freon 113                               | < 0.15    | 0.15   |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Freon 114                               | < 0.15    | 0.15   |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Freon 12                                | 0.51      | 0.15   |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Heptane                                 | < 0.15    | 0.15   |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Hexachloro-1,3-butadiene                | < 0.15    | 0.15   |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Hexane                                  | < 0.15    | 0.15   |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Isopropyl alcohol                       | 0.86 JN   | 0.15   |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| m&p-Xylene                              | < 0.30    | 0.30   |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Methyl Butyl Ketone                     | < 0.30    | 0.30   |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Methyl Ethyl Ketone                     | 0.21      | 0.30   | J    | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Methyl Isobutyl Ketone                  | < 0.30    | 0.30   |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Methyl tert-butyl ether                 | < 0.15    | 0.15   |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Methylene chloride                      | 0.12      | 0.15   | J    | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| o-Xylene                                | < 0.15    | 0.15   |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Propylene                               | < 0.15    | 0.15   |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Styrene                                 | < 0.15    | 0.15   |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Tetrachloroethylene                     | < 0.15    | 0.15   |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Tetrahydrofuran                         | < 0.15    | 0.15   |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Toluene                                 | 0.21      | 0.15   |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| trans-1,2-Dichloroethene                | < 0.15    | 0.15   |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| trans-1,3-Dichloropropene               | < 0.15    | 0.15   |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Trichloroethene                         | < 0.030   | 0.030  |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Vinyl acetate                           | < 0.15 US | 0.15   |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Vinyl Bromide                           | < 0.15    | 0.15   |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Vinyl chloride                          | < 0.040   | 0.040  |      | ppbV         | 1  | 2/28/2020 9:06:00 PM |
| Surr: Bromofluorobenzene                | 73.0      | 70-130 |      | %REC         | 1  | 2/28/2020 9:06:00 PM |

Qualifiers: SC Sub-Contracted  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 JN Non-routine analyte. Quantitation estimated.  
 S Spike Recovery outside accepted recovery limits

Results reported are not blank corrected  
 E Estimated Value above quantitation range  
 J Analyte detected below quantitation limit  
 ND Not Detected at the Limit of Detection  
 DL Detection Limit

Page 6 of 6

## Centek Laboratories, LLC

Date: 10-Mar-20

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Lab Order: C2002057  
 Project: 690 Portland Ave  
 Lab ID: C2002057-003A

Client Sample ID: OA1-20200226  
 Tag Number: 237,381  
 Collection Date: 2/26/2020  
 Matrix: AJR

| Analyses                                | Result          | DL   | Qual     | Units | DF | Date Analyzed        |
|-----------------------------------------|-----------------|------|----------|-------|----|----------------------|
| 1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE |                 |      | TO-15    |       |    | Analyst: RJP         |
| 1,1,1-Trichloroethane                   | < 0.82          | 0.82 |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| 1,1,2,2-Tetrachloroethane               | < 1.0           | 1.0  |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| 1,1,2-Trichloroethane                   | < 0.82          | 0.82 |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| 1,1-Dichloroethane                      | < 0.61          | 0.61 |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| 1,1-Dichloroethene                      | < 0.16          | 0.16 |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| 1,2,4-Trichlorobenzene                  | < 1.1 <i>UJ</i> | 1.1  |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| 1,2,4-Trimethylbenzene                  | < 0.74          | 0.74 |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| 1,2-Dibromoethane                       | < 1.2           | 1.2  |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| 1,2-Dichlorobenzene                     | < 0.90          | 0.90 |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| 1,2-Dichloroethane                      | < 0.61          | 0.61 |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| 1,2-Dichloropropane                     | < 0.69          | 0.69 |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| 1,3,5-Trimethylbenzene                  | < 0.74          | 0.74 |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| 1,3-butadiene                           | < 0.33          | 0.33 |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| 1,3-Dichlorobenzene                     | < 0.90          | 0.90 |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| 1,4-Dichlorobenzene                     | < 0.90          | 0.90 |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| 1,4-Dioxane                             | < 1.1           | 1.1  |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| 2,2,4-trimethylpentane                  | < 0.70          | 0.70 |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| 4-ethyltoluene                          | < 0.74          | 0.74 |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| Acetone                                 | 8.1 <i>J</i>    | 7.1  |          | ug/m3 | 10 | 2/29/2020 3:44:00 AM |
| Allyl chloride                          | < 0.47          | 0.47 |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| Benzene                                 | 0.54            | 0.48 |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| Benzyl chloride                         | < 0.86          | 0.86 |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| Bromodichloromethane                    | < 1.0           | 1.0  |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| Bromoform                               | < 1.6           | 1.6  |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| Bromomethane                            | < 0.58          | 0.58 |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| Carbon disulfide                        | < 0.47          | 0.47 |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| Carbon tetrachloride                    | 0.50            | 0.19 |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| Chlorobenzene                           | < 0.69          | 0.69 |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| Chloroethane                            | < 0.40          | 0.40 |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| Chloroform                              | < 0.73          | 0.73 |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| Chloromethane                           | 0.97            | 0.31 |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| cis-1,2-Dichloroethene                  | < 0.16          | 0.16 |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| cis-1,3-Dichloropropene                 | < 0.68          | 0.68 |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| Cyclohexane                             | 0.38            | 0.52 | <i>J</i> | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| Dibromochloromethane                    | < 1.3           | 1.3  |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| Ethyl acetate                           | < 0.54          | 0.54 |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| Ethylbenzene                            | < 0.65          | 0.65 |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| Freon 11                                | 1.2             | 0.84 |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| Freon 113                               | < 1.1           | 1.1  |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |
| Freon 114                               | < 1.0           | 1.0  |          | ug/m3 | 1  | 2/28/2020 9:06:00 PM |

Qualifiers: SC Sub-Contracted  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 JN Non-routine analyte. Quantitation estimated.  
 S Spike Recovery outside accepted recovery limits

- Results reported are not blank corrected  
 E Estimated Value above quantitation range  
 J Analyte detected below quantitation limit  
 ND Not Detected at the Limit of Detection  
 DL Detection Limit

Page 5 of 6



## Centek Laboratories, LLC

Date: 10-Mar-20

CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Lab Order: C2002057  
 Project: 690 Portland Ave  
 Lab ID: C2002057-003A

Client Sample ID: OA1-20200226  
 Tag Number: 237,381  
 Collection Date: 2/26/2020  
 Matrix: AIR

| Analyses                                | Result    | DL    | Qual | Units        | DF | Date Analyzed        |
|-----------------------------------------|-----------|-------|------|--------------|----|----------------------|
| 1UG/M3 W/ 0.2UG/M3 CT-TCE-VC-DCE-1,1DCE |           | TO-15 |      | Analyst: RJP |    |                      |
| Freon 12                                | 2.5       | 0.74  |      | ug/m3        | 1  | 2/28/2020 9:06:00 PM |
| Heptane                                 | < 0.61    | 0.61  |      | ug/m3        | 1  | 2/28/2020 9:06:00 PM |
| Hexachloro-1,3-butadiene                | < 1.6     | 1.6   |      | ug/m3        | 1  | 2/28/2020 9:06:00 PM |
| Hexane                                  | < 0.53    | 0.53  |      | ug/m3        | 1  | 2/28/2020 9:06:00 PM |
| Isopropyl alcohol                       | 2.1 JN    | 0.37  |      | ug/m3        | 1  | 2/28/2020 9:06:00 PM |
| m&p-Xylene                              | < 1.3     | 1.3   |      | ug/m3        | 1  | 2/28/2020 9:06:00 PM |
| Methyl Butyl Ketone                     | < 1.2     | 1.2   |      | ug/m3        | 1  | 2/28/2020 9:06:00 PM |
| Methyl Ethyl Ketone                     | 0.62      | 0.88  | J    | ug/m3        | 1  | 2/28/2020 9:06:00 PM |
| Methyl Isobutyl Ketone                  | < 1.2     | 1.2   |      | ug/m3        | 1  | 2/28/2020 9:06:00 PM |
| Methyl tert-butyl ether                 | < 0.54    | 0.54  |      | ug/m3        | 1  | 2/28/2020 9:06:00 PM |
| Methylene chloride                      | 0.42      | 0.52  | J    | ug/m3        | 1  | 2/28/2020 9:06:00 PM |
| o-Xylene                                | < 0.65    | 0.65  |      | ug/m3        | 1  | 2/28/2020 9:06:00 PM |
| Propylene                               | < 0.26    | 0.26  |      | ug/m3        | 1  | 2/28/2020 9:06:00 PM |
| Styrene                                 | < 0.64    | 0.64  |      | ug/m3        | 1  | 2/28/2020 9:06:00 PM |
| Tetrachloroethylene                     | < 1.0     | 1.0   |      | ug/m3        | 1  | 2/28/2020 9:06:00 PM |
| Tetrahydrofuran                         | < 0.44    | 0.44  |      | ug/m3        | 1  | 2/28/2020 9:06:00 PM |
| Toluene                                 | 0.79      | 0.57  |      | ug/m3        | 1  | 2/28/2020 9:06:00 PM |
| trans-1,2-Dichloroethene                | < 0.59    | 0.59  |      | ug/m3        | 1  | 2/28/2020 9:06:00 PM |
| trans-1,3-Dichloropropene               | < 0.68    | 0.68  |      | ug/m3        | 1  | 2/28/2020 9:06:00 PM |
| Trichloroethene                         | < 0.16    | 0.16  |      | ug/m3        | 1  | 2/28/2020 9:06:00 PM |
| Vinyl acetate                           | < 0.53 UT | 0.53  |      | ug/m3        | 1  | 2/28/2020 9:06:00 PM |
| Vinyl Bromide                           | < 0.66    | 0.66  |      | ug/m3        | 1  | 2/28/2020 9:06:00 PM |
| Vinyl chloride                          | < 0.10    | 0.10  |      | ug/m3        | 1  | 2/28/2020 9:06:00 PM |

Qualifiers: SC Sub-Contracted  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 JN Non-routine analyte. Quantitation estimated.  
 S Spike Recovery outside accepted recovery limits

Results reported are not blank corrected  
 E Estimated Value above quantitation range  
 J Analyte detected below quantitation limit  
 ND Not Detected at the Limit of Detection  
 DL Detection Limit

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mnp 3/25/20

## *Appendix B*

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### *Laboratory QC Documentation*

Centek Laboratories, LLC  
GC/MS QA-QC Check Report

Tune File : C:\HPCHEM\1\DATA\AR022802.D

Tune Time : 28 Feb 2020 10:09 am

Daily Calibration File : C:\HPCHEM\1\DATA\AR022802.D

|            |                   | (BFB)                   | (IS1)                       | (IS2)  | (IS3)  |
|------------|-------------------|-------------------------|-----------------------------|--------|--------|
|            |                   |                         | 39951                       | 127246 | 127286 |
| File       | Sample            | DL Surrogate Recovery % | Internal Standard Responses |        |        |
| AR022803.D | ALCS1UG-022820    | 112                     | 39850                       | 125765 | 117408 |
| AR022804.D | AMB1UG-022820     | 72                      | 40272                       | 119023 | 106193 |
| AR022813.D | C2002057-001A     | 84                      | 38243                       | 124834 | 119846 |
| AR022814.D | C2002057-002A     | 71                      | 35676                       | 105022 | 93983  |
| AR022815.D | C2002057-003A     | 73                      | 35296                       | 99850  | 97300  |
| AR022819.D | C2002057-001A 10x | 74                      | 31854                       | 88789  | 76110  |
| AR022820.D | C2002057-002A 10x | 54*                     | 31301                       | 82022  | 61795  |
| AR022821.D | C2002057-003A 10x | 57*                     | 30271                       | 77095  | 68468  |
| AR022822.D | ALCS1UGD-022820   | 115                     | 34340                       | 99744  | 93885  |

t - fails 24hr time check \* - fails criteria

Created: Tue Mar 10 09:45:56 2020 MSD #1/





CEN TEK LABORATORIES, LLC

Date: 19-Mar-20

## ANALYTICAL QC SUMMARY REPORT

CLIENT: Ravi Engineering & Land Surveying, P.C.

Work Order: C2002057

Project: 690 Portland Ave

TestCode: 0.20\_NYS

| Sample ID: ALCS1UGD-022820 | SampType: LCSD   | TestCode: 0.20_NYS | Units: ppbV | Prep Date:               | RunNo: 16090  |          |           |             |      |          |      |
|----------------------------|------------------|--------------------|-------------|--------------------------|---------------|----------|-----------|-------------|------|----------|------|
| Client ID: ZZZZZ           | Batch ID: R16090 | TestNo: TO-15      |             | Analysis Date: 2/29/2020 | SeqNo: 184281 |          |           |             |      |          |      |
| Analyte                    | Result           | PQL                | SPK value   | SPK Ref Val              | %REC          | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| 1,1,1-Trichloroethane      | 1.090            | 0.15               | 1           | 0                        | 109           | 70       | 130       | 1.01        | 7.62 | 30       |      |
| 1,1,2,2-Tetrachloroethane  | 1.080            | 0.15               | 1           | 0                        | 108           | 70       | 130       | 1.02        | 5.71 | 30       |      |
| 1,1,2-Trichloroethane      | 1.130            | 0.15               | 1           | 0                        | 113           | 70       | 130       | 1.02        | 10.2 | 30       |      |
| 1,1-Dichloroethane         | 0.9200           | 0.15               | 1           | 0                        | 92.0          | 70       | 130       | 0.92        | 0    | 30       |      |
| 1,1-Dichloroethene         | 0.7800           | 0.040              | 1           | 0                        | 78.0          | 70       | 130       | 0.88        | 12.0 | 30       |      |
| 1,2,4-Trichlorobenzene     | 0.5200           | 0.15               | 1           | 0                        | 52.0          | 70       | 130       | 0.83        | 45.9 | 30       | SR   |
| 1,2,4-Trimethylbenzene     | 0.9100           | 0.15               | 1           | 0                        | 91.0          | 70       | 130       | 0.93        | 2.17 | 30       |      |
| 1,2-Dibromoethane          | 1.030            | 0.15               | 1           | 0                        | 103           | 70       | 130       | 0.98        | 4.98 | 30       |      |
| 1,2-Dichlorobenzene        | 0.9700           | 0.15               | 1           | 0                        | 97.0          | 70       | 130       | 1.01        | 4.04 | 30       |      |
| 1,2-Dichloroethane         | 0.8700           | 0.15               | 1           | 0                        | 87.0          | 70       | 130       | 0.88        | 1.14 | 30       |      |
| 1,2-Dichloropropane        | 1.090            | 0.15               | 1           | 0                        | 109           | 70       | 130       | 0.97        | 11.7 | 30       |      |
| 1,3,5-Trimethylbenzene     | 1.140            | 0.15               | 1           | 0                        | 114           | 70       | 130       | 1.05        | 8.22 | 30       |      |
| 1,3-butadiene              | 1.120            | 0.15               | 1           | 0                        | 112           | 70       | 130       | 0.93        | 18.5 | 30       |      |
| 1,3-Dichlorobenzene        | 0.9400           | 0.15               | 1           | 0                        | 94.0          | 70       | 130       | 1           | 6.19 | 30       |      |
| 1,4-Dichlorobenzene        | 0.8900           | 0.15               | 1           | 0                        | 89.0          | 70       | 130       | 1.02        | 13.6 | 30       |      |
| 1,4-Dioxane                | 1.050            | 0.30               | 1           | 0                        | 105           | 70       | 130       | 1.02        | 2.90 | 30       |      |
| 2,2,4-trimethylpentane     | 1.000            | 0.15               | 1           | 0                        | 100           | 70       | 130       | 0.94        | 6.19 | 30       |      |
| 4-ethyltoluene             | 1.070            | 0.15               | 1           | 0                        | 107           | 70       | 130       | 1.01        | 5.77 | 30       |      |
| Acetone                    | 0.8900           | 0.30               | 1           | 0                        | 89.0          | 70       | 130       | 1.02        | 13.6 | 30       |      |
| Allyl chloride             | 0.7500           | 0.15               | 1           | 0                        | 75.0          | 70       | 130       | 0.87        | 14.8 | 30       |      |
| Benzene                    | 1.010            | 0.15               | 1           | 0                        | 101           | 70       | 130       | 0.97        | 4.04 | 30       |      |
| Benzyl chloride            | 0.7200           | 0.15               | 1           | 0                        | 72.0          | 70       | 130       | 0.96        | 28.6 | 30       |      |
| Bromodichloromethane       | 1.100            | 0.15               | 1           | 0                        | 110           | 70       | 130       | 0.99        | 10.5 | 30       |      |
| Bromoform                  | 0.9300           | 0.15               | 1           | 0                        | 93.0          | 70       | 130       | 0.85        | 8.99 | 30       |      |
| Bromomethane               | 1.070            | 0.15               | 1           | 0                        | 107           | 70       | 130       | 0.77        | 32.6 | 30       | R    |

Qualifiers: . Results reported are not blank corrected  
J Analyte detected below quantitation limit  
S Spike Recovery outside accepted recovery limits

E Estimated Value above quantitation range  
ND Not Detected at the Limit of Detection  
DL Detection Limit

H Holding times for preparation or analysis exceeded  
R RPD outside accepted recovery limits



CLIENT: Ravi Engineering & Land Surveying, P.C.  
 Work Order: C2002057  
 Project: 690 Portland Ave

TestCode: 0.20\_NYS

|                            |                  |                    |             |                          |               |          |           |             |      |          |      |
|----------------------------|------------------|--------------------|-------------|--------------------------|---------------|----------|-----------|-------------|------|----------|------|
| Sample ID: ALCS1UGD-022820 | SampType: LCSD   | TestCode: 0.20_NYS | Units: ppbV | Prep Date:               | RunNo: 16090  |          |           |             |      |          |      |
| Client ID: ZZZZZ           | Batch ID: R16090 | TestNo: TO-15      |             | Analysis Date: 2/29/2020 | SeqNo: 184281 |          |           |             |      |          |      |
| Analyte                    | Result           | PQL                | SPK value   | SPK Ref Val              | %REC          | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Toluene                    | 0.9400           | 0.15               | 1           | 0                        | 94.0          | 70       | 130       | 0.94        | 0    | 30       |      |
| trans-1,2-Dichloroethene   | 0.8200           | 0.15               | 1           | 0                        | 82.0          | 70       | 130       | 0.88        | 7.06 | 30       |      |
| trans-1,3-Dichloropropene  | 0.9400           | 0.15               | 1           | 0                        | 94.0          | 70       | 130       | 0.93        | 1.07 | 30       |      |
| Trichloroethene            | 1.030            | 0.030              | 1           | 0                        | 103           | 70       | 130       | 0.93        | 10.2 | 30       |      |
| Vinyl acetate              | 0.6600           | 0.15               | 1           | 0                        | 66.0          | 70       | 130       | 0.77        | 15.4 | 30       | S    |
| Vinyl Bromide              | 0.8300           | 0.15               | 1           | 0                        | 83.0          | 70       | 130       | 0.78        | 6.21 | 30       |      |
| Vinyl chloride             | 0.9600           | 0.040              | 1           | 0                        | 96.0          | 70       | 130       | 0.87        | 9.84 | 30       |      |
| Surr: Bromofluorobenzene   | 1.150            | 0                  | 1           | 0                        | 115           | 70       | 130       | 0           | 0    | 30       |      |

|             |   |                                                 |    |                                          |   |                                                    |
|-------------|---|-------------------------------------------------|----|------------------------------------------|---|----------------------------------------------------|
| Qualifiers: | . | Results reported are not blank corrected        | E  | Estimated Value above quantitation range | H | Holding times for preparation or analysis exceeded |
|             | J | Analyte detected below quantitation limit       | ND | Not Detected at the Limit of Detection   | R | RPD outside accepted recovery limits               |
|             | S | Spike Recovery outside accepted recovery limits | DL | Detection Limit                          |   |                                                    |

## Centek Laboratories, LLC

## Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\AR022802.D

Vial: 2

Acq On : 28 Feb 2020 10:09 am

Operator: RJP

Sample : A1UG\_1.0

Inst : MSD #1

Misc : A218\_1UG

Multiplr: 1.00

MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\A218\_1UG.M (RTE Integrator)

Title : TO-15 VOA Standards for 5 point calibration

Last Update : Tue Mar 10 09:29:44 2020

Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.33min

Max. RRF Dev : 30% Max. Rel. Area : 150%

|      | Compound                  | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|------|---------------------------|-------|-------|-------|-------|----------|
| 51 T | Toluene                   | 0.793 | 0.666 | 16.0  | 74    | 0.00     |
| 52 T | Methyl Isobutyl Ketone    | 0.760 | 0.631 | 17.0  | 76    | 0.00     |
| 53 T | Dibromochloromethane      | 1.106 | 0.949 | 14.2  | 80    | 0.00     |
| 54 T | Methyl Butyl Ketone       | 0.655 | 0.569 | 13.1  | 78    | 0.00     |
| 55 T | 1,2-dibromoethane         | 0.931 | 0.811 | 12.9  | 79    | 0.00     |
| 56 T | Tetrachloroethylene       | 0.673 | 0.594 | 11.7  | 81    | 0.00     |
| 57 T | Chlorobenzene             | 1.254 | 1.097 | 12.5  | 79    | 0.00     |
| 58 T | Ethylbenzene              | 1.571 | 1.331 | 15.3  | 74    | 0.00     |
| 59 T | m&p-xylene                | 1.329 | 1.144 | 13.9  | 73    | 0.00     |
| 60 T | Nonane                    | 0.833 | 0.739 | 11.3  | 75    | 0.00     |
| 61 T | Styrene                   | 1.101 | 0.979 | 11.1  | 74    | 0.00     |
| 62 T | Bromoform                 | 1.012 | 0.760 | 24.9  | 69    | 0.00     |
| 63 T | o-xylene                  | 1.638 | 1.422 | 13.2  | 75    | 0.00     |
| 64 T | Cumene                    | 1.801 | 1.514 | 15.9  | 73    | 0.00     |
| 65 S | Bromofluorobenzene        | 0.694 | 0.706 | -1.7  | 85    | 0.00     |
| 66 T | 1,1,2,2-tetrachloroethane | 1.428 | 1.289 | 9.7   | 84    | 0.00     |
| 67 T | Propylbenzene             | 0.511 | 0.446 | 12.7  | 74    | 0.00     |
| 68 T | 2-Chlorotoluene           | 0.590 | 0.527 | 10.7  | 77    | 0.00     |
| 69 T | 4-ethyltoluene            | 1.844 | 1.602 | 13.1  | 72    | 0.00     |
| 70 T | 1,3,5-trimethylbenzene    | 1.719 | 1.505 | 12.4  | 73    | 0.00     |
| 71 T | 1,2,4-trimethylbenzene    | 1.347 | 1.165 | 13.5  | 73    | 0.00     |
| 72 T | 1,3-dichlorobenzene       | 1.257 | 1.055 | 16.1  | 73    | 0.00     |
| 73 T | benzyl chloride           | 1.042 | 0.851 | 18.3  | 74    | 0.00     |
| 74 T | 1,4-dichlorobenzene       | 1.235 | 1.027 | 16.8  | 70    | 0.00     |
| 75 T | 1,2,3-trimethylbenzene    | 1.645 | 1.351 | 17.9  | 68    | 0.00     |
| 76 T | 1,2-dichlorobenzene       | 1.256 | 1.053 | 16.2  | 72    | 0.00     |
| 77 T | 1,2,4-trichlorobenzene    | 0.567 | 0.398 | 29.8  | 61    | 0.00     |
| 78 T | Naphthalene               | 1.200 | 0.737 | 38.6# | 52    | 0.00     |
| 79 T | Hexachloro-1,3-butadiene  | 1.151 | 0.939 | 18.4  | 75    | 0.00     |

-NT

(#)= Out of Range

SPCC's out = 0 CCC's out = 0

AR022802.D A218\_1UG.M

Tue Mar 10 09:45:08 2020

MSD1

Page 2

## *Appendix C*

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### *Validator Qualifications*

## **KENNETH R. APPLIN**

### **Geochemist/Data Validator**

Ph.D., Geochemistry and Mineralogy, The Pennsylvania State University

M.S., Geochemistry and Mineralogy, The Pennsylvania State University

B.A., Geological Sciences, SUNY at Geneseo, NY

Dr. Applin has over 35 years of experience working with the geochemistry of natural waters. His prior experience includes working as an Assistant Professor of Geology at the University of Missouri-Columbia and as Chief Hydrogeologist and Geochemist with a leading engineering firm in Rochester, NY. In 1993, he established KR Applin and Associates, a small consulting business that focuses on the geochemistry of natural waters, especially as applied to problems involving the contamination of groundwater and surface water.

Dr. Applin is also an experienced analytical data validator and has provided data validation services since 1994 to a variety of clients performing brownfield cleanup projects, hazardous waste remediation, groundwater monitoring at solid waste facilities, and other projects requiring third-party data validation. Dr. Applin has several years of hands-on experience with the laboratory analysis of natural waters and has successfully completed the USEPA Region II certification courses for performing inorganic and organic analytical data validation.



# **MICHAEL K. PERRY**

## **Chemist/Data Validator**

B.S. Chemistry, Georgia State University, Atlanta, GA

A.A.S., Chemical Technology, Alfred State College, Alfred, NY

Mr. Perry has over 30 years of experience in the analytical laboratory business. During his early career, he spent several years as a laboratory analyst performing the analysis of soil, water, and air samples for inorganic and organic chemical parameters. During his last 20 years in the environmental laboratory business, he managed and directed two major analytical laboratories in Rochester, NY. His management responsibilities included oversight of the daily operations of the lab, staff training and supervision, the selection, purchase, and maintenance of analytical instruments, the introduction of new laboratory methods, analytical quality assurance and quality control, data acquisition and management, and other business-related activities.

Mr. Perry has an extensive working knowledge of the methods and procedures used for sampling and analyzing both inorganic and organic analytes in soil, water, and air. He is an accomplished laboratory chemist and is familiar with the analytical methods and procedures established under the USEPA Contract Laboratory Protocols (CLP), the NYSDEC Analytical Services Protocols (ASP), and the NYSDOH Environmental Laboratory Approval Program (ELAP).

## **APPENDIX F**

# **IRM WORK PLAN AND AGENCY APPROVALS**

July 15, 2014



Mr. Gregory MacLean, P. E.,  
Environmental Engineer II  
New York State Department of Environmental Conservation-Region 8  
Division of Environmental Remediation  
6274 East Avon-Lima Road  
Avon, NY 14414

**Re: Work Plan for Interim Remedial Measure (IRM)  
Vapor Mitigation Systems  
Former JML Optical  
678-690 Portland Ave., Rochester, NY  
BCP Site ID #C828151**

Dear Mr. MacLean:

Ravi Engineering & Land Surveying, P.C. (RE&LS) proposes this IRM Work Plan for the installation of active sub-slab depressurizations systems (SSD systems) at 702 Portland Avenue and 708 Portland Avenue as part of the Remedial Investigation (RI) at the Former JML Optical site at 678-690 Portland Avenue in the City of Rochester, New York (the "Site"). This work will be performed in conformance with New York State Departments of Environmental Conservation (NYSDEC) and Health (NYSDOH, collectively the "State") oversight, and in conformance with the October 2006 Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York ("NYSDOH Guidance").

### **Background**

RE&LS is conducting the Brownfield Cleanup Program (BCP) Supplemental RI at the Site. In response to comments provided by the NYSDEC, RE&LS collected the vapor samples described below at two adjacent residential properties located at 702 Portland Avenue and 708 Portland Avenue in conformance with the NYSDOH Guidance.

Per the NYSDOH Guidance, RE&LS collected one sub-slab vapor sample, one interior indoor air basement sample, and one exterior ambient air sample at each residence for a 24-hour sample duration with Summa Canisters on September 4 and 5, 2013. These samples were submitted for laboratory analysis for volatile organic compounds (VOCs) by USEPA Method TO-15. The vapor contaminant of concern (COC) has been determined to be trichloroethylene (TCE).

### **Results**

The analytical data are attached to this Work Plan, and are tabulated below; the results are interpreted by comparison to the NYSDOH Soil Vapor/Indoor Air Matrix I:

| TCE Vapor Results |                                              |                                            |
|-------------------|----------------------------------------------|--------------------------------------------|
| Sample Location   | Sub Slab - 1<br>( $\mu\text{g}/\text{m}^3$ ) | Indoor - 1<br>( $\mu\text{g}/\text{m}^3$ ) |
| 702 Portland Ave  | 100                                          | 4.1                                        |
| 708 Portland Ave  | 140.0                                        | 43.0                                       |

The NYSDOH Guidance document indicates that the concentration of sub-slab TCE in combination with the concentration of TCE in the indoor air warrants mitigation at both houses. This works plan specifies the proposed remedial systems to be installed, the methodology, and the follow-up testing to be performed as part of the BCP:

### 1.1 Methods of mitigation

The NYSDOH Guidance recommends that SSD systems be utilized to address vapor intrusion conditions in homes which are similar manner to radon mitigation systems installed to mitigate elevated levels of radon. The SSD systems will be installed by Mitigation Tech, a company that specializes in addressing vapor intrusion issues in homes and buildings. The following steps will be followed during installation:

- In conformance with the NYSDOH Guidance, Mitigation Tech will first seal vapor infiltration points through the basement floors. Products designed to seal cracks to prevent air leakage, such as joint sealant, will be utilized.
- Subsequent to sealing the potential subsurface vapor entry points, an active sub-slab depressurization system (SSD System) will be installed. The SSD system will utilize a fan-powered vent and piping to draw vapors from the soil beneath the building's slab, and discharge them to the atmosphere.
- The vapor discharge point will be located approximately one foot above the eave of the roof, and either at least 10 feet horizontally from any window, or 2 feet above any window.
- Design and installation activities will be documented and reported by Mitigation Tech to the NYSDEC and NYSDOH.

### 1.2 Post-mitigation or confirmation testing

Once the SSD Systems are installed, their effectiveness and proper installation will be confirmed as follows:

#### 1.2.1 SSD Systems with Sealing



With the depressurization system operating, Mitigation Tech will check for leaks with a smoke test around concrete cracks, floor joints, and at the suction point. Any leaks identified will be re-sealed until smoke is no longer observed flowing through the opening.

The distance that the pressure changes are induced in the sub-slab area will be tested by operating the SSD Systems and simultaneously observing the movement of smoke downward into small holes at sufficient locations to demonstrate that a vacuum is being created beneath the entire slab.

#### **1.2.2 Sampling**

Post-mitigation sampling will be conducted no sooner than 30 days after installing the SSD Systems.

If post-mitigation sampling results do not indicate a significant decrease in the concentrations of TCE, the reason will be identified and corrected.

### **1.3 Operation, maintenance and monitoring of ASD systems**

Mitigation Tech will conduct routine inspection. And if required, maintenance of the systems within 18 months of installation, and within every 12 to 18 months thereafter. During routine maintenance, the following activities (at a minimum) will be conducted:

- a. a visual inspection of the complete system (e.g., vent fan, piping, warning device or indicator, labeling on systems, soil vapor retarder integrity, etc.),
- b. identification and repair of leaks, and
- c. inspection of the exhaust or discharge point to verify that no air intakes have been located nearby

As appropriate, preventative maintenance (e.g. replacing vent fans), repairs, and/or adjustments will be made to the system as recommended by Mitigation Tech (typically every five to ten years), to ensure their continued effectiveness at mitigating exposures related to soil vapor intrusion.

The SSD Systems will remain operational until the BCP Volunteer produces data to demonstrate the contamination causing the vapor intrusion issues have been remediated to the point that the SSD Systems are no longer required. At this time, the BCP Volunteer shall submit a work plan demonstrating the contamination has been reduced to the point where the mitigations systems are no longer required pursuant to the NYSDOH Guidance.

### **1.4 Post Installation Pressure Field Extension Testing**

A digital micromanometer will be used to measure pressure differentials and values will be recorded on a floor plan. All test holes will be repaired with urethane caulk (MSDS available) applied over a closed cell backer rod. Smoke tubes will be used to identify floor cracks and other openings to the sub-slab that could "short circuit" the pressure field; backdraft testing will also be performed.

### **1.5 System Operation Following Power Loss**

The systems will restart automatically after power restoration.

### **1.6 General Work Plan Provisions**

- A daily tailgate meeting for safety review will be conducted,
- OSHA Hazwoper-trained personnel will perform all drilling operations,
- On-site personnel will utilize Level 4 personal protective equipment (PPE),
- Procedures will follow the BCP Health & Safety Plan (HASP).

### **1.7 Construction Completion Report**

At the conclusion of construction, Mitigation Tech will submit a Construction Completion Report (CCR). This report will include an as-built drawing, showing SSD System locations and components. The CCR will include measurements of created sub-slab to ambient air static pressure differentials, detailed descriptions of SSD System components, and post-installation sampling results.

An Operations, Maintenance, and Monitoring (OM&M) Plan will be submitted with the CCR. The OM&M Plan will be provided to the owner and occupants to facilitate their understanding of the system's operation, maintenance and monitoring. The OM&M Plan will include the following:

- a description of the SSDS Installed and its basic operating principles, with diagram;
- how the owner or tenant can check that the SSDS is operating properly;
- how the SSDS will be maintained and monitored and by whom;
- a description of long-term reporting and annual SSDS certification requirements;
- a list of appropriate actions for the owner or tenant to take if a SSDS warning device (manometer) indicates system degradation or failure;
- a description of the proper operating procedures for the SSDS, including manufacturer's operation and maintenance instructions and warranties; and
- contact information if the owner or tenant has questions, comments, or concerns.

### **1.8 Maintenance and Monitoring**

Future monitoring will be proposed to monitor system communication via differential pressure measurements. The monitoring will be performed annually until a less-frequent monitoring frequency is approved. This routine monitoring will include:

- visual inspection of the equipment and piping;
- inspection of exhaust points to verify that no air intakes have been located nearby;
- identification and subsequent repair of any leaks;
- audible operational status check of vent fans;

- damper adjustments as required to balance parallel branches of system;
- measurement of differential pressure between the indoor air and the sub-slab to ensure a lower pressure is being maintained in the sub-slab relative to indoor ambient, as indicated by the pressure gauge on the fan suction pipe.

In addition, non-routine maintenance may be conducted should it appear that the SSD Systems has reduced its effectiveness due to malfunction, renovation, or other unplanned circumstance. Examples of such circumstances include the following:

- the building's owner or tenants report that a warning device indicates that the SSDS is not operating properly;
- the system is accidentally damaged;
- the building has undergone renovations that may reduce the effectiveness of the system.

The SSD Systems will be operated until such time as permission in writing is received from NYSDEC to terminate operation of the system and remove the equipment.

## **1.9 Schedule**

The Client shall provide notification to tenants for timing of construction, and shall obtain any necessary access agreements.

It is anticipated that work can be completed within thirty days of receipt of order.

## **1.10 Discharge Permitting**

It is understood that an air discharge permit to discharge treated vapors will not be required. It is further understood that all discharges will be direct to the atmosphere and that a Community Air Monitoring Plan is not required.

**New York State Department of Environmental Conservation**  
**Division of Environmental Remediation, Region 8**  
6274 East Avon-Lima Road, Avon, New York 14414-9519  
**Phone:** (585) 226-5353 • **Fax:** (585) 226-8139  
**Website:** [www.dec.ny.gov](http://www.dec.ny.gov)



Joe Martens  
Commissioner

October 7, 2014

Mr. Joseph M. Loboizzo II  
690 Portland Avenue Company  
135 Orchard Park Boulevard  
Rochester, NY 14609-3352

Re: Former JML Optical Site  
678-690 Portland Ave., Rochester, NY  
BCP Site ID #c828151  
IRM Work Plan for Vapor Mitigation Systems

Dear Mr. Loboizzo:

The New York State Department of Environmental Conservation, in consultation with the New York State Department of Health, has reviewed the Interim Remedial Measure (IRM) Work Plan for Vapor Mitigation Systems for this project dated July 15, 2014. The proposed action includes the installation of sub-slab depressurization systems at two off-site residential buildings to address exposure via soil vapor intrusion. Appropriate monitoring and maintenance will ensure the systems are operating effectively. This Work Plan meets program requirements and is hereby approved.

Please provide this office with a minimum one week notice prior to implementing the system installation. Should you have any questions or concerns in the meantime, please contact me at 585-226-5356 or [greg.maclean@dec.ny.gov](mailto:greg.maclean@dec.ny.gov).

Sincerely,

Gregory B. MacLean, P.E.  
Environmental Engineer 2

ec: B. Putzig  
M. Cruden  
J. Mahoney  
M. Doroski  
L. Shaw  
S. Miceli  
P. Morton

# **APPENDIX G**

## **OPERATIONS, MAINTENANCE, & MONITORING PLAN**

# VAPOR INTRUSION MITIGATION SYSTEM (Sub-Slab Depressurization System)

Installed at  
702, 708, 714 Portland Avenue  
Rochester NY 14621

## Operating, Maintenance, and Monitoring Plan

### 1. INTRODUCTION

A Vapor Intrusion Mitigation System has been installed in each building to minimize the potential migration of soil vapors into the building interior. This system creates a negative pressure (vacuum) under the slab and discharges the collected sub-slab soil vapor out a pipe stack above the rear roof. These systems are commonly referred to as Sub-Slab Depressurization Systems (SSDS). The design of a SSDS is similar to a radon mitigation system. This document contains important information pertaining to the successful on-going operation of this system.

### 2. SYSTEM INSTALLATION

The SSDS has been designed and installed by:

MITIGATION TECH  
55 Shumway Road  
Brockport, New York 14420  
Contact: Nicholas Mouganis, NEHA ID# 100722  
Telephone No. 1-800-637-9228

### 3. SYSTEM DESCRIPTION

This SSDS consists of piping, a vacuum fan, indicator gauge, sealant, suction cavities and other components designed to create and maintain a vacuum beneath the concrete floor slab of the building. Piping runs from the selected points through the floor slab and extends to the outside of the building at the rear exterior where it is connected to the vacuum fan. The fan is wired to the main breaker panel. A vacuum gauge (i.e., U-tube oil filled manometer) is located on the piping in the basement. The gauge oil in the gauge is at uneven levels as long as vacuum is present in the fan inlet piping.

### 4. SYSTEM OPERATING INSTRUCTIONS

The system is designed to operate continuously (i.e., 24 hrs per day/7 days per week). A circuit breaker in the main breaker panel controls the fan and the fan also has an on/off switch mounted on the building exterior immediately adjacent to the fan. It is strongly recommended that the fan is always left in the "on" position so that the fan is in continuous operation, except for emergency conditions. The fan restarts automatically in the event of power loss. The system does not require adjustments or changes by the building owner.

The SSDS has been designed specifically for this building as it currently exists. If any structural changes, additions or alterations are made after the SSDS has been installed, such changes or alterations may affect the operation of the system. Please report any changes made to the structure, HVAC systems, slab conditions, etc., so that possible effects of these changes can be evaluated with regard to the operation on the SSDS. Please report any changes to: MITIGATION TECH at 1-800-637-9228

## 5. SYSTEM MAINTENANCE AND INSPECTIONS

Regular inspections are useful to help confirm that the system is continuing to operate satisfactorily. It is recommended that occupants of the home regularly inspect the fan gauge (U-tube oil filled manometer) to verify that the vacuum reading, indicated by a mark on the gauge, has not changed significantly from the position of the mark. The gauge is inspected by observing the level of colored fluid. In addition, the piping should be inspected to verify that it has not been damaged, broken, disconnected, or altered in any way. Check the sealant around the piping through the floor slab to confirm that it is intact. If there are any changes to the piping or the system, call MITIGATION TECH at 1-800-637-9228.

In addition to regular inspections conducted by the building occupants and/or owner, it is recommended that an annual inspection will be conducted by Mitigation Tech or other qualified person. The entity shall submit a Certification of Effectiveness document stating that the SSD system continues to perform to the purpose for which it was designed, based on the following inspection tasks:

- Conduct a visual inspection of the complete system
- Inspect all components for condition and proper operation
- Identify and repair any leaks in accordance with the NYSDOH VI Guidance (i.e.; with the systems running, use smoke sticks to check for leaks through concrete cracks, floor joints and at the suction points; any leaks will be resealed until smoke is no longer observed flowing through the opening).
- Inspect the exhaust or discharge point of each exhaust fan to verify that no air intakes have been located within 10 feet
- Conduct pressure field extension testing (to ensure that the system is maintaining a vacuum beneath the entire slab). Perform at least one differential pressure reading for each building slab section enclosed by a separate footer
- Interview appropriate building occupants seeking comments and observations regarding the operation of the System
- Check to see that the circuit breakers controlling the circuits on which the soil vapor vent fans operate are labeled "Soil Vapor System"

### Maintenance

There are no routine component replacement procedures. Components are to be replaced upon findings of damage or failure of the system, or the building has undergone renovations that may reduce the effectiveness of the SSDS (such as HVAC changes, new combustion appliances, or deterioration of the concrete slab).

#### 6. QUESTIONS, PROBLEMS OR ISSUES

In the event of that the fan or the system is not operational, or is broken, disconnected or damaged in any way, or if there is unusual fan noise, failure to start, or repeated circuit breaker trip, turn fan off and call for service.

For service, call MITIGATION TECH at 1-800-637-9228.

#### 7. SYSTEM OPERATION FOLLOWING POWER LOSS

The systems will restart automatically after power restoration. It is recommended that the systems remain energized when the residences are vacant, as long-term shut downs risk damage to the system fans.

#### 8. INDOOR AIR SAMPLING

Post-mitigation indoor air sampling was conducted after the installation of the SSD system to confirm its effectiveness. Annual indoor air sampling is to be conducted in conformance with the NYSDOH Soil Vapor Intrusion Guidance during the heating season (November 15 - April 15).

Attachment 1: As-Built Drawings





GP  
PRO SERIES

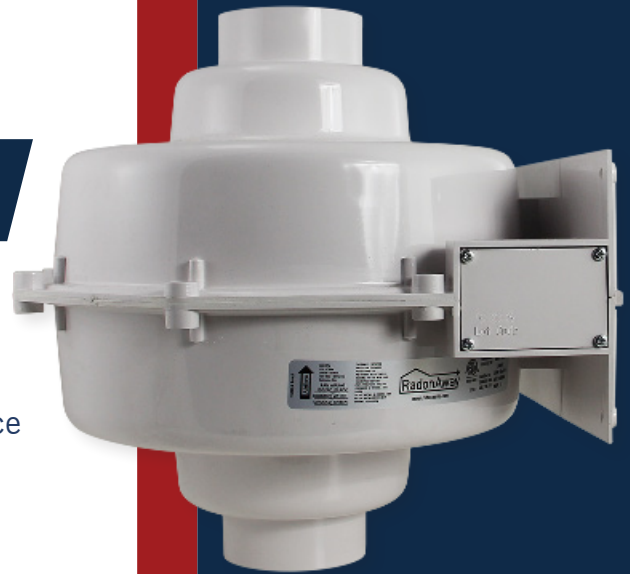
INSTALLS WHITE, STAYS WHITE

## Radon Mitigation Fan

All RadonAway® fans are specifically designed for radon mitigation. GP Series Fans offer a wide range of performance options that make them ideal for most sub-slab radon mitigation systems.

## Features

- NEW Stay-White™ housing
- Quiet operation
- Water-hardened motor
- Seams sealed under negative pressure (to inhibit radon leakage)
- Mounts on duct pipe or with integral flange
- 3" diameter ducts for use with 3" or 4" pipe
- Electrical box for hard wire or plug in
- ETL Listed - for indoor or outdoor use
- 4 interchangeable GP models

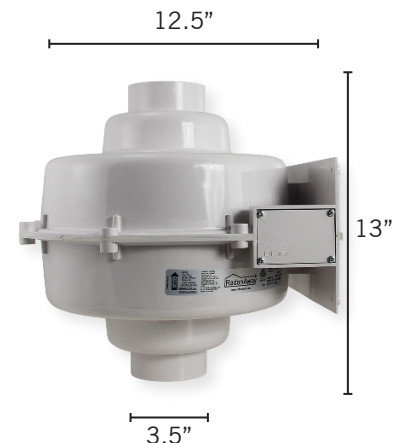


| MODEL | P/N   | FAN DUCT DIAMETER | WATTS  | RECOM. MAX. OP. PRESSURE "WC | TYPICAL CFM vs. STATIC PRESSURE WC |      |      |      |      |      |      |  |
|-------|-------|-------------------|--------|------------------------------|------------------------------------|------|------|------|------|------|------|--|
|       |       |                   |        |                              | 1.0"                               | 1.5" | 2.0" | 2.5" | 3.0" | 3.5" | 4.0" |  |
| GP201 | 28465 | 3"                | 31-67  | 1.8                          | 54                                 | 42   | -    | -    | -    | -    | -    |  |
| GP301 | 28466 | 3"                | 56-100 | 2.3                          | 64                                 | 54   | 41   | -    | -    | -    | -    |  |
| GP401 | 28467 | 3"                | 62-128 | 3.0                          | -                                  | 61   | 52   | 44   | 22   | -    | -    |  |
| GP501 | 28468 | 3"                | 68-146 | 3.8                          | -                                  | -    | 66   | 58   | 50   | 27   | -    |  |

**MADE IN USA** Made in USA with U.S. and imported parts.



**5 YEAR WARRANTY** All RadonAway® inline radon fans are covered by our 5-year, hassle-free warranty.



For Further Information, Contact Your Radon Professional:

## **APPENDIX H**

### **SSDS INSTALLATION FIELD NOTES**

Location 702 Portland Ave Date 4/13/15Project / Client 690 Portland AveJoe LaBrosse

9<sup>15</sup> Lynn Z & Tony A from Ravi; Nick M. Monganis, Aaron, & Bob from Mitigation Tech; Dave from Gallagher Mgmt Properties all on site for installation of Vapor mitigation systems to mitigate TCE vapors from adjacent 690 Portland Ave; i.e. Former JMC Optical facility.

- All do a walk thru to discuss potential issues, and to determine where the systems will be installed
- Dave gives Nick keys to all three properties and replaces a light bulb in basement of 702 Portland. 702 Portland also has 9"x9" vinyl tile flooring but Nick said that ~~none~~ none of it would be disturbed during the slab penetration (the section in the back of the house had no tile)

Location 702 Portland Ave Date 4/13/15Project / Client 1

→ workers being staging materials and drilling / leaving a section of the wall to install a pipe in 702 Portland.

12:00 Bob from Mitigation Tech drills the suction points in the concrete Slab of 702. PID Background levels range from 5.5 - 7.9 ppm because of the PVC adhesive being used in the PVC connections & elbow joints. ~~PVC~~ PID readings taken directly in the the suction holes range from 1.9 - 3.0.

2pm - Fan & exterior vent pipe is installed on east side of house near the north east corner (of 702).

Work went plans to plumb all 3 houses before performing their communication tests.



Location 714 Portland Ave Date 4/14/15  
Project / Client \_\_\_\_\_

- Onsite @ 8:30 AM with Mitigation Tech workers Bob and Aaron (Aaron arrives at 9:30 w/ keys).

- Try to open 708 w/keys but door won't open. It appears to be blocked from inside. I called Gallagher Properties Maintenance worker DAVE who said he would come with key to back door. By 10:30 still not here so materials are shifted to 714. Work begins there instead. The rest of day spent plumbing 714 inside and out.

- 11:00 - #708 is now opened from back door. (GPM worker arrived w/ key to back door and unlocked side door from inside for us to access)

- ~Noon - Bob begins drilling one suction point in concrete slab. PID = 2.9 ppm

- ~1:00 - Bob drills a second suction point

Location 714 Portland Ave Date 4/14/15  
Project / Client 690 Portland / LoBos30  
Vapor Mitigation Sys Installation

PID = 0.7 ppm (1st point is at Back of house - near NE corner / second point is near SW corner of basement)

~2:00 Bob drills 2 pilot holes for communication testing. Preliminary reading (before floor patching) is approx - 0.0027.

Work for now is done at 714 and is moved <sup>over</sup> to 708.

At this point 702 & 708 are fully plumbed inside and 702 and 708 are plumbed on the exterior (By end of day 714 will also have exterior plumbing)

~3:00 Bob Begins drilling 708 slab for suction points. 1st point is at NE corner of house. PID = 2.4. Second point is near the center of the house. PID = 1.2 ppm. Pilot holes are PID = 0.9, 0.7 ppm

~RAVI off site @ 3:30. Mitigation Tech guys still on site

10

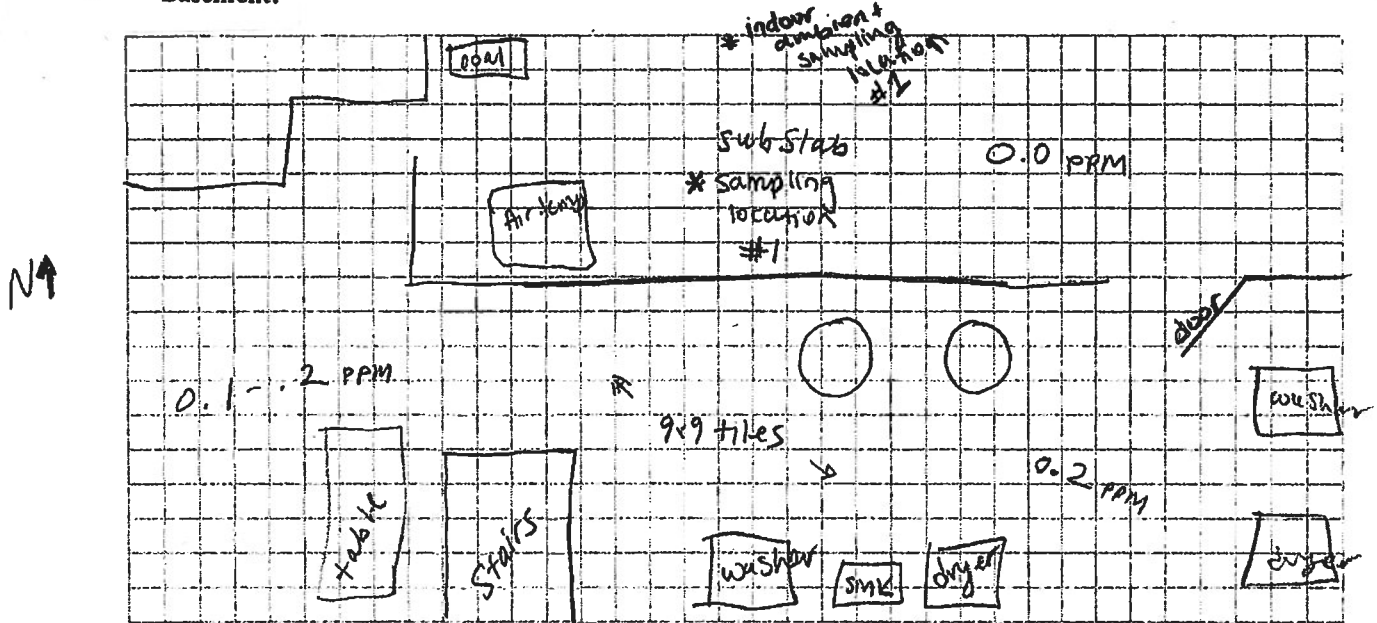
Location 708 Portland Date 4/15/15Project / Client 670 Portland

Tony Hill to cover today.  
I returned PID since all drilling  
is complete and head back to  
office.

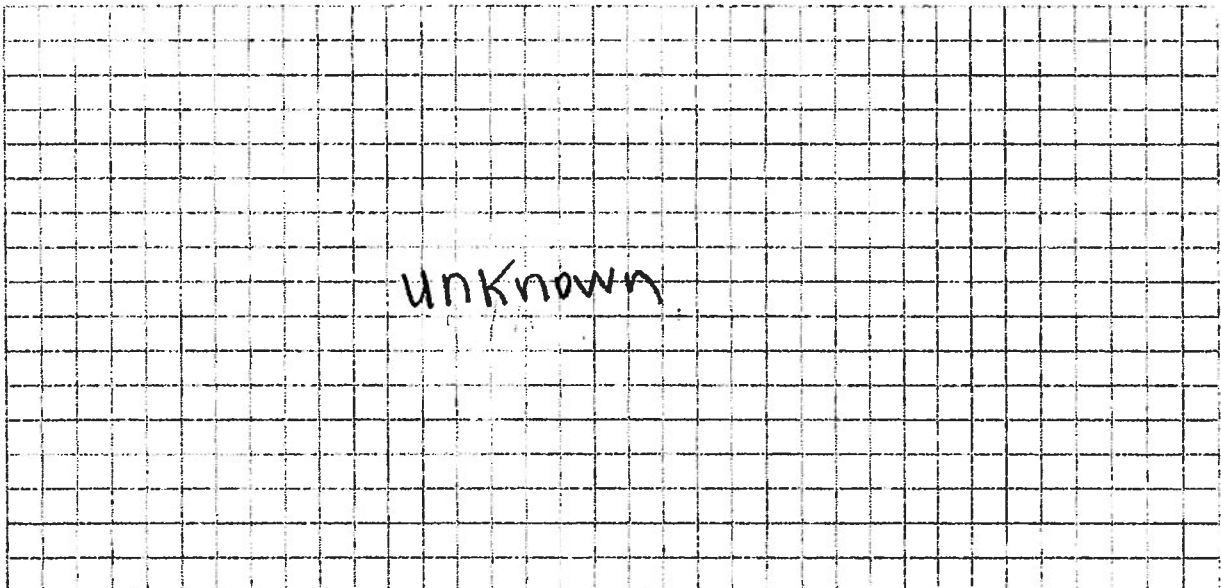
According To Tony, workers will  
patch floor and then conduct  
communication testing of system.

4/13/15 702 Portland Ave  
SSDS Installation by Mitigation Tech

**Basement:**



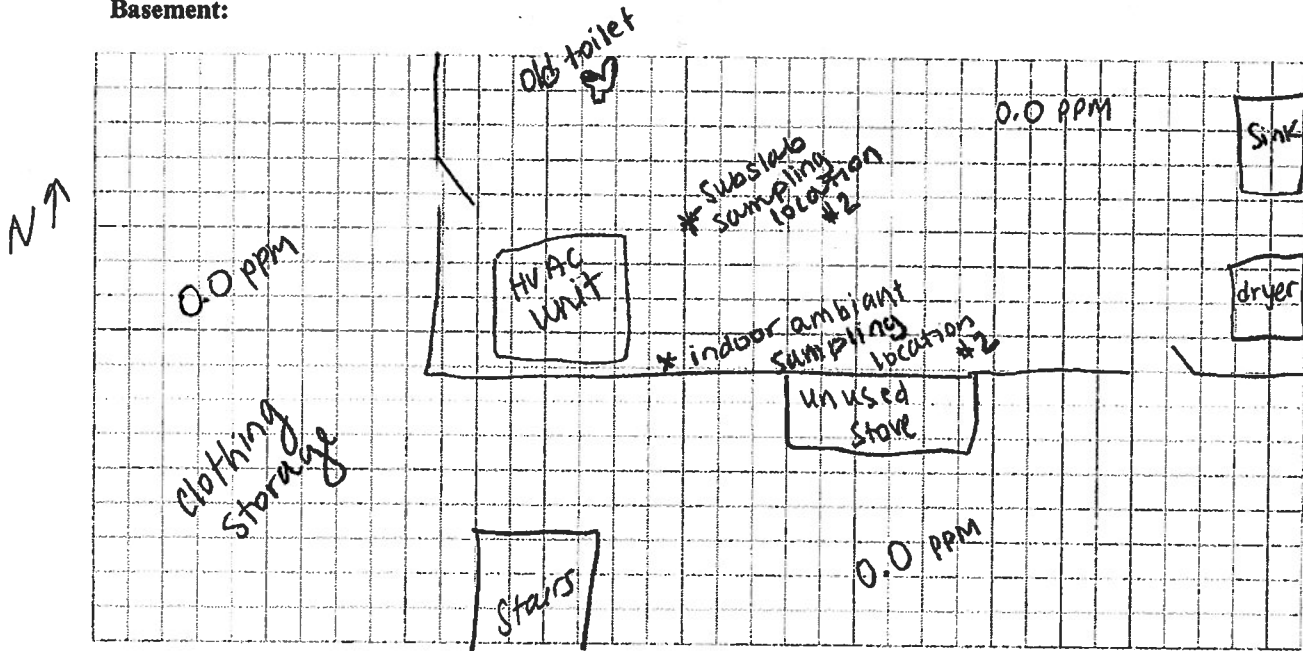
**First Floor:**



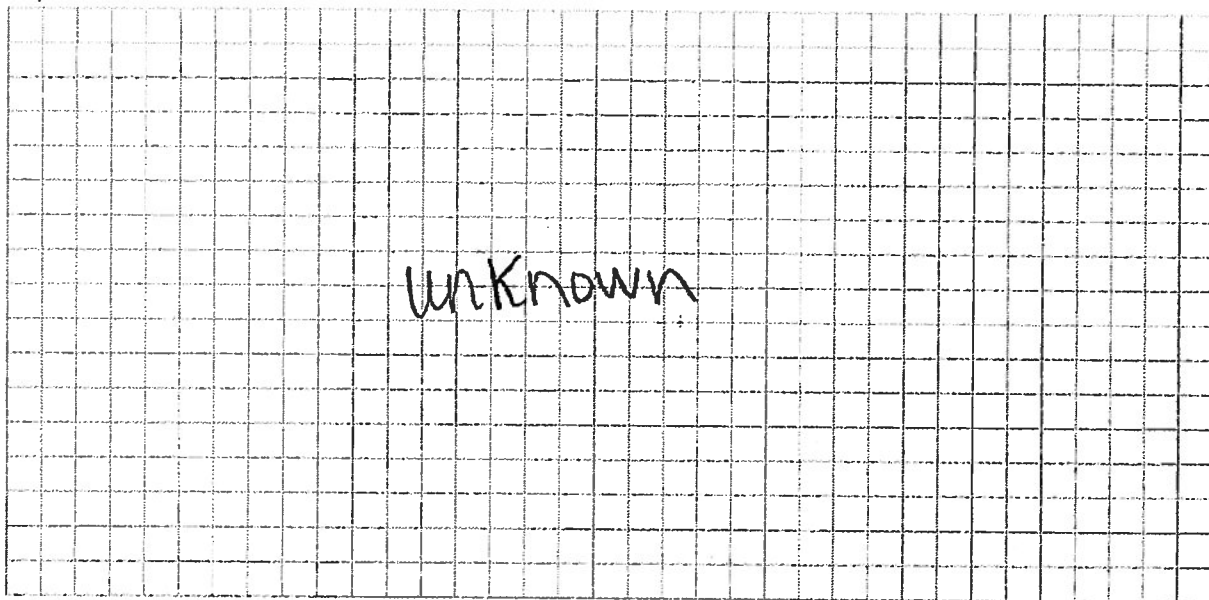


4/14/15 708 Portland Ave  
SSDS Installation by Mitigation Tech

Basement:



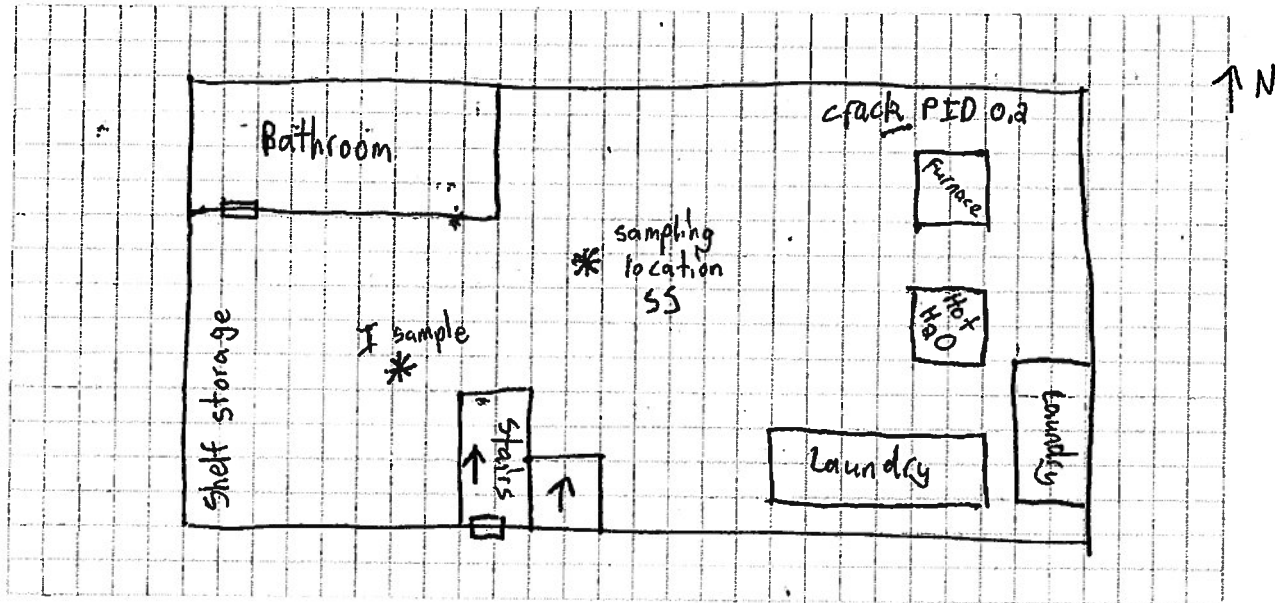
First Floor:



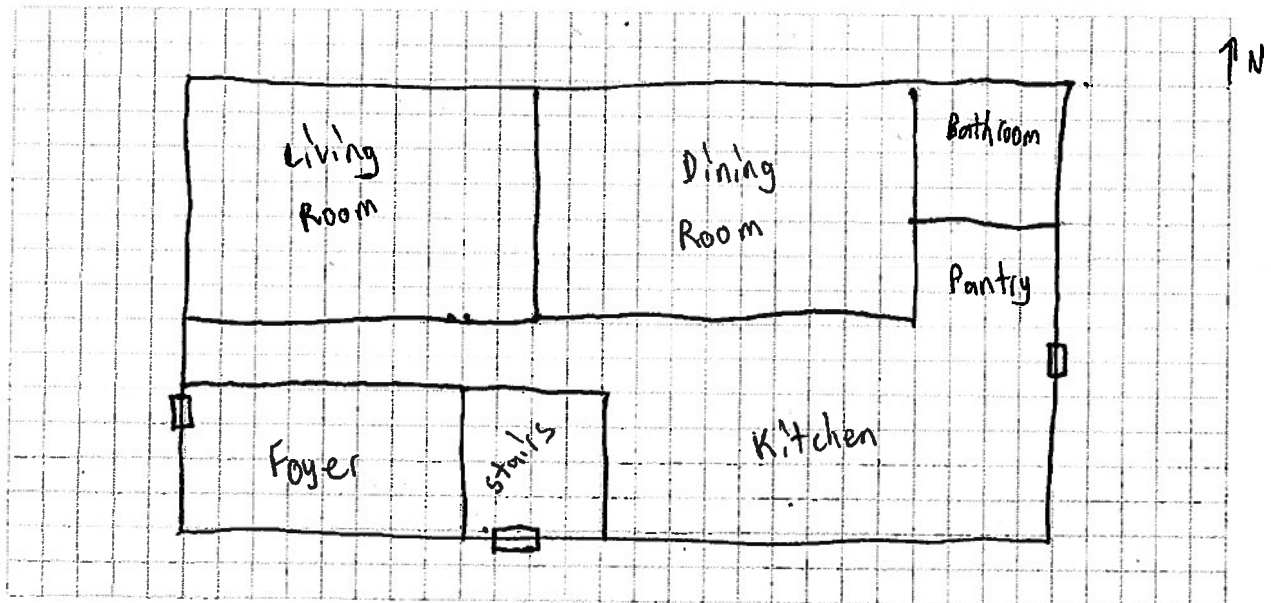
4/14/15 714 Portland Ave

SSDS Installation by Mitigation Tech

**Basement:**



**First Floor:**





# **APPENDIX I**

## **PRODUCT INVENTORY FORMS**

| Product Inventory Form      |                                             |              |           |                      |             |
|-----------------------------|---------------------------------------------|--------------|-----------|----------------------|-------------|
| Address 702 Portland Avenue |                                             |              |           |                      |             |
| Date 11/30/2015             |                                             |              |           |                      |             |
| Location                    | Product Description                         | Size (units) | Condition | Chemical Ingredients | Photo (Y/N) |
| Basement                    | Fabuloso All Purpose Cleaner                | 1 gal        | good      |                      | y           |
| Basement                    | Fantastik Bleach 5-in-1 All Purpose Cleaner | 1 qt         | good      |                      | y           |

| Product Inventory Form      |                     |              |           |                      |             |
|-----------------------------|---------------------|--------------|-----------|----------------------|-------------|
| Address 708 Portland Avenue |                     |              |           |                      |             |
| Date 11/30/2015             |                     |              |           |                      |             |
| Location                    | Product Description | Size (units) | Condition | Chemical Ingredients | Photo (Y/N) |
| Basement                    | None                |              |           |                      |             |

| Product Inventory Form      |                     |              |           |                      |             |
|-----------------------------|---------------------|--------------|-----------|----------------------|-------------|
| Address 714 Portland Avenue |                     |              |           |                      |             |
| Date 11/30/2015             |                     |              |           |                      |             |
| Location                    | Product Description | Size (units) | Condition | Chemical Ingredients | Photo (Y/N) |
| Basement                    | None                |              |           |                      |             |

| Product Inventory Form      |                     |              |           |                      |             |
|-----------------------------|---------------------|--------------|-----------|----------------------|-------------|
| Address 702 Portland Avenue |                     |              |           |                      |             |
| Date 4/12/2018              |                     |              |           |                      |             |
| Location                    | Product Description | Size (units) | Condition | Chemical Ingredients | Photo (Y/N) |
| Basement                    | None                |              |           |                      |             |

| Product Inventory Form      |                     |              |           |                      |             |
|-----------------------------|---------------------|--------------|-----------|----------------------|-------------|
| Address 708 Portland Avenue |                     |              |           |                      |             |
| Date 4/12/2018              |                     |              |           |                      |             |
| Location                    | Product Description | Size (units) | Condition | Chemical Ingredients | Photo (Y/N) |
| Basement                    | None                |              |           |                      |             |

| Product Inventory Form      |                     |              |           |                      |             |
|-----------------------------|---------------------|--------------|-----------|----------------------|-------------|
| Address 714 Portland Avenue |                     |              |           |                      |             |
| Date 4/12/2018              |                     |              |           |                      |             |
| Location                    | Product Description | Size (units) | Condition | Chemical Ingredients | Photo (Y/N) |
| Basement                    | None                |              |           |                      |             |

| Product Inventory Form      |                     |              |           |                      |             |
|-----------------------------|---------------------|--------------|-----------|----------------------|-------------|
| Address 702 Portland Avenue |                     |              |           |                      |             |
| Date 4/10/2019              |                     |              |           |                      |             |
| Location                    | Product Description | Size (units) | Condition | Chemical Ingredients | Photo (Y/N) |
| Basement                    | None                |              |           |                      |             |

| Product Inventory Form      |                     |              |           |                      |             |
|-----------------------------|---------------------|--------------|-----------|----------------------|-------------|
| Address 708 Portland Avenue |                     |              |           |                      |             |
| Date 4/10/2019              |                     |              |           |                      |             |
| Location                    | Product Description | Size (units) | Condition | Chemical Ingredients | Photo (Y/N) |
| Basement                    | None                |              |           |                      |             |

| Product Inventory Form      |                     |              |           |                      |             |
|-----------------------------|---------------------|--------------|-----------|----------------------|-------------|
| Address 714 Portland Avenue |                     |              |           |                      |             |
| Date 4/10/2019              |                     |              |           |                      |             |
| Location                    | Product Description | Size (units) | Condition | Chemical Ingredients | Photo (Y/N) |
| Basement                    | None                |              |           |                      |             |

| Product Inventory Form      |                     |              |           |                      |             |
|-----------------------------|---------------------|--------------|-----------|----------------------|-------------|
| Address 702 Portland Avenue |                     |              |           |                      |             |
| Date 2/26/2020              |                     |              |           |                      |             |
| Location                    | Product Description | Size (units) | Condition | Chemical Ingredients | Photo (Y/N) |
| Basement                    | None                |              |           |                      |             |

| Product Inventory Form      |                     |              |           |                      |             |
|-----------------------------|---------------------|--------------|-----------|----------------------|-------------|
| Address 708 Portland Avenue |                     |              |           |                      |             |
| Date 2/26/2020              |                     |              |           |                      |             |
| Location                    | Product Description | Size (units) | Condition | Chemical Ingredients | Photo (Y/N) |
| Basement                    | None                |              |           |                      |             |

| Product Inventory Form                   |                     |              |           |                      |             |
|------------------------------------------|---------------------|--------------|-----------|----------------------|-------------|
| Address 714 Portland Avenue              |                     |              |           |                      |             |
| Date 2/26/2020                           |                     |              |           |                      |             |
| Location                                 | Product Description | Size (units) | Condition | Chemical Ingredients | Photo (Y/N) |
| No access into building - did not sample |                     |              |           |                      |             |