



**TETRA TECH**

Lucas Stamps  
Project Manager

July 13, 2017

Ms. Shelly Lam  
On-Scene Coordinator  
U.S. Environmental Protection Agency, Region 5  
2525 N. Shadeland Avenue  
Indianapolis, IN 46219

Subject: **Final Site Assessment Report  
Williamson Polishing and Plating Site  
EPA Contract No. EP-S5-13-01  
Technical Direction Document No. S05-0001-1610-011  
Document Tracking No. 1757**

Dear Ms. Lam:

Tetra Tech, Inc. (Tetra Tech) is submitting this final site assessment report summarizing activities conducted at the Williamson Polishing and Plating site from October 31, 2016, to May 2, 2017. The site is located at 2080 Doctor Andrew J. Brown Avenue in Indianapolis, Indiana. This final report addresses comments that you made on an earlier draft.

If you have any questions regarding this report, please contact me at (317) 554-5862 and/or via e-mail at [lstamps@qepi.com](mailto:lstamps@qepi.com).

Respectfully,

Lucas Stamps  
Project Manager

Enclosure

cc: Kevin Scott, Tetra Tech Program Manager  
TDD File

**FINAL SITE ASSESSMENT REPORT  
WILLIAMSON POLISHING AND PLATING SITE  
2080 DOCTOR ANDREW J. BROWN AVENUE  
INDIANAPOLIS, MARION COUNTY, INDIANA**

**U.S. Environmental Protection Agency**  
Emergency Response Branch  
Region 5  
2525 N. Shadeland Avenue  
Indianapolis, IN 46219

*Submitted by*

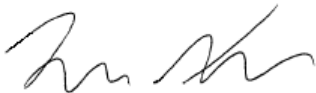
**Tetra Tech, Inc.**  
1611 S. Franklin Rd  
Indianapolis, Indiana 46239

EPA Contract No. EP-S5-13-01

Technical Direction Document No. S05-0001-1610-011  
Document Tracking No. 1757

July 13, 2017

Prepared by



Lucas Stamps  
Project Manager

Approved by



John Dirgo  
START QC Reviewer

## CONTENTS

<u>Section</u>	<u>Page</u>
1.0 INTRODUCTION .....	1
2.0 SITE BACKGROUND .....	1
3.0 FIELD INVESTIGATION .....	2
3.1 OCTOBER 2016 SAMPLING .....	3
3.2 MARCH 2017 SAMPLING .....	4
3.3 APRIL 2017 SAMPLING .....	4
4.0 ANALYTICAL RESULTS .....	5
4.1 OCTOBER 2016 RESULTS .....	5
4.2 MARCH 2017 RESULTS .....	6
4.3 APRIL 2017 RESULTS .....	6
5.0 CONCLUSIONS .....	7
6.0 REFERENCES .....	8

## APPENDIX

- A FIGURES
  - 1 – SITE LOCATION MAP
  - 2 – SITE MAP
  - 3 – MARCH 2017 SOIL GAS SAMPLE EXCEEDANCES
  - 4 – APRIL 2017 GROUNDWATER SAMPLE EXCEEDANCES
  - 5 – APRIL 2017 SOIL GAS SAMPLE EXCEEDANCES
- B ANALYTICAL RESULTS TABLES
- C FIELD LOGBOOK
- D PHOTOGRAPHIC DOCUMENTATION LOG
- E ENVIRONMENTALLY PREFERRED PRACTICES

## ATTACHMENT

- 1 SOIL BORING LOGS
- 2 LOW-FLOW GROUNDWATER SAMPLING DATA SHEETS
- 3 LABORATORY ANALYTICAL REPORTS AND DATA VALIDATION REPORTS

## 1.0 INTRODUCTION

Under the Superfund Technical Assessment and Response Team (START) Contract No. EP-S5-13-01, Technical Direction Document (TDD) No. S05-0001-1610-011, the U.S. Environmental Protection Agency (EPA) tasked Tetra Tech, Inc. (Tetra Tech) to perform a site assessment at the Williamson Polishing and Plating site in Indianapolis, Marion County, Indiana. EPA requested that START conduct field sampling during three separate sampling events. During the three sampling events, START sampled vats and drums inside the building to determine the presence or absence of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) hazardous substances; sampled soil and soil gas surrounding the building for volatile organic compounds (VOCs), metals, and cyanide; and sampled groundwater and soil gas in residential areas around the site for VOCs to assess the possibility of vapor intrusion. Under the direction of EPA On-Scene Coordinator (OSC) Shelly Lam, START conducted the site assessment activities from October 31, 2016, to May 2, 2017.

This site assessment report is organized into the following sections:

- **Introduction** – Provides a brief description of the objectives and scope of site assessment activities
- **Site Background** – Details the site description and history
- **Field Investigation** – Discusses the methods and procedures used during the site assessment
- **Analytical Results** – Presents the analytical results for the samples collected during the site assessment
- **Conclusions** – Provides a summary of the site assessment findings

In addition, this site assessment report contains five appendices and three attachments. Appendix A includes site figures. Appendix B provides summary tables of analytical results. Appendix C provides written field notes recorded by START. Appendix D provides the photographic documentation log of site conditions and activities during the site assessment. Appendix E includes information on environmentally preferred practices used during this project. Soil boring logs are included in Attachment 1. Data sheets from low-flow groundwater sampling are included in Attachment 2. The laboratory analytical reports and data validation reports for the samples collected during the site assessment are included in Attachment 3.

## 2.0 SITE BACKGROUND

The Williamson Polishing and Plating site is located at 2080 Doctor Andrew J. Brown Avenue in Indianapolis, Marion County, Indiana (see Appendix A, Figure 1). The geographic coordinates for the

site are latitude 39.795675 degrees north and longitude 86.135888 degrees west (as measured from the approximate center of the site). The site is located in a primarily commercial and industrial area, with some nearby residential properties (see Appendix A, Figure 2). Immediately to the north of the site lies a former railroad line, with a commercial property beyond that. To the east lies a large manufacturing plant owned by Major Tool and Machine Inc. To the south lies a church, though there are several empty grass-covered parcels that are associated with the site address between the former plating shop and the church. To the west lies a landscaping business, with a currently operating plating shop beyond. There are residential areas within 200 feet to the northwest and southwest of the site. JTV Hill Park is located 0.25 miles south of the site. A school is located 0.17 miles northwest of the site and approximately 32,000 people live within 1 mile of the site according to the Williamson Polishing & Plating Action Memorandum (EPA 2016).

Native soils at the site reportedly consist primarily of 1 to 3 feet of sandy clay underlain by sand and gravel glaciofluvial and/or fluvial deposits associated with the White River basin. However, virtually no native areas were observed near the surface in soil borings advanced during this assessment. The groundwater flow direction is reported to be southwesterly, based on a recent investigation of a nearby facility.

The plating shop began operations in 1937 and continued until June 2016. The facility conducted job shop polishing and electroplating services by plating brass, cadmium, copper, chrome, nickel, silver, tin, zinc, bronze, and nickel finishes on various surfaces. The site is vacant but contains a 14,651-square-foot building with plating process equipment. On October 5, 2016, the Marion County Public Health Department (MCPHD) conducted an exterior inspection after receiving complaints of abandoned chemicals inside the building. Due to violations noted during the exterior inspection, MCPHD and EPA conducted an interior inspection of the facility on October 13, 2016, and found abandoned waste in drums, vats, tanks, buckets, and small containers. MCPHD temporarily secured the building. Following the inspection, MCPHD filed a report with the National Response Center (NRC), and requested assistance from EPA.

### **3.0 FIELD INVESTIGATION**

EPA and START performed the site field investigation from October 31, 2016, to May 2, 2017, during which time a time-critical removal action was conducted at the site by EPA. Field investigation activities were split into three sampling events, and included the collection of waste, surface and subsurface soil, groundwater, and soil gas samples.

The following sections describe the three sampling events, including the rationale and scope of samples collected during each event and their relation to other site activities related to EPA's time-critical removal action.

### **3.1 OCTOBER 2016 SAMPLING**

On October 31, 2016, START, EPA, and MCPHD mobilized to the site to collect samples. The goal of the sampling was to positively identify hazardous waste inside the facility. Due to the short timeline and largely unknown nature of the interior of the plating shop, START conducted the sampling event without a sampling and analysis plan. Initially, START, EPA, and MCPHD personnel conducted a walkthrough in level C personal protective equipment (PPE) to observe the layout of the facility and choose areas to collect samples. START identified and sampled the following areas:

- START screened several plating vats with pH paper, and identified two acid and two base vats to sample. In level C PPE, START sampled the four vats with glass drum thieves and placed the collected material into glass sample jars. The drum thieves were left in place after sampling.
- START identified a full plating vat with "CAD" written on the side, which was selected to be sampled for metals on the assumption that "CAD" was an abbreviation for cadmium. START sampled the vat using the same method described above.
- START observed an approximately 25-gallon steel drum labeled as potassium cyanide which was selected to be sampled for cyanide. In level B PPE, START removed the unsecured lid from the drum and scooped the white powder into a glass sample jar using a disposable plastic scoop, which was left in place after sampling. While START collected this sample, one EPA and one MCPHD employee also donned level B PPE and stood outside the closest open door for support.
- START identified a small, open, unlabeled metal container that got a strong response (above 10,000 parts per billion) when screened with the photoionization detector (PID), which was selected to be sampled for flashpoint. In level C PPE, START decanted the container into a glass sample jar.

After collecting the seven samples described above, START reentered the facility on October 31, 2016, and November 1, 2016, to produce an approximate container inventory based on a facility map provided by the Indiana Department of Environmental Management (IDEM). Analytical results for the seven waste samples are described in Section 4.1.

Due to screening results during the sampling event and evidence of ongoing trespassing at the facility, EPA took emergency actions to secure the facility on October 31, 2016, and November 1, 2016. On November 29, 2016, EPA signed an action memorandum to conduct a time-critical removal action. EPA began the time-critical removal action on December 15, 2016, which was ongoing during the March 2017 and April 2017 sampling events described below.

### **3.2 MARCH 2017 SAMPLING**

At the OSC's request, START collected soil and soil gas samples from seven locations surrounding the former plating shop. The sampling was completed in accordance with the "Final Sampling and Analysis Plan – Williamson Polishing & Plating Site," which was submitted to EPA on March 7, 2017 (Tetra Tech 2017a). Midway Services Inc. of Dunreith, Indiana, advanced soil borings to groundwater at seven locations immediately surrounding the plating shop while START logged soil and collected soil samples to be analyzed for target analyte list (TAL) metals, cyanide, and VOCs (Appendix A, Figure 3). The uppermost interval that had sufficient recovery was sampled for TAL metals and cyanide. All intervals were screened with a PID, and intervals that showed a response were sampled for VOCs. After advancing soil borings, Midway Services stepped over approximately 1 foot and installed expendable soil vapor probes to a depth approximately 1 foot above groundwater. The probes were allowed to equilibrate for 24 hours before samples were collected into 1 liter summa canisters. START submitted the following samples for laboratory analysis:

- Four soil samples were submitted for analysis of VOCs, including one duplicate
- Eight soil samples were submitted for analysis of TAL metals and cyanide, including one duplicate
- Eight soil gas samples were submitted for analysis of VOCs, including one duplicate

The analytical results for samples collected during the March 2017 sampling event are described in Section 4.2. Soil boring logs are provided in Attachment 1.

### **3.3 APRIL 2017 SAMPLING**

Due to numerous exceedances of the vapor intrusion screening level (VISL) for trichlorethene (TCE) in the soil gas samples described in Section 3.2, the OSC requested that START assist with the collection of groundwater and soil gas samples in residential areas downgradient from the site. START collected groundwater and soil gas samples from 12 locations in the area around the site (Appendix A, Figures 4 and 5). The sampling was completed in accordance with the "Final Sampling and Analysis Plan Addendum – Williamson Polishing & Plating Site," which was submitted to EPA on April 21, 2017 (Tetra Tech 2017b). Sample locations were chosen to ensure that residences near the site lay within 100 feet of a sample to accurately assess the potential for vapor intrusion. Thirteen locations were originally chosen for sampling, but one location was abandoned due to interference by underground utilities. One sample location was chosen approximately 0.5 miles north of the site as a background sample.

IDEM advanced soil borings at each of the 12 locations while START logged soil. When it was determined that the boring had encountered groundwater, IDEM advanced the boring 5 feet deeper and installed a 1 inch diameter PVC monitoring well with a 5 foot screen. After installing a temporary monitoring well at a sample location, IDEM stepped over approximately 1 foot and installed an expendable soil gas probe to a depth approximately 1 foot above groundwater. Soil gas probes were allowed to equilibrate for 24 hours before START collected soil gas samples into 1 liter summa canisters. START collected groundwater samples using low-flow methodology. START submitted the following samples for laboratory analysis:

- 14 groundwater samples were submitted for analysis of VOCs, including 2 duplicates
- 14 soil gas samples were submitted for analysis of VOCs, including 1 duplicate and 1 ambient air sample

On May 2, 2017, START returned to the site to abandon temporary monitoring wells. The time-critical removal action at the plating shop concluded on May 8, 2017. The analytical results for samples collected during the April 2017 sampling event are described in Section 4.3. Soil boring logs are provided in Attachment 1. Field sheets used during low-flow groundwater sampling are provided in Attachment 2.

## **4.0 ANALYTICAL RESULTS**

The analytical results for the various samples collected are summarized in tables provided in Appendix B. Laboratory analytical reports and data validation reports are included as an attachment to this report (Attachment 3, Laboratory Analytical Reports and Data Validation Reports). Results that exceeded selected federal screening levels are discussed below.

### **4.1 OCTOBER 2016 RESULTS**

Analytical results for waste samples collected on October 31, 2016, were compared to hazardous waste criteria in Title 40, Section 261 of the *Code of Federal Regulations* (CFR). Seven samples were collected, including five liquid samples from plating vats, one liquid sample from a small container, and one solid sample from a steel drum. All samples were analyzed by Pace Analytical Services in Indianapolis, Indiana. Sample results that exceeded the hazardous waste criteria are detailed below.

- pH: Waste with a pH less than or equal to 2 or greater than or equal to 12.5 is considered hazardous by the characteristic of corrosivity. Four liquid samples that were collected from plating vats were analyzed for pH, three of which were determined to be hazardous. Sample WPP-A22-161031 had a pH of 13, sample WPP-B32-161031 had a pH of 0.82, and sample WPP-B33-161031 had a pH of 0.7.

- Ignitability: Waste with a flashpoint less than 140° F is considered hazardous by the characteristic of ignitability. START collected one liquid sample from a small container found in the plating shop and submitted it for analysis of flashpoint. The flashpoint of sample WPP-FLAM-161031 was 61° F, making it hazardous waste.
- Reactivity: Waste that contains cyanide and reacts when exposed to solutions with a pH between 2 and 12.5 is considered hazardous by the characteristic of reactivity. Although there is no SW-846 method for determining if a waste is considered hazardous due to this characteristic, the high level of total cyanide (7,300 milligrams per kilogram) found in solid sample WPP-CN-161031 suggests that it may be hazardous due to reactivity.
- Toxicity: Liquid sample WPP-A4-161031 was analyzed for total metals. Because the sample was a liquid, it was treated as the Toxicity Characteristic Leaching Procedure (TCLP) leachate, and results were compared to the hazardous waste criteria for the characteristic of toxicity. Cadmium was detected in the sample at 10,900 milligrams per liter (mg/L), which exceeds the hazardous waste criterion of 1 mg/L. Chromium was detected at 23.9 mg/L, which exceeds the hazardous waste criterion of 5 mg/L. These two exceedances confirmed that the sample was representative of hazardous waste.

A summary table of waste sample results is provided in Appendix B, Table 1.

## 4.2 MARCH 2017 RESULTS

Between March 9 and March 10, 2017, START collected 10 soil samples, including 2 duplicates and 8 soil gas samples, including 1 duplicate. Soil samples were submitted to CT Laboratories in Baraboo, Wisconsin for analysis of TAL metals and VOCs. Soil gas samples were submitted to ALS Environmental in Simi Valley, California for analysis of VOCs. Soil sample results were compared to the May 2016 EPA Removal Management Levels (RMLs) for industrial soil at target cancer risk (TCR) of 10E-4 and hazard quotient (HQ) 3. No exceedances were identified in any of the soil sample results. Soil gas samples were compared to the May 2016 EPA Commercial Vapor Intrusion Screening Levels (VISLs) at HQ 3 for non-carcinogens (HQ 1 for TCE) and target risk for carcinogens (TCR) 10E-4. TCE results ranged from 350 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) to 9,300  $\mu\text{g}/\text{m}^3$ , which were all above the VISL of 290  $\mu\text{g}/\text{m}^3$ . No exceedances were identified for any other analytes.

Soil VOC results are summarized in Appendix B, Table 2; soil metals results in Appendix B, Table 3; and soil gas results in Appendix B, Table 4. Sample locations and TCE results for soil gas are shown in Appendix A, Figure 3.

## 4.3 APRIL 2017 RESULTS

Between April 26 and April 28, 2017, START collected 14 groundwater samples, including 2 duplicates and 14 soil gas samples, including 1 duplicate and 1 ambient air sample. Groundwater samples were submitted to CT Laboratories in Baraboo, Wisconsin for analysis of VOCs, and soil gas samples were

submitted to ALS Environmental in Simi Valley, California for analysis of VOCs. Both sample media were compared to the May 2016 EPA Residential VISLs at HQ 3 for non-carcinogens (HQ 1 for TCE) and TCR 10E-4. Samples that exceeded VISLs are described below:

- Groundwater: Three samples exceeded the target groundwater VISL for TCE, which is 5.2 micrograms per liter ( $\mu\text{g/L}$ ). TCE was detected at 40  $\mu\text{g/L}$  in sample WPP-GW05-170427 (41  $\mu\text{g/L}$  in its duplicate), 25  $\mu\text{g/L}$  in sample WPP-GW07-170427, and 39  $\mu\text{g/L}$  in sample WPP-GW11-170428.
- Soil Gas: Seven soil gas samples exceeded the VISL for acrolein, which is 2.1  $\mu\text{g/m}^3$ . Acrolein was detected at 15  $\mu\text{g/m}^3$  in sample WPP-SG02-170426, 7.9  $\mu\text{g/m}^3$  in sample WPP-SG03-170426, 11  $\mu\text{g/m}^3$  in sample WPP-SG06-170426, 14  $\mu\text{g/m}^3$  in sample WPP-SG08-170426, 9.4  $\mu\text{g/m}^3$  in sample WPP-SG10-170426, 11 in  $\mu\text{g/m}^3$  in sample WPP-SG11-170426, and 10  $\mu\text{g/m}^3$  in sample WPP-SG12-170426.

Acrolein was not analyzed in the groundwater samples because it was not a suspected contaminant of concern, and would have required the collection of unpreserved groundwater samples. Groundwater results are summarized in Appendix B, Table 5 and soil gas results are summarized in Appendix B, Table 6. Groundwater and soil gas sample locations and exceedances of VISLs are presented in Appendix A, Figures 4 and 5, respectively.

## 5.0 CONCLUSIONS

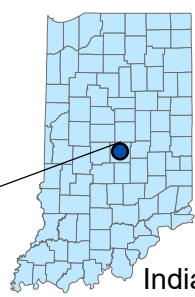
START collected 53 samples for laboratory analysis from within and around the Williamson Polishing and Plating site between October 31, 2016, and May 2, 2017. The results from seven waste samples collected within the plating shop identified hazardous waste at the site and provided evidence to justify a time-critical removal action that took place from December 15, 2016, to May 8, 2017. During the removal action, TCE was identified in exceedance of the EPA VISL at seven soil gas locations immediately surrounding the former plating shop. Additional samples identified TCE in groundwater above the EPA target groundwater VISL at three locations near residential areas downgradient from the site. Co-located soil gas samples did not contain TCE above the EPA VISL, so no complete vapor intrusion pathway was identified. Acrolein was identified above the EPA VISL at seven locations in the downgradient residential area, but was not analyzed in the groundwater samples and was not detected above the reporting limit in the seven soil gas samples taken around the plating shop. It is not suspected that the Williamson Polishing and Plating site is a source for acrolein in the area surrounding the site.

## 6.0 REFERENCES

- U.S. Environmental Protection Agency (EPA). 2016. “Williamson Polishing & Plating Action Memorandum.” November 29. Accessed online at:  
[https://www.epaossc.org/site/site\\_profile.aspx?site\\_id=11878](https://www.epaossc.org/site/site_profile.aspx?site_id=11878)
- Tetra Tech, Inc. (Tetra Tech). 2017a. “Final Sampling and Analysis Plan – Williamson Polishing & Plating Site.” March 7.
- Tetra Tech. 2017b. “Final Sampling and Analysis Plan Addendum – Williamson Polishing & Plating Site.” April 21.


**APPENDIX A**  
**FIGURES**

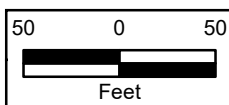
- 1 – SITE LOCATION MAP
- 2 – SITE MAP
- 3 – MARCH 2017 SOIL GAS SAMPLE EXCEEDANCES
- 4 – APRIL 2017 GROUNDWATER SAMPLE EXCEEDANCES
- 5 – APRIL 2017 SOIL GAS SAMPLE EXCEEDANCES



TDD No.: S05-0001-1610-011



**Legend**  
 Approximate Site Boundary



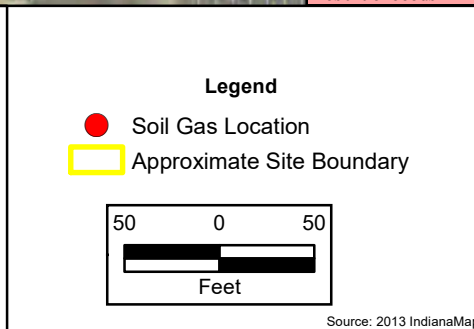
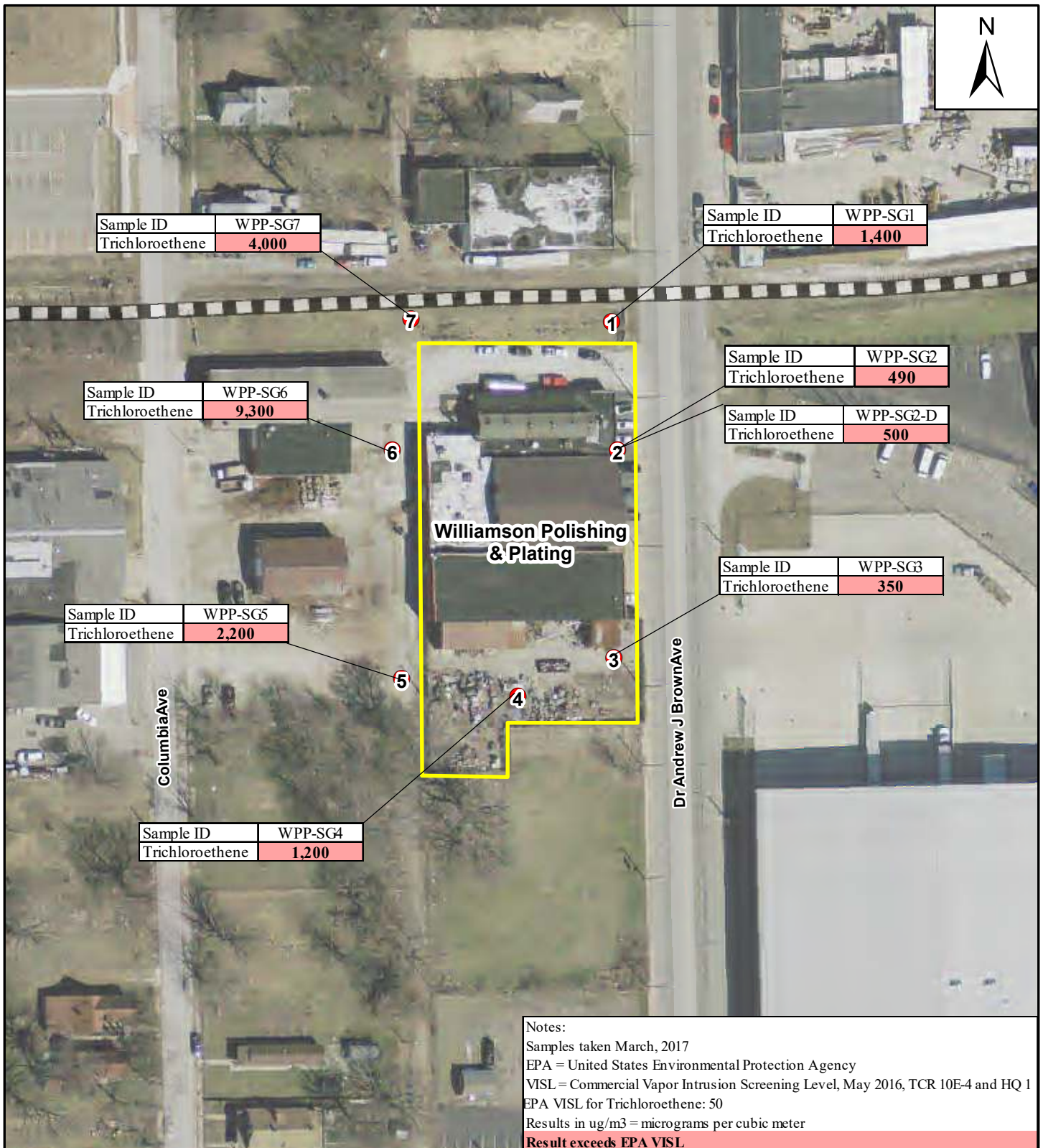
Williamson Polishing & Plating  
 2080 Dr Andrew J Brown Avenue  
 Indianapolis, Marion County, Indiana

**Figure 2**  
**Site Map**



Prepared For: EPA

Prepared By: Tetra Tech, Inc.

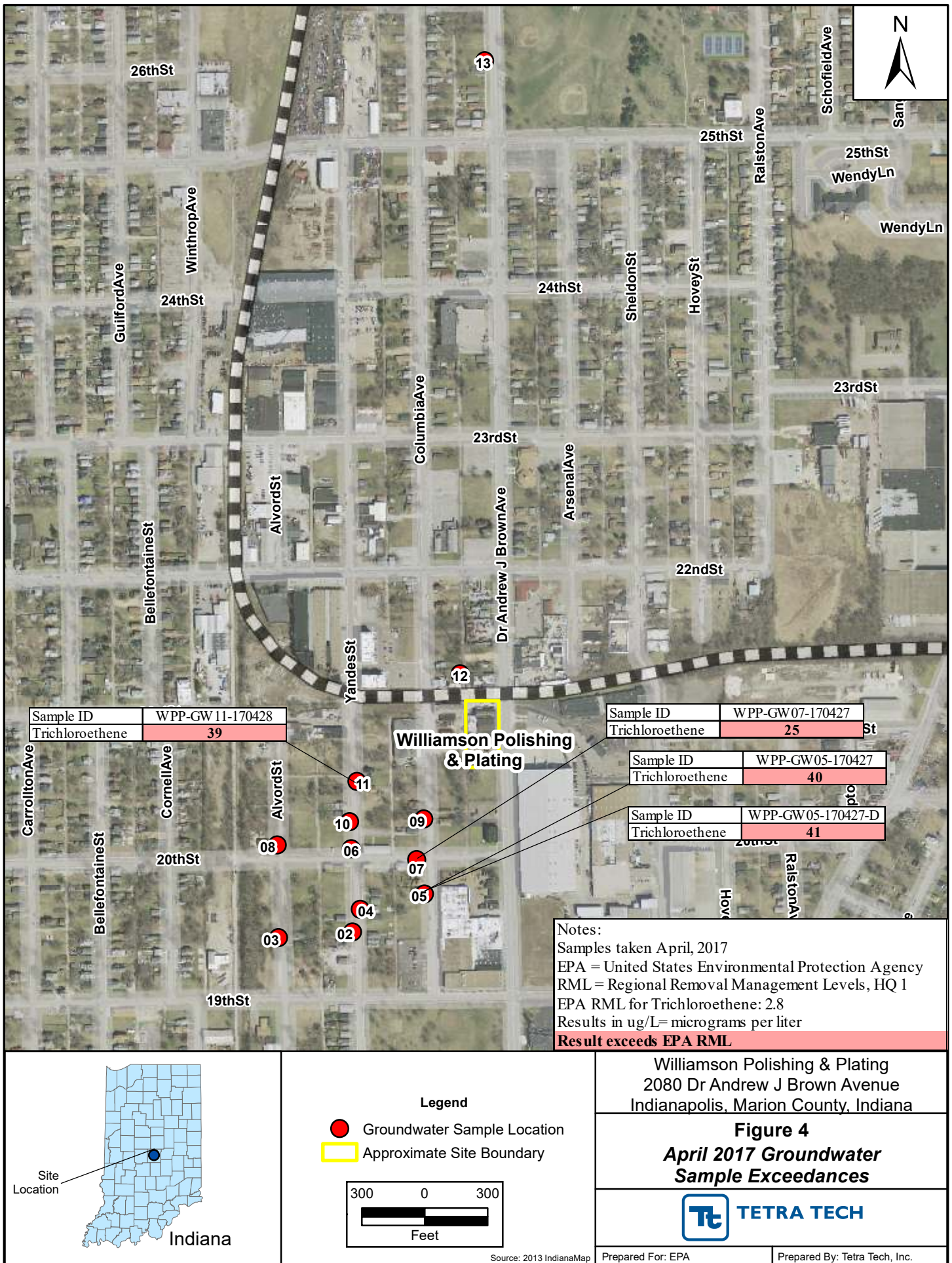


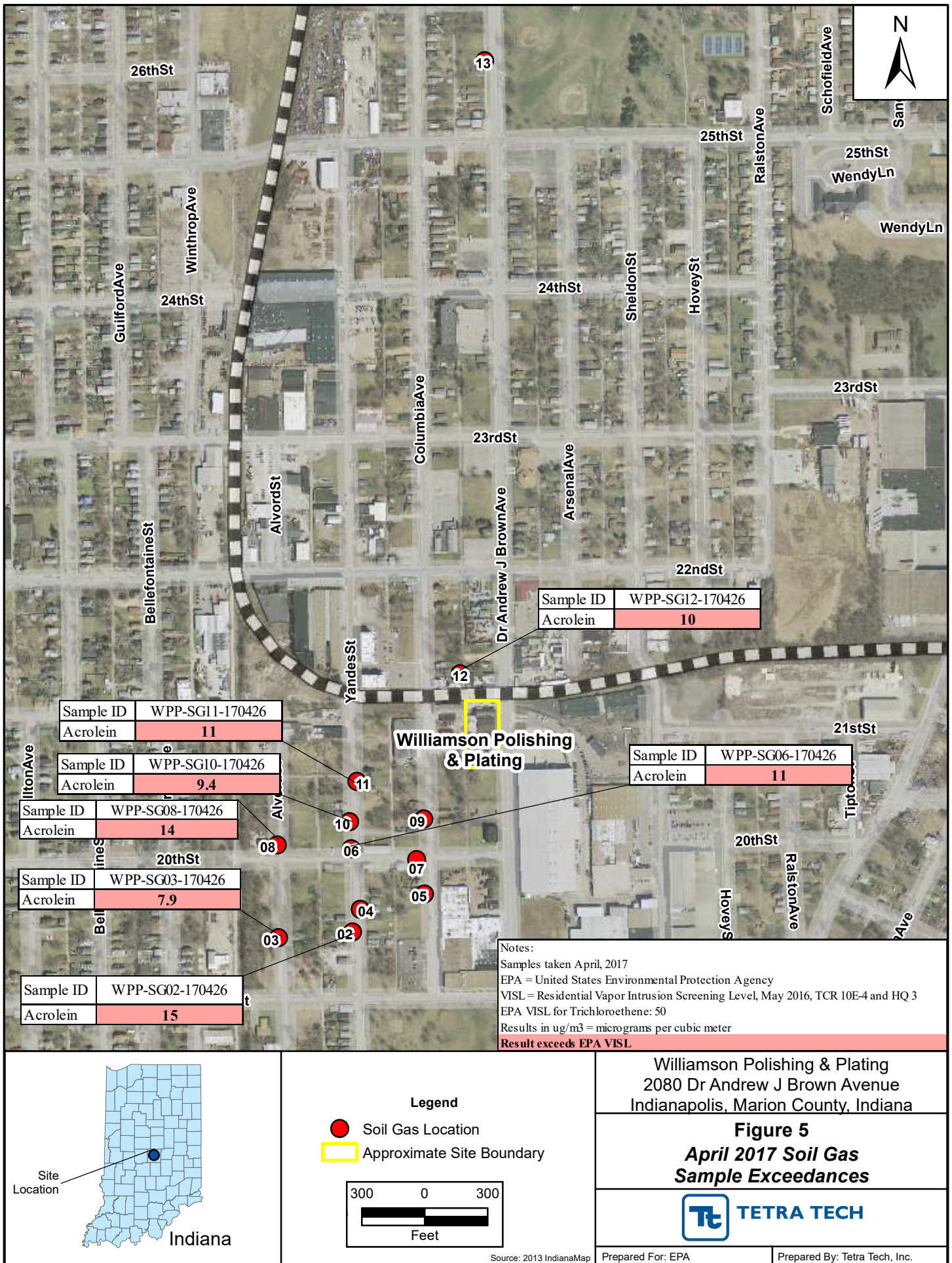
Williamson Polishing & Plating  
 2080 Dr Andrew J Brown Avenue  
 Indianapolis, Marion County, Indiana

**Figure 3**  
**March 2017 Soil Gas**  
**Sample Exceedances**

**Tt TETRA TECH**

Prepared For: EPA      Prepared By: Tetra Tech, Inc.





**APPENDIX B**  
**ANALYTICAL RESULTS TABLES**

Table 1  
Waste Sample Results  
Williamson Polishing and Plating Site  
Indianapolis, Indiana  
10/31/2016

Sample ID			WPP-A22-161031	WPP-A7-161031	WPP-B32-161031	WPP-B33-161031	WPP-CN-161031	WPP-FLAM-161031	WPP-A4-161031
Matrix			Liquid	Liquid	Liquid	Liquid	Solid	Liquid	Liquid
Analysis <sup>1</sup>	Units	40 CFR 261	Results						
pH at 25° C	SU	≤ 2 or ≥ 12.5	<b>13 J</b>	11.5 J	<b>0.82 J</b>	<b>0.7 J</b>	NA	NA	NA
Cyanide	mg/kg	NL	NA	NA	NA	NA	7,300 J-	NA	NA
Flashpoint	degrees F	140	NA	NA	NA	NA	NA	<b>61</b>	NA
Arsenic	mg/L	5	NA	NA	NA	NA	NA	NA	0.18
Cadmium	mg/L	1	NA	NA	NA	NA	NA	NA	<b>10,900</b>
Chromium	mg/L	5	NA	NA	NA	NA	NA	NA	<b>23.9</b>
Selenium	mg/L	1	NA	NA	NA	NA	NA	NA	0.79

Notes:

1 = Only positively identified analytes are listed

40 CFR 261 = Characteristics of hazardous waste from Title 40, Part 261 of the Code of Federal Regulations

J = Value is approximate

J- = Value is approximate, biased low

mg/L = milligrams per liter

mg/kg = milligrams per kilogram

NA = Not analyzed

NL = Not listed

**Result exceeds 40 CFR 261 regulatory level**

Table 2  
March 2017 Soil VOC Results  
Williamson Polishing and Plating Site  
Indianapolis, Indiana  
3/9/2017

Sample ID			WPP-SB1 (2-4)	WPP-SB1 (2-4) D	WPP-SB2 (4-6)	WPP-SB3 (0-2)
Depth (feet bgs)			2-4	2-4	4-6	0-2
Analyte <sup>1</sup>	Units	EPA RML	Results			
Chloroethane	ug/kg	170,000,000	ND	ND	ND	22.3 J
Ethylbenzene	ug/kg	2,500,000	ND	ND	ND	23.6 J
m & p-Xylene	ug/kg	7,200,000	ND	ND	ND	116
Methyl acetate	ug/kg	3,500,000,000	ND	ND	ND	689
Methylcyclohexane	ug/kg	NL	ND	ND	ND	17.7 J
o-Xylene	ug/kg	8,400,000	ND	ND	ND	40.2 J
Tetrachloroethene	ug/kg	1,200,000	ND	ND	25.1 J	ND

Notes:

1 = Only positively identified analytes are listed

bgs = Below ground surface

EPA = United States Environmental Protection Agency

HQ = Hazard quotient

J = Approximate value

ND = Not detected

NL = Not listed

RML = May 2016 Removal Management Level for industrial soil, TCR = 10E-4 and HQ = 3

TCR = Target risk for carcinogens

ug/kg = micrograms per kilogram

Table 3  
March 2017 Soil Metals Results  
Williamson Polishing and Plating Site  
Indianapolis, Indiana  
3/9/2017

Sample ID			WPP-SB1 (0-2)	WPP-SB1 (0-2) D	WPP-SB2 (4-6)	WPP-SB3 (0-2)	WPP-SB4 (0-2)	WPP-SB5 (0-2)	WPP-SB6 (0-2)	WPP-SB7 (0-2)
Depth (feet bgs)			0-2	0-2	4-6	0-2	0-2	0-2	0-2	0-2
Analyte <sup>1</sup>	Units	EPA RML	Results							
Aluminum	mg/kg	3,400,000	3,870	3,440	5,200	4,800	6,890	5,340	1,200	2,530
Antimony	mg/kg	1,400	1.7	1.1	ND	0.19 J	3.4	1.7	1.1	13.9
Arsenic	mg/kg	300	7.7	8	5.3	4.6	7	10	5.4	10
Barium	mg/kg	650,000	46.2	44	40.2	36.7	116	477	55.7	52.3
Beryllium	mg/kg	6,900	0.39	0.52	0.27 J-	0.25	0.47	0.92	0.95	0.71
Cadmium	mg/kg	2,900	1.7	1.1	152 J	0.47	24.2	25.7	67.8	1.3
Calcium	mg/kg	NL	57,800	61,800	26,500 J	45,500	7,250	19,900	5,520	28,500
Chromium	mg/kg	NL	11.6	7.4	12.4 J	8.3	43.3	48.6	100	7.1
Cobalt	mg/kg	1,000	4.3	3.7	3.4 J-	3.1	5.6	4	3.2	3.5
Copper	mg/kg	140,000	64.5	53.2	10.7 J-	47.2	61.8	142	297	90.6
Iron	mg/kg	2,500,000	14,700	17,600	7,320	9,360	12,200	12,200	4,040	16,800
Lead	mg/kg	800	76.6	52.3	11.3 J	11.4	42.7	717	68.6	582
Magnesium	mg/kg	NL	13,400	10,600	10,100 J-	9,770	3,640	3,500	1,150	11,100
Manganese	mg/kg	77,000	400	457	273	253	875	157	27.3	240
Mercury	mg/kg	140	0.028	0.025	0.034 J	ND	0.17	0.095	0.011	0.079
Nickel	mg/kg	33,000	34.7	17.3	87.8 J-	112	125	176	582	13.7
Potassium	mg/kg	NL	500	463	471	478	695	439	332	419
Selenium	mg/kg	18,000	ND	ND	ND	ND	0.58 J+	0.67 J+	2.3	ND
Silver	mg/kg	18,000	0.34 J	0.16 J+	0.17 J+	ND	0.42	0.48	3.8	0.19 J+
Sodium	mg/kg	NL	87.3	82	110	64.3	30.4	239	139	422
Thallium	mg/kg	NL	ND	ND	ND	ND	0.35 J	ND	ND	ND
Vanadium	mg/kg	17,000	12.4	12.6	13.1	12.1	17.8	19.8	7.5	12.5
Zinc	mg/kg	1,100,000	68.5	57.9	95.8 J	62.1	175	382	78.5	80.8
Cyanide	mg/kg	440	0.213 J	0.27 J	1.01 J-	10.7	12	7.16	5.08	0.551 J

Notes:

1 = Only positively identified analytes are listed

bgs = Below ground surface

EPA = United States Environmental Protection Agency

HQ = Hazard quotient

J = Value is approximate

J- = Value is approximate; may be biased low

J+ = Value is approximate; may be biased high

ND = Not detected

NL = Not listed

mg/kg = milligrams per kilogram

RML = May 2016 Removal Management Level  
for industrial soil, TCR = 10E-4 and HQ = 3

TCR = Target risk for carcinogens

Table 4  
March 2017 Soil Gas Results  
Williamson Polishing and Plating Site  
Indianapolis, Indiana  
3/10/2017

Sample ID			WPP-SG1	WPP-SG2	WPP-SG2-D	WPP-SG3	WPP-SG4	WPP-SG5	WPP-SG6	WPP-SG7
Analyte <sup>1</sup>	Units	EPA VISL	Results							
1,1,1-Trichloroethane	ug/m3	2,200,000	48	33	33	ND	ND	ND	320	ND
1,1,2-Trichlorotrifluoroethane	ug/m3	NL	ND	8.4	8.3	ND	17	ND	ND	ND
1,2,4-Trimethylbenzene	ug/m3	3,100	ND	5.4	5.7	ND	ND	ND	ND	ND
2-Butanone	ug/m3	2,200,000	360	130	140	ND	ND	160	ND	350
2-Hexanone	ug/m3	13,000	41	18	17	17	14	19	ND	34
Acetone	ug/m3	14,000,000	ND	41	41	ND	ND	ND	ND	ND
alpha-Pinene	ug/m3	NL	ND	2.9	3	ND	ND	ND	ND	ND
Benzene	ug/m3	5,200	ND	8.1	6.4	ND	ND	ND	ND	ND
Chloroform	ug/m3	1,800	ND	6.3	6.2	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ug/m3	NL	ND	ND	ND	ND	ND	ND	85	33
Dichlorodifluoromethane	ug/m3	44,000	ND	2.4	2.3	ND	ND	ND	ND	ND
Dichloromethane	ug/m3	260,000	ND	ND	ND	ND	12	ND	ND	ND
d-Limonene	ug/m3	NL	ND	2	2.7	ND	ND	ND	ND	ND
Ethanol	ug/m3	NL	ND	67	88	ND	ND	ND	ND	ND
Ethyl Acetate	ug/m3	31,000	ND	13	10	ND	ND	ND	ND	ND
Ethylbenzene	ug/m3	16,000	ND	6.6 J	3.5 J	ND	ND	ND	ND	ND
m,p-Xylenes	ug/m3	44,000	ND	15	14	ND	ND	ND	ND	ND
n-Heptane	ug/m3	NL	11	4.2	3.7	ND	ND	ND	ND	ND
n-Hexane	ug/m3	310,000	16	4.3	3.8	ND	ND	ND	45	ND
n-Nonane	ug/m3	8,800	ND	3	3	ND	ND	ND	ND	ND
n-Octane	ug/m3	NL	7.8	4.4	4.2	ND	ND	ND	ND	ND
o-Xylene	ug/m3	44,000	ND	6.1	5.3	ND	ND	ND	ND	ND
Propene	ug/m3	310,000	30	12	12	ND	ND	ND	ND	ND
Tetrachloroethene	ug/m3	18,000	42	360	400	2,900	1,800	ND	ND	ND
Toluene	ug/m3	2,200,000	15	17	16	17	28	15	ND	ND
trans-1,2-Dichloroethene	ug/m3	NL	14	ND	ND	ND	ND	ND	260	830
Trichloroethene*	ug/m3	290	1,400	490	500	350	1,200	2,200	9,300	4,000
Trichlorofluoromethane	ug/m3	NL	ND	5.6	5.5	ND	ND	ND	ND	ND

Notes:

1 = Only positively identified analytes are listed

EPA = United States Environmental Protection Agency

HQ = Hazard quotient

\*Trichloroethene compared to HQ 1 VISL

**Result exceeds EPA VISL**

J = Value is approximate

ND = Not detected

NL = Not listed

TCR = Target risk for carcinogens

VISL = Commercial Vapor Intrusion Screening Level, May 2016, TCR 10E-4 and HQ 3

ug/m3 = micrograms per cubic meter

Table 5  
 April 2017 Groundwater Results  
 Williamson Polishing and Plating Site  
 Indianapolis, Indiana  
 4/27/2017 - 4/28/2017

Sample ID			WPP- GW02- 170427	WPP- GW03- 170428	WPP- GW04- 170427	WPP- GW05- 170427	WPP- GW05- 170427-D	WPP- GW06- 170428	WPP- GW06- 170428-D	WPP- GW07- 170427
Analyte <sup>1</sup>	Units	VISL	Results							
1,1,1-Trichloroethane	ug/L	22,000	ND	ND	ND	1.2	1.1	ND	ND	10
1,1-Dichloroethane	ug/L	760	ND	ND	ND	0.43 J	0.38 J	ND	ND	0.52
Benzene	ug/L	160	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ug/L	81	ND	ND	ND	ND	ND	0.25 J	0.29 J	ND
cis-1,2-Dichloroethene	ug/L	NL	ND	ND	ND	13	13	ND	ND	4.7
Toluene	ug/L	58,000	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	ug/L	NL	ND	ND	ND	1.3	1.2	ND	ND	1
Trichloroethene*	ug/L	5.2	ND	ND	ND	<b>40</b>	<b>41</b>	ND	ND	<b>25</b>

Notes:

1 = Only positively identified analytes are listed

EPA = United States Environmental

Protection Agency

HQ = Hazard quotient

J = Value is approximate

\*Trichloroethene compared to HQ 1 VISL

**Exceeds EPA target groundwater VISL**

ND = Not detected

NL = Not listed

TCR = Target risk for carcinogens

VISL = Residential Vapor Intrusion Screening Level

May 2016, TCR 10E-4 and HQ 3

ug/L= micrograms per liter

Table 5  
April 2017 Groundwater Results  
Williamson Polishing and Plating Site  
Indianapolis, Indiana  
4/27/2017 - 4/28/2017

Sample ID			WPP- GW08- 170428	WPP- GW09- 170427	WPP- GW10- 170428	WPP- GW11- 170428	WPP- GW12- 170427	WPP- GW13- 170427
Analyte <sup>1</sup>	Units	VISL	Results					
1,1,1-Trichloroethane	ug/L	22,000	ND	0.64	ND	0.55	0.22 J	ND
1,1-Dichloroethane	ug/L	760	ND	ND	ND	ND	ND	ND
Benzene	ug/L	160	ND	ND	ND	ND	0.27 J	ND
Chloroform	ug/L	81	ND	ND	ND	2.1	0.17 J	ND
cis-1,2-Dichloroethene	ug/L	NL	ND	13	2.1	0.7	0.42 J	ND
Toluene	ug/L	58,000	ND	ND	ND	ND	0.46 J	ND
trans-1,2-Dichloroethene	ug/L	NL	ND	2.1	1.4	3.5	0.99	ND
Trichloroethene*	ug/L	5.2	ND	ND	ND	39	ND	ND

Notes:

1 = Only positively identified analytes are listed

EPA = United States Environmental

Protection Agency

HQ = Hazard quotient

J = Value is approximate

\*Trichloroethene compared to HQ 1 VISL

**Exceeds EPA target groundwater VISL**

ND = Not detected

NL = Not listed

TCR = Target risk for carcinogens

VISL = Residential Vapor Intrusion Screening Level

May 2016, TCR 10E-4 and HQ 3

ug/L= micrograms per liter

Table 6  
April 2017 Soil Gas Results  
Williamson Polishing and Plating Site  
Indianapolis, Indiana  
4/26/2017

Sample ID			WPP-AA03- 170426	WPP-SG02- 170426	WPP-SG03- 170426	WPP-SG04- 170426	WPP-SG05- 170426
Analyte <sup>1</sup>	Units	VISL	Results				
1,1,1-Trichloroethane	ug/m3	520,000	ND	ND	26	ND	10
1,2,4-Trimethylbenzene	ug/m3	730	ND	6.3	5.1	3.9	2.5
1,3,5-Trimethylbenzene	ug/m3	NL	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ug/m3	NL	ND	72	39	40	27
2-Butanone	ug/m3	520,000	ND	43	ND	ND	ND
2-Hexanone	ug/m3	3,100	ND	8.9	2.2	4.5	ND
2-Propanol	ug/m3	21,000	ND	85	45	60	29
4-Methyl-2-pentanone	ug/m3	310,000	ND	ND	ND	ND	ND
Acetone	ug/m3	3,200,000	ND	840	200	290	160
Acrolein	ug/m3	2.1	ND	15	7.9	ND	ND
alpha-Pinene	ug/m3	NL	ND	30	21	23	10
Benzene	ug/m3	1,200	ND	9.8	2.6	4.8	6.8
Carbon tetrachloride	ug/m3	1,600	ND	ND	ND	ND	ND
Chloroform	ug/m3	410	ND	ND	ND	ND	ND
Cyclohexane	ug/m3	630,000	ND	11	ND	ND	5.7
Dichlorodifluoromethane	ug/m3	10,000	2.6	2.3	2.5	2.5	2.8
d-Limonene	ug/m3	NL	ND	15	15	12	5.3
Ethanol	ug/m3	NL	ND	94	48	50	46
Ethyl Acetate	ug/m3	7,300	ND	22	25	26	5
Ethylbenzene	ug/m3	3,700	ND	3.5	1.9	2.2	2.8
m,p-Xylenes	ug/m3	10,000	ND	10	7	6.6	5.9
Naphthalene	ug/m3	280	ND	ND	ND	ND	ND
n-Heptane	ug/m3	NL	ND	11	ND	5.6	7.4
n-Hexane	ug/m3	73,000	ND	22	3.5	9.1	12
n-Nonane	ug/m3	2,100	ND	7.9	4.1	5.4	3.2
n-Octane	ug/m3	NL	ND	9.7	3.2	7.2	4.6
o-Xylene	ug/m3	10,000	ND	4.9	3.4	3.4	2.6
Propene	ug/m3	310,000	ND	26	11	16	10
Styrene	ug/m3	100,000	ND	2.2	1.8	ND	ND
Tetrachloroethene	ug/m3	4,200	ND	ND	3.9	ND	13
Toluene	ug/m3	520,000	ND	26	14	18	18
Trichloroethene*	ug/m3	70	ND	ND	ND	ND	51
Trichlorofluoromethane	ug/m3	NL	ND	ND	ND	ND	ND

Notes:

1 = Only positively identified analytes are listed

EPA = United States Environmental

Protection Agency

HQ = Hazard quotient

J = Value is approximate

\*Trichloroethene compared to HQ 1 VISL

**Result exceeds EPA VISL**

J+ = Value is approximate, biased high

ND = Not detected

NL = Not listed

TCR = Target risk for carcinogens

VISL = Residential Vapor Intrusion Screening

Level, May 2016, TCR 10E-4 and HQ 3

ug/m3 = micrograms per cubic meter

Table 6  
April 2017 Soil Gas Results  
Williamson Polishing and Plating Site  
Indianapolis, Indiana  
4/26/2017

Sample ID			WPP-SG06- 170426	WPP-SG07- 170426	WPP-SG08- 170426	WPP-SG09- 170426	WPP-SG09- 170426-D
Analyte <sup>1</sup>	Units	VISL	Results				
1,1,1-Trichloroethane	ug/m3	520,000	ND	230	21	42	44
1,2,4-Trimethylbenzene	ug/m3	730	4.3	3.4	5.6	2.6	2.6
1,3,5-Trimethylbenzene	ug/m3	NL	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ug/m3	NL	32	20	43	23	24
2-Butanone	ug/m3	520,000	24	29	31	ND	ND
2-Hexanone	ug/m3	3,100	3.9	4.1	5.8	ND	ND
2-Propanol	ug/m3	21,000	48	54	78	22	25
4-Methyl-2-pentanone	ug/m3	310,000	ND	ND	ND	2.2	ND
Acetone	ug/m3	3,200,000	460	580	600	100	120
Acrolein	ug/m3	2.1	11	ND	14	ND	ND
alpha-Pinene	ug/m3	NL	19	16	32	7.9	6.6
Benzene	ug/m3	1,200	2.4	2.3	3.2	ND	ND
Carbon tetrachloride	ug/m3	1,600	ND	ND	ND	ND	ND
Chloroform	ug/m3	410	ND	99	ND	ND	ND
Cyclohexane	ug/m3	630,000	ND	ND	10	ND	ND
Dichlorodifluoromethane	ug/m3	10,000	2.5	2.8	2.4	2.6	2.6
d-Limonene	ug/m3	NL	9.4	9.5	15	6.5	4.6
Ethanol	ug/m3	NL	66	94	150	52	41
Ethyl Acetate	ug/m3	7,300	7.2	6.3	130	12	7.4
Ethylbenzene	ug/m3	3,700	ND	ND	2.5	ND	ND
m,p-Xylenes	ug/m3	10,000	6.8	5.3	8.4	4.3	4.4
Naphthalene	ug/m3	280	ND	ND	ND	ND	ND
n-Heptane	ug/m3	NL	2.5	ND	5.2	ND	ND
n-Hexane	ug/m3	73,000	4.4	3.3	10	2.1	2.2
n-Nonane	ug/m3	2,100	4.5	3.3	6.2	ND	ND
n-Octane	ug/m3	NL	3.3	2.8	7.7	ND	ND
o-Xylene	ug/m3	10,000	3.1	2.5	4.1	ND	ND
Propene	ug/m3	310,000	15	16	21	6.2	6.4
Styrene	ug/m3	100,000	ND	ND	ND	ND	ND
Tetrachloroethene	ug/m3	4,200	3.9	20	ND	5.4	5.6
Toluene	ug/m3	520,000	15	15	21	9.6	9.3
Trichloroethene*	ug/m3	70	ND	45	ND	ND	ND
Trichlorofluoromethane	ug/m3	NL	ND	ND	3.1 J+	ND	ND

Notes:

1 = Only positively identified analytes are listed

EPA = United States Environmental

Protection Agency

HQ = Hazard quotient

J = Value is approximate

\*Trichloroethene compared to HQ 1 VISL

**Result exceeds EPA VISL**

J+ = Value is approximate, biased high

ND = Not detected

NL = Not listed

TCR = Target risk for carcinogens

VISL = Residential Vapor Intrusion Screening

Level, May 2016, TCR 10E-4 and HQ 3

ug/m3 = micrograms per cubic meter

Table 6  
April 2017 Soil Gas Results  
Williamson Polishing and Plating Site  
Indianapolis, Indiana  
4/26/2017

Sample ID			WPP-SG10- 170426	WPP-SG11- 170426	WPP-SG12- 170426	WPP-SG13- 170426
Analyte <sup>1</sup>	Units	VISL	Results			
1,1,1-Trichloroethane	ug/m3	520,000	2.8	20	30	ND
1,2,4-Trimethylbenzene	ug/m3	730	3.5	3.2	8.8	4.9
1,3,5-Trimethylbenzene	ug/m3	NL	ND	ND	2.6	ND
1,3-Dichlorobenzene	ug/m3	NL	34	71	160	52
2-Butanone	ug/m3	520,000	ND	21	ND	ND
2-Hexanone	ug/m3	3,100	3.7	3.9	5.4	2.4
2-Propanol	ug/m3	21,000	55	61	42	36
4-Methyl-2-pentanone	ug/m3	310,000	ND	ND	19	ND
Acetone	ug/m3	3,200,000	380	420	350	250
Acrolein	ug/m3	2.1	9.4	11	10	ND
alpha-Pinene	ug/m3	NL	16	16	29	19
Benzene	ug/m3	1,200	ND	3.2	4	5.7
Carbon tetrachloride	ug/m3	1,600	ND	2.7	ND	ND
Chloroform	ug/m3	410	ND	ND	ND	ND
Cyclohexane	ug/m3	630,000	ND	4.8	5	7.6
Dichlorodifluoromethane	ug/m3	10,000	2.5	2.6	2.2	2.4
d-Limonene	ug/m3	NL	7.7	5.8	23	12
Ethanol	ug/m3	NL	62	82	52	44
Ethyl Acetate	ug/m3	7,300	17	43	19	18
Ethylbenzene	ug/m3	3,700	ND	ND	2.8	ND
m,p-Xylenes	ug/m3	10,000	5.6	6	9.8	6.7
Naphthalene	ug/m3	280	ND	ND	2.3	ND
n-Heptane	ug/m3	NL	3	4.9	5	8.7
n-Hexane	ug/m3	73,000	4.5	8.5	6.6	13
n-Nonane	ug/m3	2,100	2.9	2.1	7.4	4.1
n-Octane	ug/m3	NL	3.4	3.3	8	6.8
o-Xylene	ug/m3	10,000	2.6	2.6	4.8	3.1
Propene	ug/m3	310,000	15	15	13	11
Styrene	ug/m3	100,000	ND	ND	2.3	ND
Tetrachloroethene	ug/m3	4,200	8.5	4.7	ND	ND
Toluene	ug/m3	520,000	13	15	17	18
Trichloroethene*	ug/m3	70	ND	61	ND	ND
Trichlorofluoromethane	ug/m3	NL	ND	ND	ND	ND

Notes:

1 = Only positively identified analytes are listed

EPA = United States Environmental

Protection Agency

HQ = Hazard quotient

J = Value is approximate

\*Trichloroethene compared to HQ 1 VISL

**Result exceeds EPA VISL**

J+ = Value is approximate, biased high

ND = Not detected

NL = Not listed

TCR = Target risk for carcinogens

VISL = Residential Vapor Intrusion Screening  
Level, May 2016, TCR 10E-4 and HQ 3

ug/m3 = micrograms per cubic meter

**APPENDIX C**  
**FIELD LOGBOOK**

==DEFYING==  
MOTHER NATURE™

SINCE 1916



All components of  
this product are recyclable

**Rite in the Rain**

A patented, environmentally  
responsible, all-weather writing paper  
that sheds water and enables you to  
write anywhere, in any weather.

Using a pencil or all-weather pen,  
*Rite in the Rain* ensures that your  
notes survive the rigors of the field,  
regardless of the conditions.

© 2015

JL DARLING LLC  
Tacoma, WA 98424-1017 USA  
[www.RiteintheRain.com](http://www.RiteintheRain.com)

**Item No. 351FX**

ISBN: 978-1-60134-186-6

Made in the USA  
US Pat No. 6,863,940



Williamson P+P  
Assessment



*Rite in the Rain*

ALL-WEATHER

**FIELD**

Nº 351FX

SOS-0001-1610-D11  
EPA Region 5

MADE IN TACOMA

— SINCE 1916 —

*Rite in the Rain*®

— DEFYING MOTHER NATURE —

Name

Lucas Stamps

Address

1611 S Franklin Ave  
Indianapolis IN 46239

Phone

317-777-2420

Project

Williamson Polishing  
and Plating Assessment

RiteintheRain.com

## CONTENTS

PAGE

REFERENCE

DATE

## Williamson Assessment 3/8/17

Purpose: Utility Mark Out

Personnel: Lucas Stamps

Wx: 50's Sunny. 25 mph winds from Southwest.

1130 START on site. Marked boring locations w/ marking paint.

1340 Jeff w/ American Locating on site to survey for private utilities 10 ft around each boring location

1440 American Locating off site

1500 START off site

~~3/8/17~~

## Williamson Assessment 3/9/17

Purpose: Soil Boring

Personnel: Lucas Stamps, Joe Roberts, Travis Emry

Wx: High at 61°, Sunny. Winds from E.

0730 START on site.

0810 Midway Services on site to conduct borings.

0830 Midway began boring @ SB-3.

0856 Midway installed soil gas probe @ 15' bgs.

Backnote Midway hit GW @ 16' bgs.

0930 START collected samples for VOCs, metals, + cyanide @ 0-2 ft bgs.

0905 Midway began boring @ SB-4. START collected sample for metals and cyanide from 0-2 ft bgs. Midway hit GW @ 16' bgs.

0925 Midway set soil gas probe @ 15' bgs.

0935 Midway began boring at SB-5. START collected sample for

metals + cyanide @ 0-2' bgs. Midway hit GW @ 17' bgs.

1000 Midway installed soil gas probe @ 15' bgs.

1010 Midway began boring @ SB 6. START collected sample from 0-2 ft for metals + cyanide. Midway hit groundwater @ 20' bgs.

1030 Midway installed soil gas probe @ 19 ft bgs.

1045 Midway began boring @ SB 7. START collected soil sample from 0-2 ft bgs for metals and cyanide. Midway hit GW @ 20 ft bgs.

1110 Midway set soil gas probe @ 19 ft bgs.

1115 Midway began boring @ SB 1. START collected metals/cyanide sample and duplicate from 0-2 ft bgs. Collected ~~VOC~~ VOC sample from 2-4 ft bgs.

Midway hit GW @ 18 ft  
bgs.

1140 Midway set soil gas probe  
@ 17' bgs.

1145 Midway started boring a SB  
2. START collected metals/cyanide  
& VOC sample from 4-6 ft  
bgs due to poor recovery  
from 0-4. Midway hit GW  
@ 20 ft bgs.

1212 Midway set soil gas probe  
@ 19 ft bgs

1230 Midway off site

1300 Travis Erny (START off site)

1430 START off site.

3/9/17

# Williamson Assessment 3/10/17

Purpose: Soil Gas Sampling

Personnel: Lucas Stamps, Joe Robert, Travis Erny.

Wx: Mid 30's, Sunny. Winds 13 MPH  
from NW.

0820 START on site. Turned on  
PID to warm up.

0915 START screened Soil gas location  
#3 with PID. Read Oppm

MGD-2002 helium detector  
measured 9500 PPM in the shroud.  
In the line the detector read  
zero ppm.

0919 Initial vacuum -30 inHg @ 9:19am  
at WPP-563

0934 Final vacuum pressure @ WPP-563  
is -6.5 inHg.

0945 START screened Soil gas location #4  
with PID. Read Oppm. MGD2002  
read 4275 ppm in shroud. In line  
Read Oppm.

0950 Initial pressure was -28 inHg @  
WPP-564

1005 Final pressure -5 inHg @ WPP-564.

- 1015 START screened shroud at WPP-SG5 with PID. Read Oppm, Helium Detector read 1900ppm in shroud. In line read Oppm.
- 1021 Initial pressure @ WPP-SG5 is -28 inHg.
- 1037 Final pressure @ WPP-SG5 was -4 inHg.
- 1043 START screened shroud at WPP-SG6 with PID. Read Oppm, Helium Detector read 1850ppm in shroud. In line read Oppm.
- 1047 Initial pressure @ WPP-SG6 was -27 inHg.
- 1102 Final pressure @ WPP-SG6 was -3 inHg.
- 1106 GSP system used was System: US STATE Plane 1983, Zone: Indiana East 1301, Datum: NAD 1983 (con US), Units: ft.
- 1125 START screened shroud @ WPP-SG7 with PID. Read Oppm, Helium Detector read 3000ppm in shroud. In-line read Oppm.
- 1129 Initial pressure read -29 inHg.
- 1144 Final pressure @ WPP-SG7 read -5 inHg.
- 1150 START screened shroud with PID.

- Read Oppm, Helium Detector read 9500ppm in shroud. In line read Oppm @ WPP-SG1.
- 1155 Initial pressure read Oppm, The can had no vacuum, New can used. Helium test redone. In shroud read 12,250ppm. In line Oppm.
- 1158 Initial pressure read -26 inHg at WPP-SG1.
- 1214 Final pressure -2 inHg @ WPP-SG1.
- 1227 START screened under shroud at WPP-SG2 with PID. Read Oppm, Helium Detector read 6000ppm under shroud. In-line read Oppm.
- 1230 Initial pressure of WPP-SG2 was -30 inHg, and WPP-SG2D was -28 inHg.
- 1246 Final pressure of WPP-SG2 was -5 inHg, and -3 for WPP-SG2D.
- 1315 Sampling complete. START off site.

3/10/12

4/18/17

Purpose: Mark out borings  
 Personnel: Lucas Stamps, Joe Rober  
 Mr. Sunny and ZOG

1100 handing out flyers and  
 marking out locations.

- 2016 Columbia (No Row)
- 2107 Columbia (alley way)
- 1954 Columbia (in Row)
- 2002 Columbia (in Row)
- 1932 Yandes (in Row)
- 1939 Yandes (in Row)
- 2004 Yandes (in Row)
- 2010 Yandes "
- 2037 Yandes "
- 2002 Alvord "
- 1902 Alvord "
- 1824 Yandes "
- 2550 Dr AJ Brown "

1230 Finished, marked 13 locations. will  
 call in utility locates on 4/19/17.

4/18/17

Ticket #s

1704192431  
 2446  
 2456  
 2461  
 2469  
 2477  
 2481  
 2487  
 2493  
 2510  
 2516  
 2498  
 2526

PVC Points  
 Mobile Drill  
 Intl  
 Brent  
 317452  
 4246

12  
4/21/17 Williamson P+P

Purpose: Utility locates

Personnel: Lucas Stamps

WX: 60° cloudy. Winds from NNW

1300 START on site.

1320 American locating on site  
to clear borings.

1520 American locating off site.  
Finished w/ locates;

4/21/17

13  
4/24/17 Williamson

Purpose: Well installation

Personnel: Lucas Stamps

WX: High at 75°, sunny. Winds from NE

0900 IDEM on site w/ Greprobe

Began setting up.

0945 Started boring @ SB-0507.

1630 Stopped for day. IDEM installed  
6 monitoring wells and 6  
soil gas probes.

4/24/17

4/25/17

Williamson

Purpose: Install monitoring wells.

Personnel: Lucas Stamps, Joe Robert.

High of 76°, Part sunny. Winds ~10 MPH from SE.

0645 START on site preparing for MW installation.

0745 IDEM on site.

IDEM off site. Installed 6 monitoring wells and 6 soil gas probes, for a total of 12 each. START off site.

4/25/17

Williamson

4/26/17

Purpose: Soil gas sampling

Personnel: Lucas Stamps, Joe Robert

WX: Partially cloudy. High of 81°. Winds ~15 MPH from S.

0645 START on site. Assembled Summa Canisters.

0845 Collected soil gas sample from Location 07. He leak test successful.

Shroud: 4,000 ppm

Sample train: 0 ppm.

0917 Location 05

Shroud: 8,025 ppm; Train: 0 ppm

0950 Location 09

Shroud: 4,325 ppm; Train 0 ppm

Collected duplicate sample.

1024 Location 11

Shroud: 6,225 ppm; Train: 0 ppm

1051 Location 10

Shroud: 2,150 ppm; Train: 0 ppm

1117 Location 06

Shroud: 4,125 ppm; Train: 0 ppm

1143 Location 04

Shroud: 3,050 ppm; Train: 0 ppm

Rite in the Rain

1345 Location 02

Shroud: 7,800 ppm; Train: 0 ppm.

1415 Location 03

Shroud: 6,950 ppm; Train: 0 ppm

Also collected outdoor ambient air sample.

1445 Location 08

Shroud: 6,650 ppm; Train: 0 ppm

~~1513~~ Location 12

1526 Shroud: 3,600 ppm; Train 0 ppm

Canister filled up to 0 in Hg in 5 min. Attached new can.

Shroud: 4,075 ppm; Train: 0 ppm.

1555 Location 13

Shroud: 10,200 ppm; Train: 0 ppm.

Had to reuse regulator from location 08 due to a couple that would not thread onto canister.

1630 START off site.

4/26/17

Williamson

4/27/17 <sup>17</sup>

Purpose: Groundwater Sampling

Personnel: LGS, JER

Wx: Cloudy, High of 61°. Winds 15 MPH from WSW.

0645 START on site

0700 Calibrated YSI and prepared equipment.

0930 collected sample from #13. Details on low flow field sheet.

1000 Started purging at #12. Well went dry. Allowed time to recharge. then collected sample @ 1030.

1140 Collected sample from #05. + Dup

1200 Break for lunch.

1342 Collected sample @ #07 + MSMQ

1427 Collected Sample @ #09

1507 Collected sample @ #02

1546 Collected sample @ #04.

1630 Finished putting away supplies. START off site.

4/27/17

Rite in the Rain.

4/28/17 Williamson

Purpose: Groundwater sampling

Personnel: Lucas Stamps, Joe Robert

Wx: Cloudy. High 70°. Winds approx 10 mph from SE.

0645 START on site.

0700 Collected GPS points for all points sample locations. using Trimble Geoexplorer 6000. Equipment used for groundwater sampling: Pegasus Athena peristaltic pump; Heron water level meter; YSI 556; LaMotte 2020WE turbidimeter. Equipment used for soil gas sampling on 4/26/17 was MGD-2002 Helium detector and MiniRAE 3000 PID. All instruments rented from Field Environmental Instruments and calibrated each morning (where applicable).

0900 Collected sample and duplicate from #06. Details on low-flow field sheet.

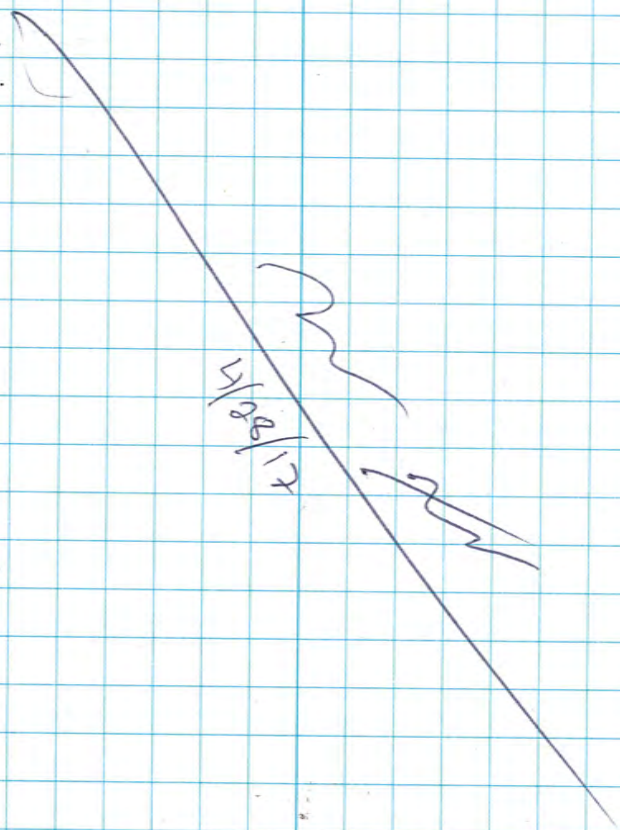
0943 Collected sample @ #11.

1022 Collected sample @ #10.

1100 Collected sample @ #03.

1142 Collected sample @ #08.

1330 START off site to ship rental equipment. Will ship cooler w/ samples on Monday.



5/2/17 Williamson

Purpose: Monitoring well abandonment

Personnel: Lucas Stamps, Joe Brodowski.

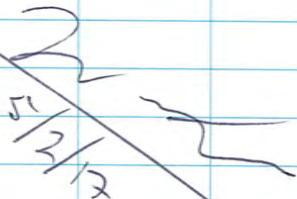
Wx: Cloudy, High of 61°. Winds ~20 MPH from West.

0945 START on site to abandon monitoring wells. 9 wells were pulled by hand and filled the hole was filled w/ bentonite to grade. Joe

1145 Joe Brodowski off site to retrieve jack and chain to pull remaining 3 wells.

1530 Pulled 2 of remaining wells using jack. One well had to be cut 2 feet bgs.

1630 START off site.



51 3/4

**APPENDIX D**  
**PHOTOGRAPHIC DOCUMENTATION LOG**



## Photographic Documentation Log

**Client:** U.S. Environmental Protection Agency Region 5  
**Site Name:** Williamson Polishing and Plating  
**Location:** Indianapolis, Indiana

**Prepared By:** Tetra Tech, Inc.  
**TDD:** S05-0001-1610-011

**Photograph: 1**

**Direction:** Northwest

**Date:** 3/9/17

**Photographer:**  
Lucas Stamps

**Description:**  
Drilling subcontractor  
boring soil



**Photograph: 2**

**Direction:** Northwest

**Date:** 3/9/17

**Photographer:**  
Lucas Stamps

**Description:**  
START logs and  
screens soil borings





## Photographic Documentation Log

**Client:** U.S. Environmental Protection Agency Region 5  
**Site Name:** Williamson Polishing and Plating  
**Location:** Indianapolis, Indiana

**Prepared By:** Tetra Tech, Inc.  
**TDD:** S05-0001-1610-011

**Photograph:** 3

**Direction:** Northeast

**Date:** 3/9/17

**Photographer:**  
Lucas Stamps

**Description:**  
Drilling subcontractors  
decontaminating  
tooling



**Photograph:** 4

**Direction:** West

**Date:** 3/9/17

**Photographer:**  
Lucas Stamps

**Description:**  
Soil gas implant and  
soil boring collocated  
approximately 1 foot  
apart





## Photographic Documentation Log

**Client:** U.S. Environmental Protection Agency Region 5  
**Site Name:** Williamson Polishing and Plating  
**Location:** Indianapolis, Indiana

**Prepared By:** Tetra Tech, Inc.  
**TDD:** S05-0001-1610-011

**Photograph: 5**

**Direction:** Northeast

**Date:** 3/10/17

**Photographer:**  
Lucas Stamps

**Description:**  
START collecting soil  
gas sample after  
conducting helium leak  
test



**Photograph: 6**

**Direction:** West

**Date:** 4/24/17

**Photographer:**  
Lucas Stamps

**Description:**  
IDEM boring soil





## Photographic Documentation Log

**Client:** U.S. Environmental Protection Agency Region 5  
**Site Name:** Williamson Polishing and Plating  
**Location:** Indianapolis, Indiana

**Prepared By:** Tetra Tech, Inc.  
**TDD:** S05-0001-1610-011

**Photograph:** 7

**Direction:** Southwest

**Date:** 4/26/17

**Photographer:**  
Lucas Stamps

**Description:**  
START conducting  
helium leak test prior to  
collecting soil gas  
sample



**Photograph:** 8

**Direction:** South

**Date:** 4/27/17

**Photographer:**  
Lucas Stamps

**Description:**  
START collecting  
groundwater sample  
using low-flow  
methodology





## *Photographic Documentation Log*

**Client:** U.S. Environmental Protection Agency Region 5  
**Site Name:** Williamson Polishing and Plating  
**Location:** Indianapolis, Indiana

**Prepared By:** Tetra Tech, Inc.  
**TDD:** S05-0001-1610-011

**Photograph:** 9

**Direction:** Southwest

**Date:** 5/2/17

**Photographer:**  
Lucas Stamps

**Description:**  
START abandoning  
temporary groundwater  
monitoring wells



**APPENDIX E**  
**ENVIRONMENTALLY PREFERRED PRACTICES**

START implemented environmentally preferred practices to maximize sustainability; reduce energy, water use, and toxic air emissions; promote carbon neutrality; and encourage industrial material reuse and recycling. In accordance with contract requirements, U.S. Environmental Protection Agency (EPA) policies, and relevant guidance, START documented project-specific environmentally preferred practices and available metrics in the Environmental Field Practices Checklist, Environmental Office Practices Checklist, and Green Metrics Table (ASTM International 2016; EPA 2012a, 2012b, and 2016).

## **References:**

- ASTM International (ASTM). 2016. "Standard Guide for Greener Cleanups." E2893-16. April 1.
- EPA. 2012a. "Methodology for Understanding and Reducing a Project's Environmental Footprint." Office of Solid Waste and Emergency Response, Office of Superfund Remediation and Technology Innovation. EPA 542-R-12-002. February.
- EPA. 2012b. "U.S. EPA Region 5 Superfund Greener Cleanup Implementation Strategy." March 16.
- EPA. 2016. Memorandum Regarding Consideration of Greener Cleanup Activities in the Superfund Cleanup Process. From Woolford, James, Director, *et. al.* To Regional Superfund National Program Managers and Regional Counsels, Regions 1 – 10. August 2.

<b>TDD #:</b>	S05-0001-1610-011
<b>Site Name:</b>	Williamson Polishing and Plating
<b>Site City, State:</b>	Indianapolis, Indiana
<b>Site Project Manager:</b>	Lucas Stamps
<b>EPA OSC:</b>	Shelly Lam

Environmentally Preferred General Field Practices				
If a general category is not applicable, then check N/A for the category box, not for each subcategory.	N= Not Used	N/A= Not Applicable	Y = Yes Implemented	Comments Section Justify in the comments for each BMP field as to why the practice was not used, not applicable, or implemented.
<b>Energy</b>				
<b>Use of Energy Efficient Equipment</b>				
Computer Equipment (FEMP/Energy Star)			x	Used when able
Installation of Electric Service		x		No field office for assessment
<b>Reduce Carbon Emissions from Transportation</b>				
Use Internet Based Meetings/Conferences	x			Meetings were in person at removal field office
Maximize Carpooling			x	Field staff carpoled when able
Use of Local Labor/Suppliers/Waste Disposal Facilities (50 mile radius)			x	Local labor used for all field activities
No idling, except for extreme weather conditions			x	No extended idling
Use of Alternative Fuels, if available within 10 miles	x			Regular gasoline used for vehicles
Properly Inflated Tires			x	Vehicles regularly serviced
Email Small Files (less than 8MB)			x	Used for all files
Reusable Electronic Storage Media or the Cloud		x		All files emailed
<b>Water</b>				
Use of Low Flow Sampling Pumps			x	Peristaltic pump used for groundwater sampling
<b>Waste</b>				
Use of Local Recycling Programs			x	Recyclable supplies were recycled
Use of Rechargeable Batteries			x	Rechargeable batteries were used for peristaltic pump, PID, and GPS
Recycling – Other		x		
Plastic Reduction		x		
Reuse of Resources		x		
Direct Push Boring			x	All borings were done with Geoprobe
<b>Materials</b>				
<b>Printing when Required</b>				
Double-sided Printing	x			Field sheets were single sided for ease of use
100% post-consumer recycled paper			x	Used

Environmentally Preferred General Field Practices				
If a general category is not applicable, then check N/A for the category box, not for each subcategory.	N = Not Used	N/A = Not Applicable	Y = Yes Implemented	<b>Comments Section</b> Justify in the comments for each BMP field as to why the practice was not used, not applicable, or implemented.
Land & Ecosystems				
Minimize Disruption to Natural Vegetation			x	Done when able
Use of Non-invasive Investigation Techniques		x		Borings and installation of monitoring wells was required
Environmentally Preferred				
Green Procurement				
Environmentally Preferred Vendors			x	Field Environmental Instruments
Green Lodging/Hotels		x		No lodging required
Use of Green Laboratories			x	CT Labs

<b>TDD #:</b>	<b>S05-0001-1610-011</b>
<b>Site Name:</b>	<b>Williamson Polishing and Plating</b>
<b>Site City, State:</b>	<b>Indianapolis, Indiana</b>
<b>Site Project Manager:</b>	<b>Lucas Stamps</b>
<b>EPA OSC:</b>	<b>Shelly Lam</b>

Green Metrics		
Metric	Amount	Unit of Measure
Diesel Fuel Used		gallons
Distance Traveled <sup>1</sup>	154.00	Miles
Unleaded Fuel Used <sup>2</sup>	5.86	gallons
Alternative/E-85 Fuel Used		gallons
Electricity from Coal		kW
Electricity from Natural Gas		kW
Electricity from solar/wind		kW
Electricity from grid/mix		kW
Solid waste reused		lbs
Solid waste recycled		lbs
Water Used	5	gallons

Greenhouse Gas Emissions (Site Specific)					
Source	Amount Used	Unit of Measure	Methane (CH <sub>4</sub> ) (Grams) <sup>3</sup>	Nitrous Oxide (N <sub>2</sub> O) (Grams) <sup>3</sup>	Carbon Dioxide (CO <sub>2</sub> ) (Kilograms) <sup>3</sup>
Gasoline	5.86	X gallons	1.02	2.51	52.17
Diesel		X gallons			
E-85		X gallons			
Electricity Office		X Kilowatts			
Natural Gas		X Therms			
Solid Waste	25.00	X lbs			
Other		X Unit of Measure			

**Note:**

<sup>1</sup> Distance traveled based on number of trips between the Williamson Polishing and Plating site in Indianapolis, Indiana, and QEPI's Indianapolis Office (11 miles) in a midsize pickup truck, which was required for cargo space. A total of 14 trips were made by 4 Tetra Tech personnel totaling 154 miles.

<sup>2</sup> Fuel consumption based on distance traveled in a large sport utility vehicle. An average fuel efficiency of 26.3 miles per gallon was assumed based on 2014 light duty truck fuel efficiency from "Average Fuel Efficiency of U.S. Light Duty Vehicles," U.S. Department of Transportation, Bureau of Statistics Table 4-23 (Accessed online at [http://www.rita.dot.gov/bts/sites/rita.dot.gov/bts/files/publications/national\\_transportation\\_statistics/html/table\\_04\\_23.html](http://www.rita.dot.gov/bts/sites/rita.dot.gov/bts/files/publications/national_transportation_statistics/html/table_04_23.html) on December 9, 2016).

<sup>3</sup> Methane and nitrous oxide emissions based on emission factors of 0.0066 and 0.0163 grams per mile for EPA Tier 2 light duty gasoline trucks from "Voluntary Reporting of Greenhouse Gases Program, Fuel Emission Coefficients, Table 5" (Accessed online at <http://205.254.135.7/oiaf/1605/coefficients.html> on December 9, 2016)

<sup>4</sup> Carbon dioxide emissions based on emission factors of 8.91 kilograms carbon dioxide per gallon of gasoline and 10.15 kilograms carbon dioxide per gallon of diesel fuel from "Voluntary Reporting of Greenhouse Gases Program, Fuel Emission Coefficients, Table 2" (Accessed online at <http://205.254.135.7/oiaf/1605/coefficients.html> on November 14, 2016).

**ATTACHMENT 1**  
**SOIL BORING LOGS**

Project: Williamsa Plating - RS  
 Project Location: 2080 N. Andrew J. Brown Ave, Indy  
 Project Number: 1610-011

Log of Boring WPP-1  
 Sheet 1 of 1

Date(s) Drilled 3/9/17 11:15	Logged By T. Erny	Checked By
Drilling Method DPT	Drill Bit Size/Type	Total Depth of Borehole
Drill Rig Type Geoprobe 6620	Drilling Contractor Midway	Approximate Surface Elevation
Groundwater Level and Date Measured 18'	Sampling Method(s) continuous	Hammer Data
Borehole Backfill bentonite chips	Location	

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	PID (ppm) REMARKS AND OTHER TESTS
	0						0-6" black topsoil	0-2 0.0
							6"-6' silt loam, brown, firm, moist, sl. plastic,	2-4 1.7
							6'-6.5' coarse sand w/ some gravel, brown, dense, sl. moist	4-6 1.5
	5							6-8 1.8
							6.5-18' fine sand, brown, dry, med. dense, 5-10% fines	8-10 1.8
	10							10-12 1.6
							18-20' coarse sand, brown, wet w/ some gravel, dense, poorly sorted	12-14 2.3
								14-16 2.1
	15							16-18 2.0
							BOB @ 20'	18-20 2.6
							Soil sample 0-2' for TAL metals + cyanide	
	20						DUP for metals/cyanide = WPP-1 (0-2')	
							Soil sample 2-4' for VOCs	
							DUP for VOCs = WPP-1 (2-4')	
	25						Soil gas sample screen set at 17' bgs	
	30							

Project: *Williamson Plating & Polishing - RS*  
 Project Location: *2680 N. Andrew J. Brown Ave, Indy*  
 Project Number: *1610-011*

Log of Boring *WUP-2*  
 Sheet 1 of 1

Date(s) Drilled <i>3/9/17 11:40</i>	Logged By <i>T. Erny</i>	Checked By
Drilling Method <i>DPT</i>	Drill Bit Size/Type	Total Depth of Borehole
Drill Rig Type <i>Geoprobe 662</i>	Drilling Contractor <i>Midway Services</i>	Approximate Surface Elevation
Groundwater Level and Date Measured <i>20'</i>	Sampling Method(s) <i>continuous 4' macro barrel</i>	Hammer Data
Borehole Backfill <i>bentonite chips</i>	Location	

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0						0-2" asphalt	
							2-6" limestone gravel base	0-4" = NR
							6"-4' No recovery	
	5						4-5' loam, moist, sl. plastic, med dense, brown	4-6" = 2.5
							5-5.5' Red brick fragments	6-8" = NR
							5.5-6' same as 4-5'	8-10" = 1.3
							6-8' No Recovery	
	10						8-8.5' same as 4-5'	10-12" = 1.5
							8.5-20' fine sand, brown, dry, med. dense, moderately sorted well	12-14" = 1.5
							20-22' coarse sand, wet, brown, poorly sorted, trace gravel, loose	14-16" = 1.3
	15						22-24' No Recovery	16-18" = 0.6
							BOSS @ 24'	18-20" = 0.1
	20						4-6' sample for metals, cyanide and VOCs	20-22" = 0.7
							soil gas probe screen set at 19' bgs	22-24" = NR
	25							
	30							

Project: Williamson Plating, RS

Project Location:

Project Number: 161D-011

Log of Boring WPP 3

Sheet 1 of 1

Date(s) Drilled 3/9/17 8:30	Logged By Travis Emy	Checked By
Drilling Method DPT	Drill Bit Size/Type	Total Depth of Borehole 16'
Drill Rig Type Geoprobe 6620	Drilling Contractor Midway	Approximate Surface Elevation
Groundwater Level and Date Measured 15.75'	Sampling Method(s) <del>DPT</del> Continuous	Hammer Data
Borehole Backfill bentonite chips	Location Williamson Plating	

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0						0-6" gravelly sand fill, moist, poorly sorted, loose	<u>PID</u>
	5						6-12" limestone gravel fill, dry, poorly sorted, v. loose	
							1-2' silty clay loam, firm, sl. moist, sl. plastic, brown	4.2 ppm
	10						2-4' NR	4-6: 0.4
							4-8' silty clay loam, firm, sl. moist, sl. plastic, brown	6-8: 0.3
	15						8'-15.75' fine sand loam, sl. moist to 10' then dry, loose, light brown	8-10: 0.6 10-12: 0.5
	20						15.75-16' sand w/ gravel, wet, loose, poorly sorted, brown	12-14: 0.8 14-16: 0.6
							BOB 16'	
	25						0-2' sampled metals & VOCs	
							soil gas sampler screen set at 15' bgs	
	30							

Project: Williamson Plating - RS

Project Location:

Project Number: 1610-011

Log of Boring WPP-4

Sheet 1 of 1

Date(s) Drilled 3/9/17 9:00	Logged By Travis Emy	Checked By
Drilling Method DPT	Drill Bit Size/Type	Total Depth of Borehole 16'
Drill Rig Type Geoprobe 6620	Drilling Contractor Midway	Approximate Surface Elevation
Groundwater Level and Date Measured 15.75'	Sampling Method(s) continuous	Hammer Data
Borehole Backfill bentonite chips	Location Williamson Plating	

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0						0-1' sand fill material, dry, wet @ 6", light bc, wet @ 6" w/ black staining	PID 0-2: 0.7
	5						1-6.5' silt loam, brown, v. sl. moist, Firm, v. sl. plastic	2-4: 0.2
							6.5-9.5 sandy loam, plastic, brown, sl. loose, v. moist to sl. wet	4-6 0.5 6-8 0.2
	10						9.5-15.75 <del>sandy</del> sandy sand, v. sl. moist to sl. loose, <del>dry</del> brown trace gravel	8-10 0.1 10-12 0.1
	15						15.75-16' sand, poorly sorted, some gravel, brown, wet loose	12-14 0.0 14-16 0.2
	20						BOB @ 16'	
							0-2' sampled for TAL metals, cyanide	
	25						Soil gas sampling screen set at 15' bgs	
	30							

Project: *Williamson Polishing & Plating*  
 Project Location: *2080 N. Andrew J. Brown, Indy*  
 Project Number: *505-0001-1610-011*

Log of Boring *WPP-5*  
 Sheet 1 of 1

Date(s) Drilled <i>3/9/17 9:30</i>	Logged By <i>Travis Ewing</i>	Checked By
Drilling Method <i>DPT 6620 DT</i>	Drill Bit Size/Type	Total Depth of Borehole
Drill Rig Type <i>Geoprobe 6620 DT</i>	Drilling Contractor <i>Midway</i>	Approximate Surface Elevation
Groundwater Level and Date Measured <i>17' bgs</i>	Sampling Method(s) <i>Continuous</i>	Hammer Data
Borehole Backfill <i>bentonite chips</i>	Location <i>Williamson Plating</i>	

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0						0-3" limestone gravel	PID 0-2: 0.9 ppm
							3'-2' sand, poorly sorted, v. moist, black staining, no odor, dense	2-4: 0.3 ppm
	5						2-6.5' silt loam, brown, firm, v. sl. moist, little black staining, no odor, w/ trace gravel	4-6 0.2
							6.5-17' fine sand, loose, dry, brown, #5-10% fines, w/ gravel at 11.5-12'	6-8 0.1 8-10 0.0
	10							10-12 0.0
								12-14 0.1
								14-16 0.5
	15						17-20' coarse sand w/ some gravel, wet, brown, loose, poorly sorted	16-18 0.4
							BOB @ 20'	18-20 0.2
	20						Sample 0-2' for TAL metals and cyanide	
							Soil gas probe screen set at 16' bgs	
	25							
	30							

Project: *Williamson Plating - RS*  
 Project Location: *2080 N. Andrew J. Brown*  
 Project Number: *1610-011*

Log of Boring *WPP-6*  
 Sheet 1 of 1

Date(s) Drilled <i>3/9/17 10:00</i>	Logged By <i>T. Eray</i>	Checked By
Drilling Method <i>DPT</i>	Drill Bit Size/Type	Total Depth of Borehole
Drill Rig Type <i>Geoprobe 6620</i>	Drilling Contractor <i>Midway</i>	Approximate Surface Elevation
Groundwater Level and Date Measured <i>20.5'</i>	Sampling Method(s) <i>continuous</i>	Hammer Data
Borehole Backfill <i>bentonite chips</i>	Location	

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	PID (ppm)	REMARKS AND OTHER TESTS
	0						0-3" limestone gravel		
							3"-2' sand, poorly sorted, dry black to dark brown @ 2' dense, fill material	0-2	
	5						V. moist @ 2'	2-4 0.1	
							2'-7' silty clay loam, brown, firm, sl. moist,	4-6 0.2	
	10						7'-16' fine sand, loose, dry, brown	6-8 0.4	
							16-20' loamy sand, dense, yellowish brown, dry	8-10 0.3	
	15						20-24' coarse sand w/ some gravel, brown, wet, poorly sorted dense	10-12 0.0	
	20						30B @ 24'	12-14 0.5	
							soil sample 0-2' for TAL metals + cyanide	14-16 0.1	
	25						soil gas sampling screen set at 19' bgs	16-18 1.0	
	30							18-20 0.2	
								20-22 0.2	
								22-24 1.0	
								24-26 NE	

Project: *Williamson Soil Plating - RS*  
 Project Location: *2080 N. Andrew J. Brown Ave, Indy*  
 Project Number: *1610-011*

**Log of Boring** *WPP-7*  
**Sheet 1 of 1**

Date(s) Drilled <i>3/9/17 10:45</i>	Logged By <i>T. Eury</i>	Checked By
Drilling Method <i>DPT</i>	Drill Bit Size/Type	Total Depth of Borehole
Drill Rig Type <i>Geoprobe 6620</i>	Drilling Contractor <i>Midway</i>	Approximate Surface Elevation
Groundwater Level and Date Measured <i>20' bgs</i>	Sampling Method(s) <i>Continuous - 4' macro barrel</i>	Hammer Data
Borehole Backfill <i>Bentonite chips</i>	Location	

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0						0-6" topsoil	0-2 0.0
							6"-5' silt loam, brown, sl. moist, med. soft, sl. plastic	2-4 0.2
	5						5-6' coarse sand, dense, dry, brown, poorly sorted	4-6 0.3
							6-8' NR	6-8 <del>0.3</del> NR
							8-9' same as 5-6'	8-10 0.3
	10						9-18' fine sand, brown, dry, loose, 5-10% fines,	10-12 0.1
							18-20' <del>NR</del> No recovery	12-14 0.0
							20-22 coarse sand w/ gravel, dense, poorly sorted, wet, brown	14-16 0.0
	15						22-24' No Recovery	16-18 0.0
							BOB @ 24'	18-20 NR
	20						Soil Sample 0-2' for <del>10</del> TAL metals + cyanide	20-22 0.1
							soil gas sampling screen @ 19'	
	25							
	30							

Project:

Project Location:

Project Number:

Log of Boring SB-02

Sheet 1 of 1

Date(s) Drilled	4/25/17 1045	Logged By	LGS	Checked By	
Drilling Method	DPT	Drill Bit Size/Type	1"	Total Depth of Borehole	20'
Drill Rig Type	6620DT	Drilling Contractor	IDEM	Approximate Surface Elevation	
Groundwater Level and Date Measured		Sampling Method(s)		Hammer Data	
Borehole Backfill		Location			

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0						Dark brown loam	PID (ppm)
							Brown clay w/ sand	
							Reddish brown sand w/ gravel and some clay	
	5							
	10						No recovery	
	15							
	20						Stopped @ 20' bgs. Installed well w/ screen @ 15-20'. Installed soil gas probe @ 10'	
	25							
	30							

Project:


Project Location:

Project Number:

Log of Boring SB-03

Sheet 1 of 1

Date(s) Drilled 4/25/17 1000	Logged By LGS	Checked By
Drilling Method DPT	Drill Bit Size/Type 1"	Total Depth of Borehole 20'
Drill Rig Type 6620DT	Drilling Contractor IDEM	Approximate Surface Elevation
Groundwater Level and Date Measured	Sampling Method(s)	Hammer Data
Borehole Backfill	Location	

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0						gray gravel - angular	PID (ppm)  
							Black sand w/ black vesicular gravel	
							Reddish brown clay	
	5						Reddish brown sand w/ gravel.	
	10							
	15						Brown gravel w/ GW gray clay w/ gravel. No GW	
	20						Gray sand w/ clay. Saturated w/ GW	
	25						Stopped @ 20 ft. Installed well w/ screen from 15-20'. Installed soil gas probe @ 10'.	
	30							

Project:

Project Location:

Project Number:

Log of Boring SB-04

Sheet 1 of 1

Date(s) Drilled 4/25/17	Logged By LGS	Checked By
Drilling Method DPT	Drill Bit Size/Type 1"	Total Depth of Borehole 20'
Drill Rig Type 6620DT	Drilling Contractor IDEM	Approximate Surface Elevation
Groundwater Level and Date Measured	Sampling Method(s)	Hammer Data
Borehole Backfill	Location	

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0						Dark brown loam	PID (ppm)
							Dark brown clay w/ sand	○
	5						Reddish brown clay w/ sand and gravel	
							Reddish brown sand w/ gravel	
	10							
							NO Recovery	
	15						Gray coarse sand w/ gravel saturated w/ GW	
	20						Stopped @ 20'. Installed 1" mw w/ screen from 15-20'. Installed soil gas probe @ 12'.	
	25							
	30							

Project:

Project Location:

Project Number:

Log of Boring SB-05

Sheet 1 of 1

Date(s) Drilled 4/24/17 1130	Logged By LGS	Checked By
Drilling Method DPT	Drill Bit Size/Type 1"	Total Depth of Borehole 20'
Drill Rig Type 6620 DT	Drilling Contractor IDEM	Approximate Surface Elevation
Groundwater Level and Date Measured	Sampling Method(s)	Hammer Data
Borehole Backfill	Location	

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0						Brick sidewalk	PID (ppm)
							Brown clay loam	0
	5						grey/brown coarse sand w/ clay.	
							gravel w/ red sand and some clay.	
	10						No recovery	
	15						poorly sorted coarse sand w/ gravel. Saturated w/ GW.	
	20						Stopped at 20' bgs. Installed monitoring well w/ screen from 15-20'	
	25						Installed soil vapor probe @ 10' bgs	
	30							

Project:

Project Location:

Project Number:

Log of Boring SB-06

Sheet 1 of 1

Date(s) Drilled	4/24/17 1430	Logged By	LGS	Checked By	
Drilling Method	DPT	Drill Bit Size/Type	1"	Total Depth of Borehole	20'
Drill Rig Type	6620DT	Drilling Contractor	IDEM	Approximate Surface Elevation	
Groundwater Level and Date Measured		Sampling Method(s)		Hammer Data	
Borehole Backfill		Location			

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0						Dark brown clay loam	PID
							Light brown clay w/ sand	APM
	5							
							Sand and gravel w/ clay brown and red in color	
	10							
							poorly sorted sand and gravel saturated w/ GW	
	15							
							Stopped boring @ 20'. Installed 1" well w/ screen @ 15-20'. Installed soil gas probe @ 9'	
	20							
	25							
	30							

Project: William son

Project Location:

Project Number:

Log of Boring SB-017

Sheet 1 of 1

Date(s) Drilled	4/24/17 0945	Logged By	LGS	Checked By	
Drilling Method	DPT	Drill Bit Size/Type	1"	Total Depth of Borehole	20'
Drill Rig Type	6620DT	Drilling Contractor	IDEM	Approximate Surface Elevation	
Groundwater Level and Date Measured		Sampling Method(s)		Hammer Data	
Borehole Backfill		Location			

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0						Silt loam, gray brown w/ cobbles throughout	PID (ppm) 0
	5						Brown sandy clay poorly sorted w/ fine to coarse sand	
	10						Mostly sand w/ some silt + clay. reddish brown wet.	
	12						Poorly sorted gravel	
	14						well sorted fine sand, brown	
	15						Poorly sorted gravel w/ groundwater.	
	20						Stopped boring @ 20' bgs. Screen from 15-20' soil gas probe @ 10'.	
	25							
	30							

Project:

Project Location:

Project Number:

Log of Boring SB-08

Sheet 1 of 1

Date(s) Drilled	4/25/17 0920	Logged By	LGS	Checked By	
Drilling Method	PPT	Drill Bit Size/Type	1"	Total Depth of Borehole	20'
Drill Rig Type	6620DT	Drilling Contractor	IDEM	Approximate Surface Elevation	
Groundwater Level and Date Measured		Sampling Method(s)		Hammer Data	
Borehole Backfill		Location			

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0						Dark brown gravel	PID (ppm)
							Brown clay w/ sand and gravel.	0
	5						Light brown sand, poorly sorted w/ gravel	
	10							
	15						Gravel w/ sand, Saturated w/ GW	
	20						Gray clay w/ gravel. No GW	
	25						Stopped boring @ 20'. Set monitoring well w/ screen @ 15-20' bgs. Soil gas probe @ 12'.	
	30							

Project:

Project Location:

Project Number:

Log of Boring 09

Sheet 1 of 1

Date(s) Drilled	4/24/17 1220	Logged By	LGS	Checked By	
Drilling Method	DPT	Drill Bit Size/Type	1"	Total Depth of Borehole	20'
Drill Rig Type	6620DT	Drilling Contractor	IDEM	Approximate Surface Elevation	
Groundwater Level and Date Measured		Sampling Method(s)		Hammer Data	
Borehole Backfill		Location			

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0						dark brown clay loam	
							Light brown coarse sand w/ silt and clay.	
	5						No recovery	
	10						gravel w/ brown sand	
	15						gray sand saturated w/ GW	
	20						stopped boring @ 20 ft. Installed well w/ screen @ 12.5-17.5'	
	25						soil gas probe @ 10'	
	30							

PID (ppm)

O

↓

Project:

Project Location:

Project Number:

Log of Boring SB-10

Sheet 1 of 1

Date(s) Drilled	4/24/17 1517	Logged By	LGS	Checked By	
Drilling Method	DPT	Drill Bit Size/Type	1"	Total Depth of Borehole	20'
Drill Rig Type	6620 DT	Drilling Contractor	IDEM	Approximate Surface Elevation	
Groundwater Level and Date Measured		Sampling Method(s)		Hammer Data	
Borehole Backfill		Location			

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft.	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0						Red brick	PID
							Light brown sand w/ gravel	plm
	5							
	10							
	15						gravel w/ some sand reddish brown	
							Reddish brown sand gravel saturated w/ GW	
	20						stopped @ 20' bgs. Installed MW w/ screen from 15-20' Soil gas probe @ 9'	
	25							
	30							

Project:	Log of Boring <u>SB-11</u> Sheet 1 of 1
Project Location:	
Project Number:	

Date(s) Drilled: <u>4/24/17</u> <u>1600</u>	Logged By: <u>LGJ</u>	Checked By:
Drilling Method: <u>DPT</u>	Drill Bit Size/Type: <u>1"</u>	Total Depth of Borehole: <u>20'</u>
Drill Rig Type: <u>Geoprobe 6620DT</u>	Drilling Contractor: <u>IDEM</u>	Approximate Surface Elevation:
Groundwater Level and Date Measured:	Sampling Method(s):	Hammer Data:
Borehole Backfill:	Location:	

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0						Red brick	PID ppm 
							Dark brown clay w/ sand	
							Light brown sand w/ gravel	
	5							
							Gravel w/ sand. Petroleum odor but no PID response	
	10							
							Sand saturated w/ GW. Gray	
	15							
							Stopped @ 20'. Installed 6mm w/ screen from 15-20' bgs. Installed soil gas probe @ 13' bgs.	
	20							
	25							
	30							

Project:

Project Location:

Project Number:

Log of Boring SR-12

Sheet 1 of 1

Date(s) Drilled	4/25/17 1345	Logged By	LGS	Checked By	
Drilling Method	DPT	Drill Bit Size/Type	1"	Total Depth of Borehole	20'
Drill Rig Type	6620DT	Drilling Contractor	IDEM	Approximate Surface Elevation	
Groundwater Level and Date Measured		Sampling Method(s)		Hammer Data	
Borehole Backfill		Location			

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0						Brown clay w/ gravel and sand.	P10 (ppm)  ○
	5						Light brown coarse sand w/ gravel.	↓
	10						No Recovery	
	15							
	20						Stopped @ 20'. Set MW w/ screen from 15-20' bgs. Set soil gas probe @ 10'.	
	25							
	30							

Project:

Project Location:

Project Number:

Log of Boring SB-13

Sheet 1 of 1

Date(s) Drilled <u>4/25/17</u> <u>1445</u>	Logged By <u>LGS</u>	Checked By
Drilling Method <u>DPT</u>	Drill Bit Size/Type <u>1"</u>	Total Depth of Borehole <u>20'</u>
Drill Rig Type <u>6620 DT</u>	Drilling Contractor <u>IDEM</u>	Approximate Surface Elevation
Groundwater Level and Date Measured	Sampling Method(s)	Hammer Data
Borehole Backfill	Location	

Elevation (feet)	Depth (feet)	Sample Type	Sample Number	Sampling Resistance, blows/ft	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	REMARKS AND OTHER TESTS
	0						Brown clay loam	P10 (ppm)
							Brown clay w/ coarse sand	0
	5							
	10						gray/brown clay w/ gravel and sand	
	15						Red clay w/ gravel, moist Gray coarse sand and gravel	
	20						Gray coarse sand and gravel saturated w/ GW	
	25						Stopped @ 20'. Installed MW w/ screen from 15-20'. Installed soil gas probe @ 14' bgs.	
	30							

**ATTACHMENT 2**  
**LOW-FLOW GROUNDWATER SAMPLING DATA SHEETS**

**FIGURE 1****LOW-FLOW GROUNDWATER SAMPLING DATA SHEET**Date/Time of Sample Collection: 04/27/17 1 1507 Project \_\_\_\_\_

Site/Subsite: \_\_\_\_\_

Sample ID: WPP-GW02-170427

Field ID: \_\_\_\_\_

Point Name: \_\_\_\_\_

Depth to Well Bottom: 19.56 ft. below top of casing (PVC cap)Depth to Water Level: 14.79 ft. below PVC capDepth to Water Level: 14.79 ft. below PVC cap prior to sampling

Method of Purging: Bladder Pump \_\_\_\_\_ Submersible Pump \_\_\_\_\_

Peristaltic Pump XStatic Well Volume: 1-inch well 0.20 Gallons /2-inch well \_\_\_\_\_ Gallons

Control Box Settings: Box # \_\_\_\_\_ Refill \_\_\_\_\_ Discharge \_\_\_\_\_

Throttle \_\_\_\_\_ psi

Total Purged: 1.00 GallonsActual Purge Rate: 0.05 Gallons/Min.**Purge Calculations****PHYSIO-CHEMICAL PARAMETERS DURING PURGING**

Measure in order listed**	Initial Reading									Stabilization Criteria	Final
Time	1452	1458	1503	1506							
pH	7.22	6.92	7.00	7.02						+/-0.1	
Temperature (°C)	13.57	13.61	13.69	13.80						NC*	
Specific Conductance (µmhos/cm)	1.035	1.035	1.046	1.046						+/-3%	
Turbidity (NTU)	X —	—	1360AU	753AU						+/-10%	
Dissolved Oxygen (mg/L)	5.55	2.86	2.59	2.73						+/-10% or +/-0.3	
ORP (mV)	100.9	95.2	86.9	85.2						+/-10	
Volume Purged (Gal)	0.25	0.50	0.75	1.00							

\*NC = No Criteria. \*\*Stabilization criteria listed should be used unless project-specific plans specify alternate stabilization criteria.

Duplicate Sample Collected? No Yes (Sample ID of Duplicate) \_\_\_\_\_MS/MSD Sample Collected? No Yes \_\_\_\_\_Sample Remarks (odors, colors, sediment): light brown, silty. Turbidity out of range.

Comments: \_\_\_\_\_

Sample(s) Collected By: JER, LGS

**FIGURE 1****LOW-FLOW GROUNDWATER SAMPLING DATA SHEET**Date/Time of Sample Collection: 4/28/17 / 1100 Project \_\_\_\_\_

Site/Subsite: \_\_\_\_\_

Sample ID: WFO-GW03-170428

Field ID: \_\_\_\_\_

Point Name: \_\_\_\_\_

Depth to Well Bottom: 19.44 ft. below top of casing (PVC cap)Depth to Water Level: 14.30 ft. below PVC capDepth to Water Level: 14.30 ft. below PVC cap prior to sampling

Method of Purging: Bladder Pump \_\_\_\_\_ Submersible Pump \_\_\_\_\_

Peristaltic Pump ☒Static Well Volume: 1-inch well 0.21 Gallons /2-inch well \_\_\_\_\_ Gallons

Control Box Settings: Box # \_\_\_\_\_ Refill \_\_\_\_\_ Discharge \_\_\_\_\_

Throttle \_\_\_\_\_ psi

Total Purged: 1.25 GallonsActual Purge Rate: 0.07 Gallons/Min.**Purge Calculations****PHYSIO-CHEMICAL PARAMETERS DURING PURGING**

Measure in order listed**	Initial Reading									Stabilization Criteria	Final
Time	1045	1048	1052	1056	1059						
pH	6.89	6.87	6.88	6.90	6.91					+/-0.1	
Temperature (°C)	12.56	12.52	12.50	12.52	12.52					NC*	
Specific Conductance (µmhos/cm)	1.012	1.033	1.040	1.041	1.041					+/-3%	
Turbidity (NTU)	125	80.4	50.5	38.0	22.2					+/-10%	
Dissolved Oxygen (mg/L)	6.76	2.79	1.53	1.13	1.05					+/-10% or +/-0.3	
ORP (mV)	181.7	179.2	173.6	168.6	166					+/-10	
Volume Purged (Gal)	0.25	0.50	0.75	1.00	1.25						

\*NC = No Criteria. \*\*Stabilization criteria listed should be used unless project-specific plans specify alternate stabilization criteria.

Duplicate Sample Collected? ☒ No Yes (Sample ID of Duplicate) \_\_\_\_\_MS/MSD Sample Collected? ☒ No Yes \_\_\_\_\_

Sample Remarks (odors, colors, sediment): \_\_\_\_\_

Comments: \_\_\_\_\_

Sample(s) Collected By: JER, LGS

**FIGURE 1****LOW-FLOW GROUNDWATER SAMPLING DATA SHEET**Date/Time of Sample Collection: 04/27/17 1 1546 Project \_\_\_\_\_

Site/Subsite: \_\_\_\_\_

Sample ID: WPP-6W04-170427

Field ID: \_\_\_\_\_ Point Name: \_\_\_\_\_

Depth to Well Bottom: 19.70 ft. below top of casing (PVC cap)Depth to Water Level: 13.65 ft. below PVC capDepth to Water Level: 13.64 ft. below PVC cap prior to sampling

Method of Purging: Bladder Pump \_\_\_\_\_ Submersible Pump \_\_\_\_\_

Peristaltic Pump ☒Static Well Volume: 1-inch well 0.35 Gallons /2-inch well \_\_\_\_\_ Gallons

Control Box Settings: Box # \_\_\_\_\_ Refill \_\_\_\_\_ Discharge \_\_\_\_\_

Throttle \_\_\_\_\_ psi

Total Purged: 1.25 GallonsActual Purge Rate: 0.05 Gallons/Min.**Purge Calculations****PHYSIO-CHEMICAL PARAMETERS DURING PURGING**

Measure in order listed**	Initial Reading									Stabilization Criteria	Final
Time	1525	1530	1537	1541	1544						
pH	7.34	7.06	7.11	7.11	7.10					+/-0.1	
Temperature (°C)	13.78	13.86	13.87	13.89	13.94					NC*	
Specific Conductance (µmhos/cm)	0.825	0.85	0.862	0.863	0.860					+/-3%	
Turbidity (NTU)	3319AU	907AU	129	68.8	32.7					+/-10%	
Dissolved Oxygen (mg/L)	4.99	2.37	1.68	1.46	1.43					+/-10% or +/-0.3	
ORP (mV)	99.7	91.0	79.5	76.6	74.7					+/-10	
Volume Purged (Gal)	0.125	0.50	0.75	1.00	1.25						

\*NC = No Criteria. \*\*Stabilization criteria listed should be used unless project-specific plans specify alternate stabilization criteria.

Duplicate Sample Collected? ☒ No Yes (Sample ID of Duplicate) \_\_\_\_\_MS/MSD Sample Collected? ☒ No Yes \_\_\_\_\_

Sample Remarks (odors, colors, sediment): \_\_\_\_\_

Comments: \_\_\_\_\_

Sample(s) Collected By: JER, LGS

**FIGURE 1****LOW-FLOW GROUNDWATER SAMPLING DATA SHEET**Date/Time of Sample Collection: 4/23/17 / 1140 Project \_\_\_\_\_

Site/Subsite: \_\_\_\_\_

Sample ID: WPP-GW05-170427

Field ID: \_\_\_\_\_ Point Name: \_\_\_\_\_

Depth to Well Bottom: 19.30 ft. below top of casing (PVC cap)Depth to Water Level: 10.71 ft. below PVC capDepth to Water Level: 10.75 ft. below PVC cap prior to sampling

Method of Purging: Bladder Pump \_\_\_\_\_ Submersible Pump \_\_\_\_\_

Peristaltic Pump ☒Static Well Volume: 1-inch well 0.39 Gallons /2-inch well \_\_\_\_\_ Gallons

Control Box Settings: Box # \_\_\_\_\_ Refill \_\_\_\_\_ Discharge \_\_\_\_\_

Throttle \_\_\_\_\_ psi

Total Purged: 1.25 GallonsActual Purge Rate: 0.04 Gallons/Min.**Purge Calculations****PHYSIO-CHEMICAL PARAMETERS DURING PURGING**

Measure in order listed**	Initial Reading									Stabilization Criteria	Final
Time	<u>1113</u>	<u>1118</u>	<u>1123</u>	<u>1128</u>	<u>1133</u>	<u>1140</u>					
pH	<u>6.79</u>	<u>6.74</u>	<u>6.94</u>	<u>6.96</u>	<u>6.96</u>	<u>6.96</u>				+/-0.1	
Temperature (°C)	<u>13.15</u>	<u>13.26</u>	<u>13.33</u>	<u>13.36</u>	<u>13.36</u>	<u>13.35</u>				NC*	
Specific Conductance (µmhos/cm)	<u>1372</u>	<u>1368</u>	<u>1368</u>	<u>1368</u>	<u>1368</u>	<u>1367</u>				+/-3%	
Turbidity (NTU)	<u>108</u>	<u>640AU</u>	<u>168</u>	<u>111</u>	<u>65.3</u>	<u>38.7</u>				+/-10%	
Dissolved Oxygen (mg/L)	<u>2.00</u>	<u>0.60</u>	<u>0.44</u>	<u>0.36</u>	<u>0.33</u>	<u>0.35</u>				+/-10% or +/-0.3	
ORP (mV)	<u>179.3</u>	<u>153.0</u>	<u>121.7</u>	<u>104.7</u>	<u>92.0</u>	<u>81.9</u>				+/-10	
Volume Purged (Gal)	<u>0</u>	<u>0.33</u>	<u>0.50</u>	<u>0.75</u>	<u>1.00</u>	<u>1.25</u>					

\*NC = No Criteria. \*\*Stabilization criteria listed should be used unless project-specific plans specify alternate stabilization criteria.

Duplicate Sample Collected? No ☒ (Sample ID of Duplicate) WPP-GW05-170427-DMS/MSD Sample Collected? No ☒ WPP-SC0

Sample Remarks (odors, colors, sediment): \_\_\_\_\_

Comments: \_\_\_\_\_

Sample(s) Collected By: JER, LGS

**FIGURE 1****LOW-FLOW GROUNDWATER SAMPLING DATA SHEET**Date/Time of Sample Collection: 4/28/17 / 10900 Project

Site/Subsite: \_\_\_\_\_

Sample ID: WPP-GW06-170428

Field ID: \_\_\_\_\_ Point Name: \_\_\_\_\_

Depth to Well Bottom: 14.81 ft. below top of casing (PVC cap)Depth to Water Level: 14.26 ft. below PVC capDepth to Water Level: 14.28 ft. below PVC cap prior to sampling

Method of Purging: Bladder Pump \_\_\_\_\_ Submersible Pump \_\_\_\_\_

Peristaltic Pump XStatic Well Volume: 1-inch well 0.19 Gallons /2-inch well \_\_\_\_\_ Gallons

Control Box Settings: Box # \_\_\_\_\_ Refill \_\_\_\_\_ Discharge \_\_\_\_\_

Throttle \_\_\_\_\_ psi

Total Purged: 1.25 GallonsActual Purge Rate: 0.06 Gallons/Min.**Purge Calculations****PHYSIO-CHEMICAL PARAMETERS DURING PURGING**

Measure in order listed**	Initial Reading									Stabilization Criteria	Final
Time	0843	0847	0849	0852	0859						
pH	6.84	7.04	7.09	7.11	7.13					+/-0.1	
Temperature (°C)	13.71	13.79	13.79	13.83	13.78					NC*	
Specific Conductance (µmhos/cm)	0.914	0.938	0.938	0.938	0.927					+/-3%	
Turbidity (NTU)	1444AU	2924AU	1796AU	936AU	102N7					+/-10%	
Dissolved Oxygen (mg/L)	32.5	1.49	1.33	1.41	1.20					+/-10% or +/-0.3	
ORP (mV)	192.7	173.9	170.1	175.5	163.0					+/-10	
Volume Purged (Gal)	0.40	0.50	0.75	1.00	1.25						

\*NC = No Criteria. \*\*Stabilization criteria listed should be used unless project-specific plans specify alternate stabilization criteria.

Duplicate Sample Collected? No (Yes) (Sample ID of Duplicate) WPP-GW06-170428-DMS/MSD Sample Collected? No Yes

Sample Remarks (odors, colors, sediment): \_\_\_\_\_

Comments: \_\_\_\_\_

Sample(s) Collected By: JER

**FIGURE 1****LOW-FLOW GROUNDWATER SAMPLING DATA SHEET**Date/Time of Sample Collection: 04/27/17 1 1342 Project \_\_\_\_\_

Site/Subsite: \_\_\_\_\_

Sample ID: WPP-GW07-170427

Field ID: \_\_\_\_\_

Point Name: \_\_\_\_\_

Depth to Well Bottom: 19.29 ft. below top of casing (PVC cap)Depth to Water Level: 12.06 ft. below PVC capDepth to Water Level: 19.29 12.08 ft. below PVC cap prior to sampling

Method of Purging: Bladder Pump \_\_\_\_\_ Submersible Pump \_\_\_\_\_

Peristaltic Pump ☒Static Well Volume: 1-inch well 30 Gallons /2-inch well \_\_\_\_\_ Gallons

Control Box Settings: Box # \_\_\_\_\_ Refill \_\_\_\_\_ Discharge \_\_\_\_\_

Throttle \_\_\_\_\_ psi

Total Purged: 1.00 GallonsActual Purge Rate: 0.05 Gallons/Min.**Purge Calculations****PHYSIO-CHEMICAL PARAMETERS DURING PURGING**

Measure in order listed**	Initial Reading									Stabilization Criteria	Final
Time	1325	1330	1335	1338	1341						
pH	6.85	6.77	6.87	6.89	6.9					+/-0.1	
Temperature (°C)	13.66	13.64	13.64	13.73	13.65					NC*	
Specific Conductance (µmhos/cm)	1.157	1.180	1.188	1.189	1.189					+/-3%	
Turbidity (NTU)	881.40	104.2	35.3	14.2	11.89					+/-10%	
Dissolved Oxygen (mg/L)	3.36	0.56	0.35	0.30	0.31					+/-10% or +/-0.3	
ORP (mV)	144.4	140.0	133.3	131.3	130.1					+/-10	
Volume Purged (Gal)	0.12	0.25	0.50	0.75	1.00						

\*NC = No Criteria. \*\*Stabilization criteria listed should be used unless project-specific plans specify alternate stabilization criteria.

Duplicate Sample Collected? No Yes (Sample ID of Duplicate) \_\_\_\_\_

MS/MSD Sample Collected? No Yes \_\_\_\_\_

Sample Remarks (odors, colors, sediment): \_\_\_\_\_

Comments: \_\_\_\_\_

Sample(s) Collected By: JER, LGS

**FIGURE 1****LOW-FLOW GROUNDWATER SAMPLING DATA SHEET**Date/Time of Sample Collection: 4/28/17 / 1142 Project

Site/Subsite: \_\_\_\_\_

Sample ID: WFP-GW08-170428

Field ID: \_\_\_\_\_ Point Name: \_\_\_\_\_

Depth to Well Bottom: 19.19 ft. below top of casing (PVC cap)Depth to Water Level: 14.54 ft. below PVC capDepth to Water Level: 14.53 ft. below PVC cap prior to sampling

Method of Purging: Bladder Pump \_\_\_\_\_ Submersible Pump \_\_\_\_\_

Peristaltic Pump ☒Static Well Volume: 1-inch well 0.4 Gallons / 2-inch well \_\_\_\_\_ Gallons

Control Box Settings: Box # \_\_\_\_\_ Refill \_\_\_\_\_ Discharge \_\_\_\_\_

Throttle \_\_\_\_\_ psi

Total Purged: 1.00 GallonsActual Purge Rate: 0.05 Gallons/Min.**Purge Calculations****PHYSIO-CHEMICAL PARAMETERS DURING PURGING**

Measure in order listed**	Initial Reading									Stabilization Criteria	Final
Time	1126	1131	1135	1140							
pH	6.87	6.88	6.89	6.89						+/-0.1	
Temperature (°C)	12.95	12.94	12.96	12.97						NC*	
Specific Conductance (µmhos/cm)	1.046	1.061	1.067	1.073						+/-3%	
Turbidity (NTU)	12.8	43.8	16.6	8.86						+/-10%	
Dissolved Oxygen (mg/L)	4.13	1.80	1.63	1.62						+/-10% or +/-0.3	
ORP (mV)	166.1	161.6	161.2	159.0						+/-10	
Volume Purged (Gal)	0.25	0.5	0.75	1.00							

\*NC = No Criteria. \*\*Stabilization criteria listed should be used unless project-specific plans specify alternate stabilization criteria.

Duplicate Sample Collected? ☒ No ☐ Yes (Sample ID of Duplicate) \_\_\_\_\_MS/MSD Sample Collected? ☒ No ☐ Yes \_\_\_\_\_

Sample Remarks (odors, colors, sediment): \_\_\_\_\_

Comments: \_\_\_\_\_

Sample(s) Collected By: JER, LGS

**FIGURE 1****LOW-FLOW GROUNDWATER SAMPLING DATA SHEET**Date/Time of Sample Collection: 04/27/17 1 1427 Project \_\_\_\_\_

Site/Subsite: \_\_\_\_\_

Sample ID: WPP-GW09-170427

Field ID: \_\_\_\_\_ Point Name: \_\_\_\_\_

Depth to Well Bottom: 19.30 ft. below top of casing (PVC cap)Depth to Water Level: 15.67 ft. below PVC capDepth to Water Level: ~~19.3~~ 15.71 ft. below PVC cap prior to sampling

Method of Purging: Bladder Pump \_\_\_\_\_ Submersible Pump \_\_\_\_\_

Peristaltic Pump XStatic Well Volume: 1-inch well 0.15 Gallons /2-inch well \_\_\_\_\_ Gallons

Control Box Settings: Box # \_\_\_\_\_ Refill \_\_\_\_\_ Discharge \_\_\_\_\_

Throttle \_\_\_\_\_ psi

Total Purged: 1.00 GallonsActual Purge Rate: 0.06 Gallons/Min.**Purge Calculations****PHYSIO-CHEMICAL PARAMETERS DURING PURGING**

Measure in order listed**	Initial Reading									Stabilization Criteria	Final
Time	1412	1417	1421	1425							
pH	7.17	6.98	7.01	7.05						+/-0.1	
Temperature (°C)	12.99	12.92	12.88	12.91						NC*	
Specific Conductance (µmhos/cm)	1.099	1.092	1.103	1.113						+/-3%	
Turbidity (NTU)	2544AU	3502AU	3009AU	2123AU						+/-10%	
Dissolved Oxygen (mg/L)	4.15	2.03	1.02	0.72						+/-10% or +/-0.3	
ORP (mV)	120.3	107.1	93.4	80.8						+/-10	
Volume Purged (Gal)	0.25	0.50	0.75	1.00							

\*NC = No Criteria. \*\*Stabilization criteria listed should be used unless project-specific plans specify alternate stabilization criteria.

Duplicate Sample Collected? No Yes (Sample ID of Duplicate) \_\_\_\_\_MS/MSD Sample Collected? No Yes \_\_\_\_\_Sample Remarks (odors, colors, sediment): light brown, silty

Comments: \_\_\_\_\_

Sample(s) Collected By: JER, LGS

**FIGURE 1****LOW-FLOW GROUNDWATER SAMPLING DATA SHEET**Date/Time of Sample Collection: 4/24/17 / 1022 Project \_\_\_\_\_

Site/Subsite: \_\_\_\_\_

Sample ID: WPP-GW10-170428

Field ID: \_\_\_\_\_

Point Name: \_\_\_\_\_

Depth to Well Bottom: 19.63 ft. below top of casing (PVC cap)Depth to Water Level: 15.12 ft. below PVC capDepth to Water Level: 15.11 ft. below PVC cap prior to sampling

Method of Purging: Bladder Pump \_\_\_\_\_ Submersible Pump \_\_\_\_\_

Peristaltic Pump ☒Static Well Volume: 1-inch well 0.18 Gallons /2-inch well \_\_\_\_\_ Gallons

Control Box Settings: Box # \_\_\_\_\_ Refill \_\_\_\_\_ Discharge \_\_\_\_\_

Throttle \_\_\_\_\_ psi

Total Purged: 1.00 GallonsActual Purge Rate: 0.05 Gallons/Min.**Purge Calculations****PHYSIO-CHEMICAL PARAMETERS DURING PURGING**

Measure in order listed**	Initial Reading									Stabilization Criteria	Final
Time	1005	1011	1016	1021							
pH	6.95	6.95	<del>6.94</del> 6.94	6.94						+/-0.1	
Temperature (°C)	14.04	14.10	14.11	14.12						NC*	
Specific Conductance (µmhos/cm)	1,152	1,165	1,168	1,169						+/-3%	
Turbidity (NTU)	134	81.5	46.3	29.0						+/-10%	
Dissolved Oxygen (mg/L)	4.09	2.01	1.87	1.87						+/-10% or +/-0.3	
ORP (mV)	175.0	168.1	165.5	164.4						+/-10	
Volume Purged (Gal)	0.25	0.50	0.75	1.00							

\*NC = No Criteria. \*\*Stabilization criteria listed should be used unless project-specific plans specify alternate stabilization criteria.

Duplicate Sample Collected? ☒ No Yes (Sample ID of Duplicate) \_\_\_\_\_MS/MSD Sample Collected? ☒ No Yes \_\_\_\_\_

Sample Remarks (odors, colors, sediment): \_\_\_\_\_

Comments: \_\_\_\_\_

Sample(s) Collected By: JER, LGS

**FIGURE 1****LOW-FLOW GROUNDWATER SAMPLING DATA SHEET**Date/Time of Sample Collection: 04/28/17 / 0943 Project \_\_\_\_\_

Site/Subsite: \_\_\_\_\_

Sample ID: WPP-GW11-170428

Field ID: \_\_\_\_\_ Point Name: \_\_\_\_\_

Depth to Well Bottom: 14.40 ft. below top of casing (PVC cap)Depth to Water Level: 16.78 ft. below PVC capDepth to Water Level: 16.79 ft. below PVC cap prior to sampling

Method of Purging: Bladder Pump \_\_\_\_\_ Submersible Pump \_\_\_\_\_

Peristaltic Pump ☒Static Well Volume: 1-inch well 0.12 Gallons /2-inch well \_\_\_\_\_ Gallons

Control Box Settings: Box # \_\_\_\_\_ Refill \_\_\_\_\_ Discharge \_\_\_\_\_

Throttle \_\_\_\_\_ psi

Total Purged: 1.25 GallonsActual Purge Rate: 0.07 Gallons/Min.**Purge Calculations****PHYSIO-CHEMICAL PARAMETERS DURING PURGING**

Measure in order listed**	Initial Reading									Stabilization Criteria	Final
Time	<u>0928</u>	<u>0933</u>	<u>0938</u>	<u>0942</u>							
pH	<u>7.02</u>	<u>7.04</u>	<u>7.04</u>	<u>7.04</u>						+/-0.1	
Temperature (°C)	<u>13.64</u>	<u>13.76</u>	<u>13.81</u>	<u>13.83</u>						NC*	
Specific Conductance (µmhos/cm)	<u>0.860</u>	<u>0.871</u>	<u>0.872</u>	<u>0.872</u>						+/-3%	
Turbidity (NTU)	<u>143</u>	<u>56.8</u>	<u>27.9</u>	<u>21.0</u>						+/-10%	
Dissolved Oxygen (mg/L)	<u>7.38</u>	<u>4.92</u>	<u>4.72</u>	<u>4.36</u>						+/-10% or +/-0.3	
ORP (mV)	<u>169.1</u>	<u>160.6</u>	<u>158.7</u>	<u>157.9</u>						+/-10	
Volume Purged (Gal)	<u>0.50</u>	<u>0.75</u>	<u>1.00</u>	<u>1.25</u>							

\*NC = No Criteria. \*\*Stabilization criteria listed should be used unless project-specific plans specify alternate stabilization criteria.

Duplicate Sample Collected? ☒ No Yes (Sample ID of Duplicate) \_\_\_\_\_MS/MSD Sample Collected? ☒ No Yes \_\_\_\_\_

Sample Remarks (odors, colors, sediment): \_\_\_\_\_

Comments: \_\_\_\_\_

Sample(s) Collected By: JER, LGS

**FIGURE 1****LOW-FLOW GROUNDWATER SAMPLING DATA SHEET**Date/Time of Sample Collection: 04/27/17 1 1030 Project \_\_\_\_\_

Site/Subsite: \_\_\_\_\_

Sample ID: WPP-GW12-170427Field ID: 191

Point Name: \_\_\_\_\_

Depth to Well Bottom: 19.78 ft. below top of casing (PVC cap)Depth to Water Level: 19.29 ft. below PVC capDepth to Water Level: N/A ft. below PVC cap prior to sampling

Method of Purging: Bladder Pump \_\_\_\_\_ Submersible Pump \_\_\_\_\_

Peristaltic Pump ☒Static Well Volume: 1-inch well 0.02 Gallons /2-inch well \_\_\_\_\_ Gallons

Control Box Settings: Box # \_\_\_\_\_ Refill \_\_\_\_\_ Discharge \_\_\_\_\_

Throttle \_\_\_\_\_ psi

Total Purged: 0.02 Gallons

Actual Purge Rate: \_\_\_\_\_ Gallons/Min.

**Purge Calculations****PHYSIO-CHEMICAL PARAMETERS DURING PURGING**

Measure in order listed**	Initial Reading									Stabilization Criteria	Final
Time											
pH										+/-0.1	
Temperature (°C)										NC*	
Specific Conductance (µmhos/cm)										+/-3%	
Turbidity (NTU)										+/-10%	
Dissolved Oxygen (mg/L)										+/-10% or +/-0.3	
ORP (mV)										+/-10	
Volume Purged (Gal)											

\*NC = No Criteria. \*\*Stabilization criteria listed should be used unless project-specific plans specify alternate stabilization criteria.

Duplicate Sample Collected? No Yes (Sample ID of Duplicate) \_\_\_\_\_

MS/MSD Sample Collected? No Yes \_\_\_\_\_

Sample Remarks (odors, colors, sediment): \_\_\_\_\_

Comments: \_\_\_\_\_

Sample(s) Collected By: UGS, JER

Well pumped dry. Allowed to recharge, then collected sample.

**FIGURE 1****LOW-FLOW GROUNDWATER SAMPLING DATA SHEET**Date/Time of Sample Collection: 4/27/17 / 0930 Project

Site/Subsite: \_\_\_\_\_

Sample ID: WPP-LW13-170427

Field ID: \_\_\_\_\_

Point Name: \_\_\_\_\_

Depth to Well Bottom: 19.65 ft. below top of casing (PVC cap)Depth to Water Level: 16.68 ft. below PVC capDepth to Water Level: 16.70 ft. below PVC cap prior to sampling

Method of Purging: Bladder Pump \_\_\_\_\_ Submersible Pump \_\_\_\_\_

Peristaltic Pump XStatic Well Volume: 1-inch well 0.13 Gallons /2-inch well \_\_\_\_\_ Gallons

Control Box Settings: Box # \_\_\_\_\_ Refill \_\_\_\_\_ Discharge \_\_\_\_\_

Throttle \_\_\_\_\_ psi

Total Purged: 2.0 GallonsActual Purge Rate: 0.06 Gallons/Min.**Purge Calculations****PHYSIO-CHEMICAL PARAMETERS DURING PURGING**

Measure in order listed**	Initial Reading									Stabilization Criteria	Final
Time	0900	0910	0917	0923	0930	<del>0935</del>					
pH	6.59	<del>6.52</del>	6.57	6.61	6.65					+/-0.1	
Temperature (°C)	13.08	12.87	12.74	12.78	12.72					NC*	
Specific Conductance (µmhos/cm)	1.171	1.172	1.173	1.173	1.173					+/-3%	
Turbidity (NTU)	67.0	74.1	108	85.8	43.9					+/-10%	
Dissolved Oxygen (mg/L)	2.71	1.87	1.72	1.69	1.63					+/-10% or +/-0.3	
ORP (mV)	193.4	190.6	185.3	180.4	177.6					+/-10	
Volume Purged (Gal)	<del>0.75</del>	1.0	1.3	1.75	2.0						

\*NC = No Criteria. \*\*Stabilization criteria listed should be used unless project-specific plans specify alternate stabilization criteria.

Duplicate Sample Collected? No Yes (Sample ID of Duplicate) \_\_\_\_\_

MS/MSD Sample Collected? No Yes \_\_\_\_\_

Sample Remarks (odors, colors, sediment): \_\_\_\_\_

Comments: \_\_\_\_\_

Sample(s) Collected By: LGS, JER

**ATTACHMENT 3**  
**LABORATORY ANALYTICAL REPORTS AND DATA VALIDATION REPORTS**

November 03, 2016

Josh Randall  
Quality Environmental Professionals, Inc.  
1611 South Franklin Road  
Indianapolis, IN 46239

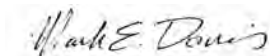
RE: Project: Williamson Polishing & Plating  
Pace Project No.: 50157824

Dear Josh Randall:

Enclosed are the analytical results for sample(s) received by the laboratory on October 31, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Mark Davis  
mark.davis@pacelabs.com  
Project Manager

Enclosures



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



**Pace Analytical Services, LLC**

Not NELAP Accredited

4860 Blazer Parkway

Dublin, OH 43017

(614)486-5421

**Pace Analytical Services, LLC**

7726 Moller Road

Indianapolis, IN 46268

(317)228-3100

## CERTIFICATIONS

Project: Williamson Polishing & Plating

Pace Project No.: 50157824

---

### Indiana Certification IDs

7726 Moller Road, Indianapolis, IN 46268

Illinois Certification #: 200074

Indiana Certification #: C-49-06

Kansas/NELAP Certification #:E-10177

Kentucky UST Certification #: 0042

Kentucky WW Certification #:98019

Ohio VAP Certification #: CL-0065

Oklahoma Certification #: 2014-148

Texas Certification #: T104704355-15-9

West Virginia Certification #: 330

Wisconsin Certification #: 999788130

USDA Soil Permit #: P330-10-00128

---

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## SAMPLE SUMMARY

Project: Williamson Polishing & Plating

Pace Project No.: 50157824

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50157824001	WPP-A4-161031	Water	10/31/16 11:30	10/31/16 16:40
50157824002	WPP-A7-161031	Water	10/31/16 11:35	10/31/16 16:40
50157824003	WPP-A22-161031	Water	10/31/16 11:40	10/31/16 16:40
50157824004	WPP-B32-161031	Water	10/31/16 11:55	10/31/16 16:40
50157824005	WPP-B33-161031	Water	10/31/16 11:55	10/31/16 16:40
50157824006	WPP-FLAM-161031	Water	10/31/16 11:50	10/31/16 16:40
50157824007	WPP-CN-161031	Solid	10/31/16 10:00	10/31/16 16:40

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

**SAMPLE ANALYTE COUNT**

Project: Williamson Polishing &amp; Plating

Pace Project No.: 50157824

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
50157824001	WPP-A4-161031	EPA 6010	JPK, MJC	7	PASI-I
		EPA 7470	ILP	1	PASI-I
50157824002	WPP-A7-161031	EPA 9045	SCM	1	PASI-I
50157824003	WPP-A22-161031	EPA 9045	SCM	1	PASI-I
50157824004	WPP-B32-161031	EPA 9045	SCM	1	PASI-I
50157824005	WPP-B33-161031	EPA 9045	SCM	1	PASI-I
50157824006	WPP-FLAM-161031	EPA 1010	SCM	1	PASI-I
50157824007	WPP-CN-161031	EPA 9012	ZM	1	PASI-I

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## SUMMARY OF DETECTION

Project: Williamson Polishing & Plating

Pace Project No.: 50157824

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
<b>50157824001</b>	<b>WPP-A4-161031</b>					
EPA 6010	Arsenic	0.18	mg/L	0.10	11/03/16 04:04	
EPA 6010	Cadmium	10900	mg/L	25.0	11/03/16 09:42	
EPA 6010	Chromium	23.9	mg/L	0.10	11/03/16 04:04	
EPA 6010	Selenium	0.79	mg/L	0.10	11/03/16 04:04	
<b>50157824002</b>	<b>WPP-A7-161031</b>					
EPA 9045	pH at 25 Degrees C	11.5	Std. Units	0.10	11/03/16 12:59	
<b>50157824003</b>	<b>WPP-A22-161031</b>					
EPA 9045	pH at 25 Degrees C	13.0	Std. Units	0.10	11/03/16 13:00	
<b>50157824004</b>	<b>WPP-B32-161031</b>					
EPA 9045	pH at 25 Degrees C	0.82	Std. Units	0.10	11/03/16 13:02	
<b>50157824005</b>	<b>WPP-B33-161031</b>					
EPA 9045	pH at 25 Degrees C	0.70	Std. Units	0.10	11/03/16 13:03	
<b>50157824006</b>	<b>WPP-FLAM-161031</b>					
EPA 1010	Flashpoint	61	deg F		11/02/16 13:10	1d
<b>50157824007</b>	<b>WPP-CN-161031</b>					
EPA 9012	Cyanide	7300	mg/kg	119	11/02/16 12:45	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## ANALYTICAL RESULTS

Project: Williamson Polishing & Plating

Pace Project No.: 50157824

Sample: WPP-A4-161031		Lab ID: 50157824001		Collected: 10/31/16 11:30		Received: 10/31/16 16:40		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
6010 MET ICP, TCLP		Analytical Method: EPA 6010 Preparation Method: EPA 3010							
		Leachate Method/Date: EPA 1311; 11/01/16 18:15 Initial pH: 0; Final pH: 11.71							
Arsenic	0.18	mg/L	0.10	1	11/02/16 17:24	11/03/16 04:04	7440-38-2		
Barium	ND	mg/L	5.0	1	11/02/16 17:24	11/03/16 04:04	7440-39-3		
Cadmium	10900	mg/L	25.0	500	11/02/16 17:24	11/03/16 09:42	7440-43-9		
Chromium	23.9	mg/L	0.10	1	11/02/16 17:24	11/03/16 04:04	7440-47-3		
Lead	ND	mg/L	0.10	1	11/02/16 17:24	11/03/16 04:04	7439-92-1		
Selenium	0.79	mg/L	0.10	1	11/02/16 17:24	11/03/16 04:04	7782-49-2		
Silver	ND	mg/L	0.10	1	11/02/16 17:24	11/03/16 04:04	7440-22-4		
7470 Mercury, TCLP		Analytical Method: EPA 7470 Preparation Method: EPA 7470							
		Leachate Method/Date: EPA 1311; 11/01/16 18:15 Initial pH: 0; Final pH: 11.71							
Mercury	ND	mg/L	0.0020	1	11/02/16 22:40	11/03/16 11:34	7439-97-6		

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

**ANALYTICAL RESULTS**

Project: Williamson Polishing &amp; Plating

Pace Project No.: 50157824

<b>Sample: WPP-A7-161031</b>		<b>Lab ID: 50157824002</b>		Collected: 10/31/16 11:35		Received: 10/31/16 16:40		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
<b>9045 pH Soil</b>		Analytical Method: EPA 9045							
pH at 25 Degrees C	<b>11.5</b>	Std. Units	0.10	1		11/03/16 12:59			

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

**ANALYTICAL RESULTS**

Project: Williamson Polishing &amp; Plating

Pace Project No.: 50157824

<b>Sample: WPP-A22-161031</b>		<b>Lab ID: 50157824003</b>		Collected: 10/31/16 11:40		Received: 10/31/16 16:40		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
<b>9045 pH Soil</b>		Analytical Method: EPA 9045							
pH at 25 Degrees C	<b>13.0</b>	Std. Units	0.10	1		11/03/16 13:00			

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

**ANALYTICAL RESULTS**

Project: Williamson Polishing &amp; Plating

Pace Project No.: 50157824

<b>Sample: WPP-B32-161031</b>		<b>Lab ID: 50157824004</b>		Collected: 10/31/16 11:55		Received: 10/31/16 16:40		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
<b>9045 pH Soil</b>		Analytical Method: EPA 9045							
pH at 25 Degrees C	<b>0.82</b>	Std. Units	0.10	1		11/03/16 13:02			

**REPORT OF LABORATORY ANALYSIS**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## ANALYTICAL RESULTS

Project: Williamson Polishing & Plating

Pace Project No.: 50157824

<b>Sample: WPP-B33-161031</b>		<b>Lab ID: 50157824005</b>		Collected: 10/31/16 11:55		Received: 10/31/16 16:40		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
<b>9045 pH Soil</b>		Analytical Method: EPA 9045							
pH at 25 Degrees C	<b>0.70</b>	Std. Units	0.10	1		11/03/16 13:03			

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## ANALYTICAL RESULTS

Project: Williamson Polishing &amp; Plating

Pace Project No.: 50157824

<b>Sample: WPP-FLAM-161031</b>		<b>Lab ID: 50157824006</b>		Collected: 10/31/16 11:50		Received: 10/31/16 16:40		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
<b>1010 Flashpoint,Closed Cup</b>		Analytical Method: EPA 1010							
Flashpoint	<b>61</b>	deg F		1		11/02/16 13:10			1d

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## ANALYTICAL RESULTS

Project: Williamson Polishing &amp; Plating

Pace Project No.: 50157824

**Sample: WPP-CN-161031**      **Lab ID: 50157824007**      Collected: 10/31/16 10:00      Received: 10/31/16 16:40      Matrix: Solid**Results reported on a "wet-weight" basis**

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
<b>9012 Cyanide, Total</b>		Analytical Method: EPA 9012    Preparation Method: EPA 9012						
Cyanide	<b>7300</b>	mg/kg	119	500	11/01/16 20:26	11/02/16 12:45	57-12-5	

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALITY CONTROL DATA

Project: Williamson Polishing & Plating

Pace Project No.: 50157824

QC Batch: 359540

Analysis Method: EPA 7470

QC Batch Method: EPA 7470

Analysis Description: 7470 Mercury TCLP

Associated Lab Samples: 50157824001

METHOD BLANK: 1661693

Matrix: Water

Associated Lab Samples: 50157824001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/L	ND	0.00067	11/03/16 11:15	

LABORATORY CONTROL SAMPLE: 1661694

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	.005	0.0052	104	80-120	

MATRIX SPIKE SAMPLE: 1661695

Parameter	Units	50157498001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	.015	0.015	101	75-125	

MATRIX SPIKE SAMPLE: 1661696

Parameter	Units	50157803006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	.015	0.017	103	75-125	

MATRIX SPIKE SAMPLE: 1661697

Parameter	Units	50157824001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	ND	.015	0.017	111	75-125	

MATRIX SPIKE SAMPLE: 1661698

Parameter	Units	50157860001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	<0.0010	.015	0.016	104	75-125	

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

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALITY CONTROL DATA

Project: Williamson Polishing & Plating

Pace Project No.: 50157824

QC Batch: 359496

Analysis Method: EPA 6010

QC Batch Method: EPA 3010

Analysis Description: 6010 MET TCLP

Associated Lab Samples: 50157824001

METHOD BLANK: 1661482

Matrix: Water

Associated Lab Samples: 50157824001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.010	11/03/16 03:55	
Barium	mg/L	ND	0.50	11/03/16 03:55	
Cadmium	mg/L	ND	0.0050	11/03/16 09:33	
Chromium	mg/L	ND	0.010	11/03/16 03:55	
Lead	mg/L	ND	0.010	11/03/16 03:55	
Selenium	mg/L	ND	0.010	11/03/16 03:55	
Silver	mg/L	ND	0.010	11/03/16 03:55	

LABORATORY CONTROL SAMPLE: 1661483

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	1	0.99	99	80-120	
Barium	mg/L	1	0.96	96	80-120	
Cadmium	mg/L	1	0.97	97	80-120	
Chromium	mg/L	1	0.97	97	80-120	
Lead	mg/L	1	0.93	93	80-120	
Selenium	mg/L	1	1.0	100	80-120	
Silver	mg/L	.5	0.47	95	80-120	

MATRIX SPIKE SAMPLE: 1661484

Parameter	Units	50157498001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	ND	10	9.9	99	50-150	
Barium	mg/L	9.4	10	18.3	89	50-150	
Cadmium	mg/L	ND	10	9.6	96	50-150	
Chromium	mg/L	192	10	192	-2	50-150	P6
Lead	mg/L	ND	10	9.0	90	50-150	
Selenium	mg/L	ND	10	9.9	99	50-150	
Silver	mg/L	ND	5	4.7	93	50-150	

MATRIX SPIKE SAMPLE: 1661485

Parameter	Units	50157824001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	0.18	10	11.9	117	50-150	
Barium	mg/L	ND	10	10.0	96	50-150	
Cadmium	mg/L	10900	10	11000	1200	50-150	P6
Chromium	mg/L	23.9	10	33.8	98	50-150	

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

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALITY CONTROL DATA

Project: Williamson Polishing & Plating

Pace Project No.: 50157824

MATRIX SPIKE SAMPLE:		1661485					
		50157824001	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Lead	mg/L	ND	10	8.1	81	50-150	
Selenium	mg/L	0.79	10	12.3	115	50-150	
Silver	mg/L	ND	5	4.7	94	50-150	

MATRIX SPIKE SAMPLE:		1661486					
		50157860001	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Arsenic	mg/L	<0.050	10	10.3	103	50-150	
Barium	mg/L	<0.25	10	9.7	95	50-150	
Cadmium	mg/L	<0.025	10	9.9	99	50-150	
Chromium	mg/L	0.078J	10	9.6	95	50-150	
Lead	mg/L	<0.050	10	9.3	93	50-150	
Selenium	mg/L	<0.050	10	10.3	103	50-150	
Silver	mg/L	<0.050	5	4.8	96	50-150	

MATRIX SPIKE SAMPLE:		1661487					
		50157821001	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Arsenic	mg/L	ND	10	10.0	100	50-150	
Barium	mg/L	ND	10	10.1	93	50-150	
Cadmium	mg/L	ND	10	9.7	97	50-150	
Chromium	mg/L	ND	10	9.5	95	50-150	
Lead	mg/L	0.57	10	9.7	91	50-150	
Selenium	mg/L	ND	10	10.3	103	50-150	
Silver	mg/L	ND	5	4.8	95	50-150	

MATRIX SPIKE SAMPLE:		1661488					
		50157810001	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Arsenic	mg/L	ND	10	9.5	95	50-150	
Barium	mg/L	ND	10	9.4	94	50-150	
Cadmium	mg/L	ND	10	9.2	92	50-150	
Chromium	mg/L	ND	10	9.5	95	50-150	
Lead	mg/L	ND	10	9.2	91	50-150	
Selenium	mg/L	ND	10	9.6	96	50-150	
Silver	mg/L	ND	5	4.7	93	50-150	

MATRIX SPIKE SAMPLE:		1661489					
		50157790001	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Arsenic	mg/L	ND	10	10.4	103	50-150	

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

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALITY CONTROL DATA

Project: Williamson Polishing & Plating

Pace Project No.: 50157824

MATRIX SPIKE SAMPLE:		1661489					
		50157790001	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Barium	mg/L	ND	10	12.3	101	50-150	
Cadmium	mg/L	ND	10	9.9	99	50-150	
Chromium	mg/L	8.1	10	18.0	100	50-150	
Lead	mg/L	ND	10	9.5	95	50-150	
Selenium	mg/L	ND	10	10.5	105	50-150	
Silver	mg/L	ND	5	5.1	101	50-150	

MATRIX SPIKE SAMPLE:		1661490					
		50157864002	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Arsenic	mg/L	ND	10	10.1	101	50-150	
Barium	mg/L	ND	10	9.9	98	50-150	
Cadmium	mg/L	ND	10	9.7	97	50-150	
Chromium	mg/L	ND	10	9.9	99	50-150	
Lead	mg/L	ND	10	9.3	93	50-150	
Selenium	mg/L	ND	10	10.3	103	50-150	
Silver	mg/L	ND	5	5.0	99	50-150	

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

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALITY CONTROL DATA

Project: Williamson Polishing & Plating

Pace Project No.: 50157824

QC Batch: 359579 Analysis Method: EPA 9045  
QC Batch Method: EPA 9045 Analysis Description: 9045 pH  
Associated Lab Samples: 50157824002, 50157824003, 50157824004, 50157824005

SAMPLE DUPLICATE: 1661809

Parameter	Units	50157809001 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	7.8	7.8	1	20	

SAMPLE DUPLICATE: 1661810

Parameter	Units	50157845001 Result	Dup Result	RPD	Max RPD	Qualifiers
pH at 25 Degrees C	Std. Units	4.5	4.5	1	20	

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

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALITY CONTROL DATA

Project: Williamson Polishing & Plating

Pace Project No.: 50157824

QC Batch: 359294

Analysis Method: EPA 9012

QC Batch Method: EPA 9012

Analysis Description: 9012 Cyanide

Associated Lab Samples: 50157824007

METHOD BLANK: 1660758

Matrix: Solid

Associated Lab Samples: 50157824007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/kg	ND	0.25	11/02/16 09:21	

LABORATORY CONTROL SAMPLE: 1660759

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/kg	4.9	4.7	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1660760 1660761

Parameter	Units	50157860001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/kg	8.0	4.8	4.8	9.8	8.8	38	18	90-110	10	20	M3

MATRIX SPIKE SAMPLE: 1660762

Parameter	Units	50157775018 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/kg	19.0	11.4	37.5	163	90-110	M0

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

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALIFIERS

Project: Williamson Polishing & Plating

Pace Project No.: 50157824

### DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

### LABORATORIES

PASI-I Pace Analytical Services - Indianapolis

### ANALYTE QUALIFIERS

1d Flashpoint was not confirmed by a second analysis due to limited sample volume.

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

M3 Matrix spike recovery was outside laboratory control limits due to matrix interferences.

P6 Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Williamson Polishing & Plating

Pace Project No.: 50157824

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50157824001	WPP-A4-161031	EPA 3010	359496	EPA 6010	359574
50157824001	WPP-A4-161031	EPA 7470	359540	EPA 7470	359626
50157824006	WPP-FLAM-161031	EPA 1010	359465		
50157824002	WPP-A7-161031	EPA 9045	359579		
50157824003	WPP-A22-161031	EPA 9045	359579		
50157824004	WPP-B32-161031	EPA 9045	359579		
50157824005	WPP-B33-161031	EPA 9045	359579		
50157824007	WPP-CN-161031	EPA 9012	359294	EPA 9012	359368

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

Company: GEPT  
 Project Contact: M Lucas Stamps  
 Telephone: 317-797-2420  
 Project Name: Williamson Polishing  
 Project #: 13-07-035  
 Location: Indianapolis IN  
 Sampled By: LGS

Report To:  
 EMAIL: stamps@gepi.com  
 Company: jrandall@gepi.com  
 Address:

Lab Use Only  
 Place Header Sticker Here:

Program:  
 QSM RCRA SDWA NPDES  
 Solid Waste Other  
 PO #

Invoice To:  
 EMAIL: jrandall@gepi.com  
 Company: GEPT  
 Address: 1611 S Franklin Rd  
 Indianapolis, IN 46234

\*Party listed is responsible for payment of invoice as per CT Laboratories' terms and conditions

## Client Special Instructions

2 day TAT  
 EPA scribe EDD

Matrix:  
 GW - groundwater SW - surface water WW - wastewater DW - drinking water  
 S - soil/sediment SL - sludge A - air M - misc/waste

Collection		Matrix	Grab/ Comp	Sample #	Sample ID Description
Date	Time				
10/31/16	1130	M	G		WPP-A4-161031
	1135				WPP-A7-161031
	1140				WPP-A22-161031
	1155				WPP-B32-161031
	1145				WPP-B33-161031
	1150				WPP-FLAM-161031
	1000				WPP-CN-161031

Relinquished By:

Date/Time: 10/31/16 1840

Received by:

Date/Time

Received By:

Date/Time

Lab Use Only  
 Ice Present Yes No  
 Temp 10.7C IR Gun  
 Cooler #

Date/Time: 10-31-16/1840

# Sample Condition Upon Receipt

Pace Analytical

Client Name: CT Lab

Project # 50157 824

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☒ Client ☐ Commercial ☐ Pace Other

Tracking #: \_\_\_\_\_

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Date/Time 5035A kits placed in freezer

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other

Thermometer 2 3 4 5 6 A B C D E F

Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 10.7 -10.7

Ice Visible in Sample Containers: ☐ yes ☒ no

(Initial/Corrected)

Temp should be above freezing to 6°C

Comments:

Date and Initials of person examining contents: 10/31/16 LE

Are samples from West Virginia?

☐ Yes ☒ No

Document any containers out of temp.

Chain of Custody Present:

☒ Yes ☐ No ☐ N/A

Chain of Custody Filled Out:

☒ Yes ☐ No ☐ N/A

Chain of Custody Relinquished:

☒ Yes ☐ No ☐ N/A

Sampler Name & Signature on COC:

☒ Yes ☐ No ☐ N/A

Short Hold Time Analysis (<72hr):

☐ Yes ☒ No ☐ N/A

Rush Turn Around Time Requested:

☒ Yes ☐ No ☐ N/A

Containers Intact:

☒ Yes ☐ No ☐ N/A

Sample Labels match COC:

☒ Yes ☐ No ☐ N/A

-Includes date/time/ID/Analysis

All containers needing acid/base pres. have been checked?

☐ Yes ☐ No ☒ N/A

exceptions: VOA, coliform, TOC, O&G

All containers needing preservation are found to be in compliance with EPA recommendation (<2, >9, >12) unless otherwise noted.

Residual Chlorine Check (SVOC 625 Pest/PCB 608)

11. Present Absent

Residual Chlorine Check (Total/Amenable/Free Cyanide)

12. Present Absent

Headspace in VOA Vials (>6mm):

☐ Yes ☐ No ☒ N/A

Headspace Wisconsin Sulfide

☐ Yes ☐ No

Trip Blank Present:

☐ Yes ☐ No ☒ N/A

Trip Blank Custody Seals Present

☐ Yes ☐ No ☒ N/A

Project Manager Review

Samples Arrived within Hold Time:

☒ Yes ☐ No ☐ N/A

Sufficient Volume:

☐ Yes ☐ No ☐ N/A

Correct Containers Used:

☐ Yes ☐ No ☐ N/A

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted: Lucas Stamps

Date/Time: 10/1/16

Comments/ Resolution:

A7- Low volume, A22 Low volume, B32 Low volume, B33 Low volume  
Flam - Low volume, CN Low volume

1st photo, run total CN only for WPP-CN-161031.

Project Manager Review:

MLA

Date: 11/1/16

CT Lab

COC PAGE 1 of 1

COC ID#

## Bulk Kit

Project #

56157824

Sample Line	Item
H6G9H	H6G9H
H6G9H	H6G9H

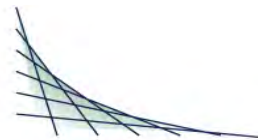
AG1U WGFU AG0U R 4 / 6 BP2N BP2U BP2S BP3N BP3U BP3S AG3S AG1H BP3C BP1U SP5T AG2U

Matrix S1M/OT  
(Soil/Water/Other)

[illegible]

## Container Codes

DG9H	40mL HCL amber voa vial	AG0U	100mL unpreserved amber glass	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber glass	AG1H	1 liter HCL amber glass	BP1S	1 liter H2SO4 plastic	DG9S	40mL H2SO4 amber vial
WG9U	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber glass	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved amber vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	SP5T	120mL Coliform Na Thiosulfate
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H2SO4 plastic	AG2U	500mL unpreserved amber glass	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber glass	AF	Air Filter	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCL clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio. clear vial
BP3S	250mL H2SO4 plastic	BG1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved clear vial
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear glass	C	Air Cassettes	VSG	Headspace septa vial & HCL
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLCC	Ziploc Bag



## ***ANALYTICAL REPORT***

This report at a minimum contains the following information:

- Analytical Report of Test Results
- Description of QC Qualifiers
- Chain of Custody (copy)
- Quality Control Summary
- Case Narrative (if applicable)
- Correspondence with Client (if applicable)

*This report has been specifically prepared to satisfy project or program requirements. These results are in compliance with NELAC requirements for parameters where accreditation is required or available, unless otherwise noted in the case narrative.*



## ANALYTICAL REPORT

TETRA TECH  
 CHRIS BURNS  
 1 S WACKER DRIVE  
 SUITE 3700  
 CHICAGO, IL 60606

Project Name: WILLIAMSON  
 Project Phase: INDIANAPOLIS, IN  
 Contract #: 3049  
 Project #: S05-0001-1610-011  
 Folder #: 125864  
 Purchase Order #: 1111200

Page 1 of 20  
 Arrival Temperature: 1.1  
 Report Date: 03/23/2017  
 Date Received: 03/10/2017  
 Reprint Date: 03/23/2017

CT LAB#: 840336

Sample Description: WPP-SB1 (0-2)

Client Sample #:

Sampled: 03/09/2017 1117

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Inorganic Results</b>												
Solids, Percent	87.8	%	0.1	0.1	0.1	0.1	1.00			3/10/17 14:20	BMM	EPA 8000C
Cyanide	0.213	mg/kg	0.16	0.33	0.67	0.67	1.00	J	03/13/2017 12:00	3/14/17 12:07	SAW	EPA 9012A ^
<b>Metals Results</b>												
Aluminum	3870	mg/kg	0.043	0.13	0.26	0.26	1.00		03/14/2017 09:30	3/15/17 12:42	NAH	EPA 6010C ^
Antimony	1.7	mg/kg	0.14	0.43	0.86	0.86	1.00		03/14/2017 09:30	3/15/17 12:42	NAH	EPA 6010C ^
Arsenic	7.7	mg/kg	0.14	0.43	0.86	0.86	1.00		03/14/2017 09:30	3/15/17 12:42	NAH	EPA 6010C ^
Barium	46.2	mg/kg	0.0097	0.027	0.054	0.054	1.00		03/14/2017 09:30	3/15/17 12:42	NAH	EPA 6010C ^
Beryllium	0.39	mg/kg	0.0043	0.013	0.043	0.043	1.00	B	03/14/2017 09:30	3/15/17 12:42	NAH	EPA 6010C ^
Cadmium	1.7	mg/kg	0.0064	0.021	0.043	0.043	1.00		03/14/2017 09:30	3/15/17 12:42	NAH	EPA 6010C ^
Calcium	57800	mg/kg	2.6	7.5	15	15	10.00		03/14/2017 09:30	3/16/17 23:38	NAH	EPA 6010C ^
Chromium	11.6	mg/kg	0.025	0.075	0.15	0.15	1.00		03/14/2017 09:30	3/15/17 12:42	NAH	EPA 6010C ^
Cobalt	4.3	mg/kg	0.043	0.13	0.26	0.26	1.00		03/14/2017 09:30	3/15/17 12:42	NAH	EPA 6010C ^
Copper	64.5	mg/kg	0.075	0.21	0.43	0.43	1.00		03/14/2017 09:30	3/15/17 12:42	NAH	EPA 6010C ^
Iron	14700	mg/kg	0.32	0.97	1.9	1.9	1.00		03/14/2017 09:30	3/15/17 12:42	NAH	EPA 6010C ^
Lead	76.6	mg/kg	0.043	0.13	0.27	0.27	1.00		03/14/2017 09:30	3/15/17 12:42	NAH	EPA 6010C ^
Magnesium	13400	mg/kg	0.15	0.43	0.86	0.86	1.00		03/14/2017 09:30	3/15/17 12:42	NAH	EPA 6010C ^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 840336	Sample Description: WPP-SB1 (0-2)	Client Sample #:	Sampled: 03/09/2017 1117
-----------------	-----------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Manganese	400	mg/kg	0.027	0.081	0.16	0.16	1.00		03/14/2017 09:30	3/15/17 12:42	NAH	EPA 6010C ^
Nickel	34.7	mg/kg	0.023	0.064	0.13	0.13	1.00		03/14/2017 09:30	3/15/17 12:42	NAH	EPA 6010C ^
Selenium	<0.064	mg/kg	0.064	0.21	0.43	0.43	1.00	U	03/14/2017 09:30	3/15/17 12:42	NAH	EPA 6010C ^
Silver	0.34	mg/kg	0.018	0.054	0.11	0.11	1.00		03/14/2017 09:30	3/15/17 12:42	NAH	EPA 6010C ^
Thallium	<0.086	mg/kg	0.086	0.26	0.52	0.52	1.00	U	03/14/2017 09:30	3/15/17 12:42	NAH	EPA 6010C ^
Vanadium	12.4	mg/kg	0.013	0.043	0.086	0.086	1.00		03/14/2017 09:30	3/15/17 12:42	NAH	EPA 6010C ^
Zinc	68.5	mg/kg	0.054	0.16	0.32	0.32	1.00		03/14/2017 09:30	3/15/17 12:42	NAH	EPA 6010C ^
Potassium	500	mg/kg	12	35	71	71	1.00		03/14/2017 09:30	3/15/17 11:59	MDS	EPA 6010C ^
Sodium	87.3	mg/kg	4.3	13	26	26	1.00		03/14/2017 09:30	3/15/17 11:59	MDS	EPA 6010C ^
Mercury	0.028	mg/kg	0.0026	0.0051	0.010	0.010	1.00		03/17/2017 08:00	3/20/17 08:07	LJF	EPA 7471B ^

CT LAB#: 840361	Sample Description: WPP-SB1 (0-2) D	Client Sample #:	Sampled: 03/09/2017 1117
-----------------	-------------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Inorganic Results</b>												
Solids, Percent	85.9	%	0.1	0.1	0.1	0.1	1.00			3/10/17 14:20	BMM	EPA 8000C
Cyanide	0.270	mg/kg	0.17	0.36	0.71	0.71	1.00	J	03/13/2017 12:00	3/14/17 12:08	SAW	EPA 9012A ^
<b>Metals Results</b>												
Aluminum	3440	mg/kg	0.048	0.14	0.29	0.29	1.00		03/14/2017 09:30	3/15/17 12:49	NAH	EPA 6010C ^
Antimony	1.1	mg/kg	0.15	0.48	0.95	0.95	1.00		03/14/2017 09:30	3/15/17 12:49	NAH	EPA 6010C ^
Arsenic	8.0	mg/kg	0.15	0.48	0.95	0.95	1.00		03/14/2017 09:30	3/15/17 12:49	NAH	EPA 6010C ^
Barium	44.0	mg/kg	0.011	0.030	0.059	0.059	1.00		03/14/2017 09:30	3/15/17 12:49	NAH	EPA 6010C ^
Beryllium	0.52	mg/kg	0.0048	0.014	0.048	0.048	1.00	B	03/14/2017 09:30	3/15/17 12:49	NAH	EPA 6010C ^
Cadmium	1.1	mg/kg	0.0071	0.024	0.048	0.048	1.00		03/14/2017 09:30	3/15/17 12:49	NAH	EPA 6010C ^
Calcium	61800	mg/kg	2.9	8.3	17	17	10.00		03/14/2017 09:30	3/16/17 23:45	NAH	EPA 6010C ^
Chromium	7.4	mg/kg	0.027	0.083	0.17	0.17	1.00		03/14/2017 09:30	3/15/17 12:49	NAH	EPA 6010C ^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 840361	Sample Description: WPP-SB1 (0-2) D	Client Sample #:	Sampled: 03/09/2017 1117
-----------------	-------------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Cobalt	3.7	mg/kg	0.048	0.14	0.29	0.29	1.00		03/14/2017 09:30	3/15/17 12:49	NAH	EPA 6010C ^
Copper	53.2	mg/kg	0.083	0.24	0.48	0.48	1.00		03/14/2017 09:30	3/15/17 12:49	NAH	EPA 6010C ^
Iron	17600	mg/kg	0.36	1.1	2.1	2.1	1.00		03/14/2017 09:30	3/15/17 12:49	NAH	EPA 6010C ^
Lead	52.3	mg/kg	0.048	0.15	0.30	0.30	1.00		03/14/2017 09:30	3/15/17 12:49	NAH	EPA 6010C ^
Magnesium	10600	mg/kg	0.17	0.48	0.95	0.95	1.00		03/14/2017 09:30	3/15/17 12:49	NAH	EPA 6010C ^
Manganese	457	mg/kg	0.030	0.089	0.18	0.18	1.00		03/14/2017 09:30	3/15/17 12:49	NAH	EPA 6010C ^
Nickel	17.3	mg/kg	0.025	0.071	0.14	0.14	1.00		03/14/2017 09:30	3/15/17 12:49	NAH	EPA 6010C ^
Selenium	<0.071	mg/kg	0.071	0.24	0.48	0.48	1.00	U	03/14/2017 09:30	3/15/17 12:49	NAH	EPA 6010C ^
Silver	0.16	mg/kg	0.020	0.059	0.12	0.12	1.00	B	03/14/2017 09:30	3/15/17 12:49	NAH	EPA 6010C ^
Thallium	<0.095	mg/kg	0.095	0.29	0.57	0.57	1.00	U	03/14/2017 09:30	3/15/17 12:49	NAH	EPA 6010C ^
Vanadium	12.6	mg/kg	0.014	0.048	0.095	0.095	1.00		03/14/2017 09:30	3/15/17 12:49	NAH	EPA 6010C ^
Zinc	57.9	mg/kg	0.059	0.18	0.36	0.36	1.00		03/14/2017 09:30	3/15/17 12:49	NAH	EPA 6010C ^
Potassium	463	mg/kg	13	39	78	78	1.00		03/14/2017 09:30	3/15/17 12:08	MDS	EPA 6010C ^
Sodium	82.0	mg/kg	4.8	14	29	29	1.00		03/14/2017 09:30	3/15/17 12:08	MDS	EPA 6010C ^
Mercury	0.025	mg/kg	0.0024	0.0049	0.0097	0.0097	1.00		03/17/2017 08:00	3/20/17 08:10	LJF	EPA 7471B ^

CT LAB#: 840362	Sample Description: WPP-SB1 (2-4)	Client Sample #:	Sampled: 03/09/2017 1122
-----------------	-----------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Inorganic Results</b>												
Solids, Percent	84.0	%	0.1	0.1	0.1	0.1	1.00			3/10/17 14:20	BMM	EPA 8000C
<b>Organic Results</b>												
1,1,1-Trichloroethane	<12	ug/kg	12	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
1,1,2,2-Tetrachloroethane	<7.2	ug/kg	7.2	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
1,1,2-Trichloroethane	<9.5	ug/kg	9.5	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
1,1-Dichloroethane	<13	ug/kg	13	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 840362

Sample Description: WPP-SB1 (2-4)

Client Sample #:

Sampled: 03/09/2017 1122

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,1-Dichloroethene	<19	ug/kg	19	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
1,2,3-Trichlorobenzene	<9.5	ug/kg	9.5	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
1,2,4-Trichlorobenzene	<11	ug/kg	11	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
1,2-Dibromo-3-chloropropane	<14	ug/kg	14	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
1,2-Dibromoethane	<12	ug/kg	12	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
1,2-Dichlorobenzene	<11	ug/kg	11	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
1,2-Dichloroethane	<14	ug/kg	14	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
1,2-Dichloropropane	<8.4	ug/kg	8.4	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
1,3-Dichlorobenzene	<9.5	ug/kg	9.5	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
1,4-Dichlorobenzene	<9.5	ug/kg	9.5	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
1,4-Dioxane	<480	ug/kg	480	1200	6000	6000	1.00	U Q,Z	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
112Trichloro122trifluoroethane	<24	ug/kg	24	48	120	120	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
2-Butanone	<120	ug/kg	120	240	600	600	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
2-Hexanone	<81	ug/kg	81	240	600	600	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
4-Methyl-2-pentanone	<98	ug/kg	98	240	600	600	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
Acetone	150	ug/kg	75	240	600	600	1.00	J B	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
Benzene	<6.0	ug/kg	6.0	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
Bromochloromethane	<9.5	ug/kg	9.5	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
Bromodichloromethane	<11	ug/kg	11	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
Bromoform	<7.2	ug/kg	7.2	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
Bromomethane	73.6	ug/kg	36	60	120	120	1.00	J B	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
Carbon disulfide	<18	ug/kg	18	48	120	120	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
Carbon tetrachloride	<13	ug/kg	13	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
Chlorobenzene	<9.5	ug/kg	9.5	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
Chloroethane	<23	ug/kg	23	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
Chloroform	<11	ug/kg	11	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
Chloromethane	<30	ug/kg	30	60	120	120	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
cis-1,2-Dichloroethene	<12	ug/kg	12	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 840362

Sample Description: WPP-SB1 (2-4)

Client Sample #:

Sampled: 03/09/2017 1122

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
cis-1,3-Dichloropropene	<12	ug/kg	12	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
Cyclohexane	<14	ug/kg	14	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
Dibromochloromethane	<9.5	ug/kg	9.5	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
Dichlorodifluoromethane	<16	ug/kg	16	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
Ethylbenzene	<9.5	ug/kg	9.5	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
Isopropylbenzene	<9.5	ug/kg	9.5	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
m & p-Xylene	<21	ug/kg	21	48	120	120	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
Methyl acetate	<14	ug/kg	14	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
Methyl tert-butyl ether	<33	ug/kg	33	60	120	120	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
Methylcyclohexane	<11	ug/kg	11	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
Methylene chloride	<48	ug/kg	48	60	120	120	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
o-Xylene	<9.5	ug/kg	9.5	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
Styrene	<7.2	ug/kg	7.2	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
Tetrachloroethene	<9.5	ug/kg	9.5	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
Toluene	<8.4	ug/kg	8.4	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
trans-1,2-Dichloroethene	<13	ug/kg	13	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
trans-1,3-Dichloropropene	<8.4	ug/kg	8.4	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
Trichloroethene	<12	ug/kg	12	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
Trichlorofluoromethane	<16	ug/kg	16	24	60	60	1.00	U Z	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
Vinyl chloride	<17	ug/kg	17	24	60	60	1.00	U	03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C ^
1,2 Dichloroethane-d4	104	% Recovery	80			117	1.00		03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C
Bromofluorobenzene	101	% Recovery	85			120	1.00		03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C
d8-Toluene	99	% Recovery	85			115	1.00		03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C
Dibromofluoromethane	85	% Recovery	79			118	1.00		03/10/2017 12:50	3/12/17 12:37	RLD	EPA 8260C

CT LAB#: 840363

Sample Description: WPP-SB1 (2-4) D

Client Sample #:

Sampled: 03/09/2017 1122

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Inorganic Results</b>												
Solids, Percent	84.1	%	0.1	0.1	0.1	0.1	1.00			3/10/17 14:20	BMM	EPA 8000C
<b>Organic Results</b>												
1,1,1-Trichloroethane	<10	ug/kg	10	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
1,1,2,2-Tetrachloroethane	<6.1	ug/kg	6.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
1,1,2-Trichloroethane	<8.1	ug/kg	8.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
1,1-Dichloroethane	<11	ug/kg	11	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
1,1-Dichloroethene	<16	ug/kg	16	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
1,2,3-Trichlorobenzene	<8.1	ug/kg	8.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
1,2,4-Trichlorobenzene	<9.1	ug/kg	9.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
1,2-Dibromo-3-chloropropane	<12	ug/kg	12	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
1,2-Dibromoethane	<10	ug/kg	10	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
1,2-Dichlorobenzene	<9.1	ug/kg	9.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
1,2-Dichloroethane	<12	ug/kg	12	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
1,2-Dichloropropane	<7.1	ug/kg	7.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
1,3-Dichlorobenzene	<8.1	ug/kg	8.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
1,4-Dichlorobenzene	<8.1	ug/kg	8.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
1,4-Dioxane	<400	ug/kg	400	1000	5100	5100	1.00	U Q,Z	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
112Trichloro122trifluoroethane	<20	ug/kg	20	40	100	100	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
2-Butanone	<100	ug/kg	100	200	510	510	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
2-Hexanone	<69	ug/kg	69	200	510	510	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
4-Methyl-2-pentanone	<83	ug/kg	83	200	510	510	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
Acetone	129	ug/kg	64	200	510	510	1.00	J B	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
Benzene	<5.1	ug/kg	5.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
Bromochloromethane	<8.1	ug/kg	8.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
Bromodichloromethane	<9.1	ug/kg	9.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
Bromoform	<6.1	ug/kg	6.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 840363

Sample Description: WPP-SB1 (2-4) D

Client Sample #:

Sampled: 03/09/2017 1122

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Bromomethane	51.8	ug/kg	30	51	100	100	1.00	J B	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
Carbon disulfide	<15	ug/kg	15	40	100	100	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
Carbon tetrachloride	<11	ug/kg	11	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
Chlorobenzene	<8.1	ug/kg	8.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
Chloroethane	<19	ug/kg	19	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
Chloroform	<9.1	ug/kg	9.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
Chloromethane	<25	ug/kg	25	51	100	100	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
cis-1,2-Dichloroethene	<10	ug/kg	10	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
cis-1,3-Dichloropropene	<10	ug/kg	10	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
Cyclohexane	<12	ug/kg	12	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
Dibromochloromethane	<8.1	ug/kg	8.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
Dichlorodifluoromethane	<13	ug/kg	13	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
Ethylbenzene	<8.1	ug/kg	8.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
Isopropylbenzene	<8.1	ug/kg	8.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
m & p-Xylene	<18	ug/kg	18	40	100	100	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
Methyl acetate	<12	ug/kg	12	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
Methyl tert-butyl ether	<28	ug/kg	28	51	100	100	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
Methylcyclohexane	<9.1	ug/kg	9.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
Methylene chloride	<40	ug/kg	40	51	100	100	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
o-Xylene	<8.1	ug/kg	8.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
Styrene	<6.1	ug/kg	6.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
Tetrachloroethene	<8.1	ug/kg	8.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
Toluene	<7.1	ug/kg	7.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
trans-1,2-Dichloroethene	<11	ug/kg	11	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
trans-1,3-Dichloropropene	<7.1	ug/kg	7.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
Trichloroethene	<10	ug/kg	10	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
Trichlorofluoromethane	<13	ug/kg	13	20	51	51	1.00	U Z	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^
Vinyl chloride	<14	ug/kg	14	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C ^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 840363	Sample Description: WPP-SB1 (2-4) D	Client Sample #:	Sampled: 03/09/2017 1122
-----------------	-------------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,2 Dichloroethane-d4	104	% Recovery	80			117	1.00		03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C
Bromofluorobenzene	101	% Recovery	85			120	1.00		03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C
d8-Toluene	100	% Recovery	85			115	1.00		03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C
Dibromofluoromethane	86	% Recovery	79			118	1.00		03/10/2017 12:50	3/12/17 13:04	RLD	EPA 8260C

CT LAB#: 840364	Sample Description: WPP-SB2 (4-6)	Client Sample #:	Sampled: 03/09/2017 1145
-----------------	-----------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
---------	--------	-------	----	------------	------------	----	----	-----------	-------------------	-----------------------	---------	--------

#### Inorganic Results

Solids, Percent	87.3	%	0.1	0.1	0.1	0.1	1.00			3/10/17 14:20	BMM	EPA 8000C
Cyanide	1.01	mg/kg	0.16	0.34	0.69	0.69	1.00	M	03/13/2017 12:00	3/14/17 12:11	SAW	EPA 9012A ^

#### Metals Results

Aluminum	5200	mg/kg	0.044	0.13	0.26	0.26	1.00	M	03/14/2017 09:30	3/15/17 12:56	NAH	EPA 6010C ^
Antimony	<0.14	mg/kg	0.14	0.44	0.88	0.88	1.00	U	03/14/2017 09:30	3/15/17 12:56	NAH	EPA 6010C ^
Arsenic	5.3	mg/kg	0.14	0.44	0.88	0.88	1.00		03/14/2017 09:30	3/15/17 12:56	NAH	EPA 6010C ^
Barium	40.2	mg/kg	0.0099	0.028	0.055	0.055	1.00		03/14/2017 09:30	3/15/17 12:56	NAH	EPA 6010C ^
Beryllium	0.27	mg/kg	0.0044	0.013	0.044	0.044	1.00	B,M	03/14/2017 09:30	3/15/17 12:56	NAH	EPA 6010C ^
Cadmium	152	mg/kg	0.066	0.22	0.44	0.44	10.00	Y,M	03/14/2017 09:30	3/21/17 23:23	NAH	EPA 6010C ^
Calcium	26500	mg/kg	0.26	0.77	1.5	1.5	1.00	M,Y	03/14/2017 09:30	3/15/17 12:56	NAH	EPA 6010C ^
Chromium	12.4	mg/kg	0.025	0.077	0.15	0.15	1.00	Y	03/14/2017 09:30	3/15/17 12:56	NAH	EPA 6010C ^
Cobalt	3.4	mg/kg	0.044	0.13	0.26	0.26	1.00	M	03/14/2017 09:30	3/15/17 12:56	NAH	EPA 6010C ^
Copper	10.7	mg/kg	0.077	0.22	0.44	0.44	1.00		03/14/2017 09:30	3/15/17 12:56	NAH	EPA 6010C ^
Iron	7320	mg/kg	0.33	0.99	2.0	2.0	1.00	M	03/14/2017 09:30	3/15/17 12:56	NAH	EPA 6010C ^
Lead	11.3	mg/kg	0.044	0.14	0.28	0.28	1.00	Y	03/14/2017 09:30	3/15/17 12:56	NAH	EPA 6010C ^
Magnesium	10100	mg/kg	0.15	0.44	0.88	0.88	1.00	Y,M	03/14/2017 09:30	3/15/17 12:56	NAH	EPA 6010C ^

CT LAB#: 840364

Sample Description: WPP-SB2 (4-6)

Client Sample #:

Sampled: 03/09/2017 1145

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Manganese	273	mg/kg	0.028	0.083	0.17	0.17	1.00	M	03/14/2017 09:30	3/15/17 12:56	NAH	EPA 6010C ^
Nickel	87.8	mg/kg	0.023	0.066	0.13	0.13	1.00	Y,M	03/14/2017 09:30	3/15/17 12:56	NAH	EPA 6010C ^
Selenium	0.41	mg/kg	0.066	0.22	0.44	0.44	1.00	J B	03/14/2017 09:30	3/15/17 12:56	NAH	EPA 6010C ^
Silver	0.17	mg/kg	0.019	0.055	0.11	0.11	1.00	B	03/14/2017 09:30	3/15/17 12:56	NAH	EPA 6010C ^
Thallium	<0.088	mg/kg	0.088	0.26	0.53	0.53	1.00	U M	03/14/2017 09:30	3/15/17 12:56	NAH	EPA 6010C ^
Vanadium	13.1	mg/kg	0.013	0.044	0.088	0.088	1.00		03/14/2017 09:30	3/15/17 12:56	NAH	EPA 6010C ^
Zinc	95.8	mg/kg	0.055	0.17	0.33	0.33	1.00	Y,M	03/14/2017 09:30	3/15/17 12:56	NAH	EPA 6010C ^
Potassium	471	mg/kg	12	36	73	73	1.00		03/14/2017 09:30	3/15/17 12:11	MDS	EPA 6010C ^
Sodium	110	mg/kg	4.4	13	26	26	1.00		03/14/2017 09:30	3/15/17 12:11	MDS	EPA 6010C ^
Mercury	0.034	mg/kg	0.0024	0.0049	0.0097	0.0097	1.00	M	03/17/2017 08:00	3/20/17 08:12	LJF	EPA 7471B ^

### Organic Results

1,1,1-Trichloroethane	<10	ug/kg	10	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
1,1,2,2-Tetrachloroethane	<6.1	ug/kg	6.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
1,1,2-Trichloroethane	<8.1	ug/kg	8.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
1,1-Dichloroethane	<11	ug/kg	11	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
1,1-Dichloroethene	<16	ug/kg	16	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
1,2,3-Trichlorobenzene	<8.1	ug/kg	8.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
1,2,4-Trichlorobenzene	<9.1	ug/kg	9.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
1,2-Dibromo-3-chloropropane	<12	ug/kg	12	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
1,2-Dibromoethane	<10	ug/kg	10	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
1,2-Dichlorobenzene	<9.1	ug/kg	9.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
1,2-Dichloroethane	<12	ug/kg	12	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
1,2-Dichloropropane	<7.1	ug/kg	7.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
1,3-Dichlorobenzene	<8.1	ug/kg	8.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
1,4-Dichlorobenzene	<8.1	ug/kg	8.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
1,4-Dioxane	<410	ug/kg	410	1000	5100	5100	1.00	U Q,Z,M	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
112Trichloro122trifluoroethane	<20	ug/kg	20	41	100	100	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 840364

Sample Description: WPP-SB2 (4-6)

Client Sample #:

Sampled: 03/09/2017 1145

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
2-Butanone	<100	ug/kg	100	200	510	510	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
2-Hexanone	<69	ug/kg	69	200	510	510	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
4-Methyl-2-pentanone	<83	ug/kg	83	200	510	510	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
Acetone	130	ug/kg	64	200	510	510	1.00	J B	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
Benzene	<5.1	ug/kg	5.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
Bromochloromethane	<8.1	ug/kg	8.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
Bromodichloromethane	<9.1	ug/kg	9.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
Bromoform	<6.1	ug/kg	6.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
Bromomethane	34.7	ug/kg	30	51	100	100	1.00	J B	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
Carbon disulfide	<15	ug/kg	15	41	100	100	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
Carbon tetrachloride	<11	ug/kg	11	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
Chlorobenzene	<8.1	ug/kg	8.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
Chloroethane	<19	ug/kg	19	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
Chloroform	<9.1	ug/kg	9.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
Chloromethane	<25	ug/kg	25	51	100	100	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
cis-1,2-Dichloroethene	<10	ug/kg	10	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
cis-1,3-Dichloropropene	<10	ug/kg	10	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
Cyclohexane	<12	ug/kg	12	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
Dibromochloromethane	<8.1	ug/kg	8.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
Dichlorodifluoromethane	<13	ug/kg	13	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
Ethylbenzene	<8.1	ug/kg	8.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
Isopropylbenzene	<8.1	ug/kg	8.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
m & p-Xylene	<18	ug/kg	18	41	100	100	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
Methyl acetate	<12	ug/kg	12	20	51	51	1.00	U M	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
Methyl tert-butyl ether	<28	ug/kg	28	51	100	100	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
Methylcyclohexane	<9.1	ug/kg	9.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
Methylene chloride	<41	ug/kg	41	51	100	100	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
o-Xylene	<8.1	ug/kg	8.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 840364	Sample Description: WPP-SB2 (4-6)	Client Sample #:	Sampled: 03/09/2017 1145
-----------------	-----------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Styrene	<6.1	ug/kg	6.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
Tetrachloroethene	25.1	ug/kg	8.1	20	51	51	1.00	J	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
Toluene	<7.1	ug/kg	7.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
trans-1,2-Dichloroethene	<11	ug/kg	11	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
trans-1,3-Dichloropropene	<7.1	ug/kg	7.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
Trichloroethene	<10	ug/kg	10	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
Trichlorofluoromethane	<13	ug/kg	13	20	51	51	1.00	U Z	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
Vinyl chloride	<14	ug/kg	14	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C ^
1,2 Dichloroethane-d4	98	% Recovery	80			117	1.00		03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C
Bromofluorobenzene	98	% Recovery	85			120	1.00		03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C
d8-Toluene	97	% Recovery	85			115	1.00		03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C
Dibromofluoromethane	82	% Recovery	79			118	1.00		03/10/2017 12:50	3/12/17 13:32	RLD	EPA 8260C

CT LAB#: 840365	Sample Description: WPP-SB3 (0-2)	Client Sample #:	Sampled: 03/09/2017 0835
-----------------	-----------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Inorganic Results</b>												
Solids, Percent	87.5	%	0.1	0.1	0.1	0.1	1.00			3/10/17 14:20	BMM	EPA 8000C
Cyanide	10.7	mg/kg	0.82	1.8	3.5	3.5	5.00		03/13/2017 12:00	3/14/17 12:23	SAW	EPA 9012A ^
<b>Metals Results</b>												
Aluminum	4800	mg/kg	0.044	0.13	0.27	0.27	1.00		03/14/2017 09:30	3/15/17 13:55	NAH	EPA 6010C ^
Antimony	0.19	mg/kg	0.14	0.44	0.88	0.88	1.00	J	03/14/2017 09:30	3/15/17 13:55	NAH	EPA 6010C ^
Arsenic	4.6	mg/kg	0.14	0.44	0.88	0.88	1.00		03/14/2017 09:30	3/15/17 13:55	NAH	EPA 6010C ^
Barium	36.7	mg/kg	0.0099	0.028	0.055	0.055	1.00		03/14/2017 09:30	3/15/17 13:55	NAH	EPA 6010C ^
Beryllium	0.25	mg/kg	0.0044	0.013	0.044	0.044	1.00	B	03/14/2017 09:30	3/15/17 13:55	NAH	EPA 6010C ^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 840365

Sample Description: WPP-SB3 (0-2)

Client Sample #:

Sampled: 03/09/2017 0835

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Cadmium	0.47	mg/kg	0.0066	0.022	0.044	0.044	1.00		03/14/2017 09:30	3/15/17 13:55	NAH	EPA 6010C ^
Calcium	45500	mg/kg	2.7	7.7	15	15	10.00		03/14/2017 09:30	3/16/17 23:51	NAH	EPA 6010C ^
Chromium	8.3	mg/kg	0.025	0.077	0.15	0.15	1.00		03/14/2017 09:30	3/15/17 13:55	NAH	EPA 6010C ^
Cobalt	3.1	mg/kg	0.044	0.13	0.27	0.27	1.00		03/14/2017 09:30	3/15/17 13:55	NAH	EPA 6010C ^
Copper	47.2	mg/kg	0.077	0.22	0.44	0.44	1.00		03/14/2017 09:30	3/15/17 13:55	NAH	EPA 6010C ^
Iron	9360	mg/kg	0.33	0.99	2.0	2.0	1.00		03/14/2017 09:30	3/15/17 13:55	NAH	EPA 6010C ^
Lead	11.4	mg/kg	0.044	0.14	0.28	0.28	1.00	B	03/14/2017 09:30	3/15/17 13:55	NAH	EPA 6010C ^
Magnesium	9770	mg/kg	0.15	0.44	0.88	0.88	1.00		03/14/2017 09:30	3/15/17 13:55	NAH	EPA 6010C ^
Manganese	253	mg/kg	0.028	0.083	0.17	0.17	1.00		03/14/2017 09:30	3/15/17 13:55	NAH	EPA 6010C ^
Nickel	112	mg/kg	0.023	0.066	0.13	0.13	1.00		03/14/2017 09:30	3/15/17 13:55	NAH	EPA 6010C ^
Selenium	0.39	mg/kg	0.066	0.22	0.44	0.44	1.00	J B	03/14/2017 09:30	3/15/17 13:55	NAH	EPA 6010C ^
Silver	0.069	mg/kg	0.019	0.055	0.11	0.11	1.00	J B	03/14/2017 09:30	3/15/17 13:55	NAH	EPA 6010C ^
Thallium	<0.088	mg/kg	0.088	0.27	0.53	0.53	1.00	U	03/14/2017 09:30	3/15/17 13:55	NAH	EPA 6010C ^
Vanadium	12.1	mg/kg	0.013	0.044	0.088	0.088	1.00		03/14/2017 09:30	3/15/17 13:55	NAH	EPA 6010C ^
Zinc	62.1	mg/kg	0.055	0.17	0.33	0.33	1.00		03/14/2017 09:30	3/15/17 13:55	NAH	EPA 6010C ^
Potassium	478	mg/kg	12	36	73	73	1.00		03/14/2017 09:30	3/15/17 12:29	MDS	EPA 6010C ^
Sodium	64.3	mg/kg	4.4	13	27	27	1.00		03/14/2017 09:30	3/15/17 12:29	MDS	EPA 6010C ^
Mercury	<0.0025	mg/kg	0.0025	0.0051	0.010	0.010	1.00	U	03/17/2017 08:00	3/20/17 08:25	LJF	EPA 7471B ^

#### Organic Results

1,1,1-Trichloroethane	<10	ug/kg	10	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
1,1,2,2-Tetrachloroethane	<6.1	ug/kg	6.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
1,1,2-Trichloroethane	<8.2	ug/kg	8.2	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
1,1-Dichloroethane	<11	ug/kg	11	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
1,1-Dichloroethene	<16	ug/kg	16	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
1,2,3-Trichlorobenzene	<8.2	ug/kg	8.2	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
1,2,4-Trichlorobenzene	<9.2	ug/kg	9.2	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
1,2-Dibromo-3-chloropropane	<12	ug/kg	12	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 840365

Sample Description: WPP-SB3 (0-2)

Client Sample #:

Sampled: 03/09/2017 0835

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,2-Dibromoethane	<10	ug/kg	10	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
1,2-Dichlorobenzene	<9.2	ug/kg	9.2	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
1,2-Dichloroethane	<12	ug/kg	12	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
1,2-Dichloropropane	<7.2	ug/kg	7.2	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
1,3-Dichlorobenzene	<8.2	ug/kg	8.2	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
1,4-Dichlorobenzene	<8.2	ug/kg	8.2	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
1,4-Dioxane	<410	ug/kg	410	1000	5100	5100	1.00	U Q,Z	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
112Trichloro122trifluoroethane	<20	ug/kg	20	41	100	100	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
2-Butanone	<100	ug/kg	100	200	510	510	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
2-Hexanone	<70	ug/kg	70	200	510	510	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
4-Methyl-2-pentanone	<84	ug/kg	84	200	510	510	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
Acetone	156	ug/kg	65	200	510	510	1.00	J B	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
Benzene	<5.1	ug/kg	5.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
Bromochloromethane	<8.2	ug/kg	8.2	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
Bromodichloromethane	<9.2	ug/kg	9.2	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
Bromoform	<6.1	ug/kg	6.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
Bromomethane	63.4	ug/kg	31	51	100	100	1.00	J B	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
Carbon disulfide	<15	ug/kg	15	41	100	100	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
Carbon tetrachloride	<11	ug/kg	11	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
Chlorobenzene	<8.2	ug/kg	8.2	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
Chloroethane	22.3	ug/kg	19	20	51	51	1.00	J	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
Chloroform	<9.2	ug/kg	9.2	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
Chloromethane	<26	ug/kg	26	51	100	100	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
cis-1,2-Dichloroethene	<10	ug/kg	10	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
cis-1,3-Dichloropropene	<10	ug/kg	10	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
Cyclohexane	<12	ug/kg	12	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
Dibromochloromethane	<8.2	ug/kg	8.2	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
Dichlorodifluoromethane	<13	ug/kg	13	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 840365	Sample Description: WPP-SB3 (0-2)	Client Sample #:	Sampled: 03/09/2017 0835
-----------------	-----------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Ethylbenzene	23.6	ug/kg	8.2	20	51	51	1.00	J	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
Isopropylbenzene	<8.2	ug/kg	8.2	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
m & p-Xylene	116	ug/kg	18	41	100	100	1.00		03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
Methyl acetate	689	ug/kg	12	20	51	51	1.00		03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
Methyl tert-butyl ether	<29	ug/kg	29	51	100	100	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
Methylcyclohexane	17.7	ug/kg	9.2	20	51	51	1.00	J	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
Methylene chloride	<41	ug/kg	41	51	100	100	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
o-Xylene	40.2	ug/kg	8.2	20	51	51	1.00	J	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
Styrene	<6.1	ug/kg	6.1	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
Tetrachloroethene	<8.2	ug/kg	8.2	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
Toluene	<7.2	ug/kg	7.2	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
trans-1,2-Dichloroethene	<11	ug/kg	11	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
trans-1,3-Dichloropropene	<7.2	ug/kg	7.2	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
Trichloroethene	<10	ug/kg	10	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
Trichlorofluoromethane	<13	ug/kg	13	20	51	51	1.00	U Z	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
Vinyl chloride	<14	ug/kg	14	20	51	51	1.00	U	03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C ^
1,2 Dichloroethane-d4	103	% Recovery	80			117	1.00		03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C
Bromofluorobenzene	101	% Recovery	85			120	1.00		03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C
d8-Toluene	100	% Recovery	85			115	1.00		03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C
Dibromofluoromethane	84	% Recovery	79			118	1.00		03/10/2017 12:50	3/12/17 14:00	RLD	EPA 8260C

CT LAB#: 840366	Sample Description: WPP-SB4 (0-2)	Client Sample #:	Sampled: 03/09/2017 0910
-----------------	-----------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
---------	--------	-------	----	------------	------------	----	----	-----------	-------------------	-----------------------	---------	--------

#### Inorganic Results

Solids, Percent	86.8	%	0.1	0.1	0.1	0.1	1.00			3/10/17 14:20	BMM	EPA 8000C
-----------------	------	---	-----	-----	-----	-----	------	--	--	---------------	-----	-----------

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 840366

Sample Description: WPP-SB4 (0-2)

Client Sample #:

Sampled: 03/09/2017 0910

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method	
Cyanide	12.0	mg/kg	0.76	1.6	3.3	3.3	5.00		03/13/2017 12:00	3/14/17 12:50	SAW	EPA 9012A	^
<b>Metals Results</b>													
Aluminum	6890	mg/kg	0.048	0.14	0.29	0.29	1.00		03/14/2017 09:30	3/15/17 14:02	NAH	EPA 6010C	^
Antimony	3.4	mg/kg	0.16	0.48	0.96	0.96	1.00		03/14/2017 09:30	3/15/17 14:02	NAH	EPA 6010C	^
Arsenic	7.0	mg/kg	0.16	0.48	0.96	0.96	1.00		03/14/2017 09:30	3/15/17 14:02	NAH	EPA 6010C	^
Barium	116	mg/kg	0.011	0.030	0.060	0.060	1.00		03/14/2017 09:30	3/15/17 14:02	NAH	EPA 6010C	^
Beryllium	0.47	mg/kg	0.0048	0.014	0.048	0.048	1.00	B	03/14/2017 09:30	3/15/17 14:02	NAH	EPA 6010C	^
Cadmium	24.2	mg/kg	0.0072	0.024	0.048	0.048	1.00		03/14/2017 09:30	3/15/17 14:02	NAH	EPA 6010C	^
Calcium	7250	mg/kg	0.29	0.84	1.7	1.7	1.00		03/14/2017 09:30	3/15/17 14:02	NAH	EPA 6010C	^
Chromium	43.3	mg/kg	0.027	0.084	0.17	0.17	1.00		03/14/2017 09:30	3/15/17 14:02	NAH	EPA 6010C	^
Cobalt	5.6	mg/kg	0.048	0.14	0.29	0.29	1.00		03/14/2017 09:30	3/15/17 14:02	NAH	EPA 6010C	^
Copper	61.8	mg/kg	0.084	0.24	0.48	0.48	1.00		03/14/2017 09:30	3/15/17 14:02	NAH	EPA 6010C	^
Iron	12200	mg/kg	0.36	1.1	2.1	2.1	1.00		03/14/2017 09:30	3/15/17 14:02	NAH	EPA 6010C	^
Lead	42.7	mg/kg	0.048	0.15	0.30	0.30	1.00	B	03/14/2017 09:30	3/15/17 14:02	NAH	EPA 6010C	^
Magnesium	3640	mg/kg	0.17	0.48	0.96	0.96	1.00		03/14/2017 09:30	3/15/17 14:02	NAH	EPA 6010C	^
Manganese	875	mg/kg	0.030	0.090	0.18	0.18	1.00		03/14/2017 09:30	3/15/17 14:02	NAH	EPA 6010C	^
Nickel	125	mg/kg	0.025	0.072	0.14	0.14	1.00		03/14/2017 09:30	3/15/17 14:02	NAH	EPA 6010C	^
Selenium	0.58	mg/kg	0.072	0.24	0.48	0.48	1.00	B	03/14/2017 09:30	3/15/17 14:02	NAH	EPA 6010C	^
Silver	0.42	mg/kg	0.020	0.060	0.12	0.12	1.00		03/14/2017 09:30	3/15/17 14:02	NAH	EPA 6010C	^
Thallium	0.35	mg/kg	0.096	0.29	0.57	0.57	1.00	J	03/14/2017 09:30	3/15/17 14:02	NAH	EPA 6010C	^
Vanadium	17.8	mg/kg	0.014	0.048	0.096	0.096	1.00		03/14/2017 09:30	3/15/17 14:02	NAH	EPA 6010C	^
Zinc	175	mg/kg	0.060	0.18	0.36	0.36	1.00		03/14/2017 09:30	3/15/17 14:02	NAH	EPA 6010C	^
Potassium	695	mg/kg	13	39	79	79	1.00		03/14/2017 09:30	3/15/17 12:32	MDS	EPA 6010C	^
Sodium	30.4	mg/kg	4.8	14	29	29	1.00		03/14/2017 09:30	3/15/17 12:32	MDS	EPA 6010C	^
Mercury	0.17	mg/kg	0.0024	0.0048	0.0096	0.0096	1.00		03/17/2017 08:00	3/20/17 08:27	LJF	EPA 7471B	^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 840367

Sample Description: WPP-SB5 (0-2)

Client Sample #:

Sampled: 03/09/2017 0940

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Inorganic Results</b>												
Solids, Percent	83.5	%	0.1	0.1	0.1	0.1	1.00			3/10/17 14:20	BMM	EPA 8000C
Cyanide	7.16	mg/kg	0.83	1.8	3.6	3.6	5.00		03/13/2017 12:00	3/14/17 12:52	SAW	EPA 9012A ^
<b>Metals Results</b>												
Aluminum	5340	mg/kg	0.047	0.14	0.28	0.28	1.00		03/14/2017 09:30	3/15/17 14:08	NAH	EPA 6010C ^
Antimony	1.7	mg/kg	0.15	0.47	0.95	0.95	1.00		03/14/2017 09:30	3/15/17 14:08	NAH	EPA 6010C ^
Arsenic	10	mg/kg	0.15	0.47	0.95	0.95	1.00		03/14/2017 09:30	3/15/17 14:08	NAH	EPA 6010C ^
Barium	477	mg/kg	0.11	0.30	0.59	0.59	10.00		03/14/2017 09:30	3/17/17 00:17	NAH	EPA 6010C ^
Beryllium	0.92	mg/kg	0.0047	0.014	0.047	0.047	1.00	B	03/14/2017 09:30	3/15/17 14:08	NAH	EPA 6010C ^
Cadmium	25.7	mg/kg	0.0071	0.024	0.047	0.047	1.00		03/14/2017 09:30	3/15/17 14:08	NAH	EPA 6010C ^
Calcium	19900	mg/kg	0.28	0.83	1.7	1.7	1.00		03/14/2017 09:30	3/15/17 14:08	NAH	EPA 6010C ^
Chromium	48.6	mg/kg	0.027	0.083	0.17	0.17	1.00		03/14/2017 09:30	3/15/17 14:08	NAH	EPA 6010C ^
Cobalt	4.0	mg/kg	0.047	0.14	0.28	0.28	1.00		03/14/2017 09:30	3/15/17 14:08	NAH	EPA 6010C ^
Copper	142	mg/kg	0.083	0.24	0.47	0.47	1.00		03/14/2017 09:30	3/15/17 14:08	NAH	EPA 6010C ^
Iron	12200	mg/kg	0.36	1.1	2.1	2.1	1.00		03/14/2017 09:30	3/15/17 14:08	NAH	EPA 6010C ^
Lead	717	mg/kg	0.047	0.15	0.30	0.30	1.00	B	03/14/2017 09:30	3/15/17 14:08	NAH	EPA 6010C ^
Magnesium	3500	mg/kg	0.17	0.47	0.95	0.95	1.00		03/14/2017 09:30	3/15/17 14:08	NAH	EPA 6010C ^
Manganese	157	mg/kg	0.030	0.089	0.18	0.18	1.00		03/14/2017 09:30	3/15/17 14:08	NAH	EPA 6010C ^
Nickel	176	mg/kg	0.025	0.071	0.14	0.14	1.00		03/14/2017 09:30	3/15/17 14:08	NAH	EPA 6010C ^
Selenium	0.67	mg/kg	0.071	0.24	0.47	0.47	1.00	B	03/14/2017 09:30	3/15/17 14:08	NAH	EPA 6010C ^
Silver	0.48	mg/kg	0.020	0.059	0.12	0.12	1.00		03/14/2017 09:30	3/15/17 14:08	NAH	EPA 6010C ^
Thallium	<0.095	mg/kg	0.095	0.28	0.57	0.57	1.00	U	03/14/2017 09:30	3/15/17 14:08	NAH	EPA 6010C ^
Vanadium	19.8	mg/kg	0.014	0.047	0.095	0.095	1.00		03/14/2017 09:30	3/15/17 14:08	NAH	EPA 6010C ^
Zinc	382	mg/kg	0.059	0.18	0.36	0.36	1.00		03/14/2017 09:30	3/15/17 14:08	NAH	EPA 6010C ^
Potassium	439	mg/kg	13	39	78	78	1.00		03/14/2017 09:30	3/15/17 12:35	MDS	EPA 6010C ^
Sodium	239	mg/kg	4.7	14	28	28	1.00		03/14/2017 09:30	3/15/17 12:35	MDS	EPA 6010C ^
Mercury	0.095	mg/kg	0.0027	0.0054	0.011	0.011	1.00		03/17/2017 08:00	3/20/17 08:29	LJF	EPA 7471B ^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 840367	Sample Description: WPP-SB5 (0-2)	Client Sample #:	Sampled: 03/09/2017 0940
-----------------	-----------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
---------	--------	-------	----	------------	------------	----	----	-----------	-------------------	-----------------------	---------	--------

CT LAB#: 840368	Sample Description: WPP-SB6 (0-2)	Client Sample #:	Sampled: 03/09/2017 1015
-----------------	-----------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
---------	--------	-------	----	------------	------------	----	----	-----------	-------------------	-----------------------	---------	--------

#### Inorganic Results

Solids, Percent	89.7	%	0.1	0.1	0.1	0.1	1.00			3/10/17 14:20 BMM	EPA 8000C	
Cyanide	5.08	mg/kg	0.79	1.7	3.4	3.4	5.00		03/13/2017 12:00	3/14/17 12:53 SAW	EPA 9012A	^

#### Metals Results

Aluminum	1200	mg/kg	0.044	0.13	0.26	0.26	1.00		03/14/2017 09:30	3/15/17 14:15 NAH	EPA 6010C	^
Antimony	1.1	mg/kg	0.14	0.44	0.88	0.88	1.00		03/14/2017 09:30	3/15/17 14:15 NAH	EPA 6010C	^
Arsenic	5.4	mg/kg	0.14	0.44	0.88	0.88	1.00		03/14/2017 09:30	3/15/17 14:15 NAH	EPA 6010C	^
Barium	55.7	mg/kg	0.0099	0.027	0.055	0.055	1.00		03/14/2017 09:30	3/15/17 14:15 NAH	EPA 6010C	^
Beryllium	0.95	mg/kg	0.0044	0.013	0.044	0.044	1.00	B	03/14/2017 09:30	3/15/17 14:15 NAH	EPA 6010C	^
Cadmium	67.8	mg/kg	0.066	0.22	0.44	0.44	10.00		03/14/2017 09:30	3/22/17 18:46 NAH	EPA 6010C	^
Calcium	5520	mg/kg	0.26	0.77	1.5	1.5	1.00		03/14/2017 09:30	3/15/17 14:15 NAH	EPA 6010C	^
Chromium	100	mg/kg	0.025	0.077	0.15	0.15	1.00		03/14/2017 09:30	3/15/17 14:15 NAH	EPA 6010C	^
Cobalt	3.2	mg/kg	0.044	0.13	0.26	0.26	1.00		03/14/2017 09:30	3/15/17 14:15 NAH	EPA 6010C	^
Copper	297	mg/kg	0.77	2.2	4.4	4.4	10.00		03/14/2017 09:30	3/22/17 18:46 NAH	EPA 6010C	^
Iron	4040	mg/kg	0.33	0.99	2.0	2.0	1.00		03/14/2017 09:30	3/15/17 14:15 NAH	EPA 6010C	^
Lead	68.6	mg/kg	0.044	0.14	0.27	0.27	1.00	B	03/14/2017 09:30	3/15/17 14:15 NAH	EPA 6010C	^
Magnesium	1150	mg/kg	0.15	0.44	0.88	0.88	1.00		03/14/2017 09:30	3/15/17 14:15 NAH	EPA 6010C	^
Manganese	27.3	mg/kg	0.027	0.082	0.16	0.16	1.00		03/14/2017 09:30	3/15/17 14:15 NAH	EPA 6010C	^
Nickel	582	mg/kg	0.23	0.66	1.3	1.3	10.00		03/14/2017 09:30	3/22/17 18:46 NAH	EPA 6010C	^
Selenium	2.3	mg/kg	0.066	0.22	0.44	0.44	1.00		03/14/2017 09:30	3/15/17 14:15 NAH	EPA 6010C	^
Silver	3.8	mg/kg	0.19	0.55	1.1	1.1	10.00		03/14/2017 09:30	3/22/17 18:46 NAH	EPA 6010C	^
Thallium	<0.088	mg/kg	0.088	0.26	0.53	0.53	1.00	U	03/14/2017 09:30	3/15/17 14:15 NAH	EPA 6010C	^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 840368	Sample Description: WPP-SB6 (0-2)	Client Sample #:	Sampled: 03/09/2017 1015
-----------------	-----------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Vanadium	7.5	mg/kg	0.013	0.044	0.088	0.088	1.00		03/14/2017 09:30	3/15/17 14:15	NAH	EPA 6010C ^
Zinc	78.5	mg/kg	0.055	0.16	0.33	0.33	1.00		03/14/2017 09:30	3/15/17 14:15	NAH	EPA 6010C ^
Potassium	332	mg/kg	12	36	72	72	1.00		03/14/2017 09:30	3/15/17 12:43	MDS	EPA 6010C ^
Sodium	139	mg/kg	4.4	13	26	26	1.00		03/14/2017 09:30	3/15/17 12:43	MDS	EPA 6010C ^
Mercury	0.011	mg/kg	0.0023	0.0047	0.0093	0.0093	1.00		03/17/2017 08:00	3/20/17 08:31	LJF	EPA 7471B ^

CT LAB#: 840369	Sample Description: WPP-SB7 (0-2)	Client Sample #:	Sampled: 03/09/2017 1050
-----------------	-----------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
---------	--------	-------	----	------------	------------	----	----	-----------	-------------------	-----------------------	---------	--------

#### Inorganic Results

Solids, Percent	85.0	%	0.1	0.1	0.1	0.1	1.00			3/10/17 14:20	BMM	EPA 8000C
Cyanide	0.551	mg/kg	0.16	0.33	0.67	0.67	1.00	J	03/13/2017 12:00	3/14/17 12:19	SAW	EPA 9012A ^

#### Metals Results

Aluminum	2530	mg/kg	0.048	0.14	0.29	0.29	1.00		03/14/2017 09:30	3/15/17 14:22	NAH	EPA 6010C ^
Antimony	13.9	mg/kg	0.15	0.48	0.95	0.95	1.00		03/14/2017 09:30	3/15/17 14:22	NAH	EPA 6010C ^
Arsenic	10	mg/kg	0.15	0.48	0.95	0.95	1.00		03/14/2017 09:30	3/15/17 14:22	NAH	EPA 6010C ^
Barium	52.3	mg/kg	0.011	0.030	0.059	0.059	1.00		03/14/2017 09:30	3/15/17 14:22	NAH	EPA 6010C ^
Beryllium	0.71	mg/kg	0.0048	0.014	0.048	0.048	1.00	B	03/14/2017 09:30	3/15/17 14:22	NAH	EPA 6010C ^
Cadmium	1.3	mg/kg	0.0071	0.024	0.048	0.048	1.00		03/14/2017 09:30	3/15/17 14:22	NAH	EPA 6010C ^
Calcium	28500	mg/kg	0.29	0.83	1.7	1.7	1.00		03/14/2017 09:30	3/15/17 14:22	NAH	EPA 6010C ^
Chromium	7.1	mg/kg	0.027	0.083	0.17	0.17	1.00		03/14/2017 09:30	3/15/17 14:22	NAH	EPA 6010C ^
Cobalt	3.5	mg/kg	0.048	0.14	0.29	0.29	1.00		03/14/2017 09:30	3/15/17 14:22	NAH	EPA 6010C ^
Copper	90.6	mg/kg	0.083	0.24	0.48	0.48	1.00		03/14/2017 09:30	3/15/17 14:22	NAH	EPA 6010C ^
Iron	16800	mg/kg	0.36	1.1	2.1	2.1	1.00		03/14/2017 09:30	3/15/17 14:22	NAH	EPA 6010C ^
Lead	582	mg/kg	0.048	0.15	0.30	0.30	1.00	B	03/14/2017 09:30	3/15/17 14:22	NAH	EPA 6010C ^
Magnesium	11100	mg/kg	0.17	0.48	0.95	0.95	1.00		03/14/2017 09:30	3/15/17 14:22	NAH	EPA 6010C ^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 840369

Sample Description: WPP-SB7 (0-2)

Client Sample #:

Sampled: 03/09/2017 1050

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Manganese	240	mg/kg	0.030	0.089	0.18	0.18	1.00		03/14/2017 09:30	3/15/17 14:22	NAH	EPA 6010C ^
Nickel	13.7	mg/kg	0.025	0.071	0.14	0.14	1.00		03/14/2017 09:30	3/15/17 14:22	NAH	EPA 6010C ^
Selenium	<0.071	mg/kg	0.071	0.24	0.48	0.48	1.00	U	03/14/2017 09:30	3/15/17 14:22	NAH	EPA 6010C ^
Silver	0.19	mg/kg	0.020	0.059	0.12	0.12	1.00	B	03/14/2017 09:30	3/15/17 14:22	NAH	EPA 6010C ^
Thallium	<0.095	mg/kg	0.095	0.29	0.57	0.57	1.00	U	03/14/2017 09:30	3/15/17 14:22	NAH	EPA 6010C ^
Vanadium	12.5	mg/kg	0.014	0.048	0.095	0.095	1.00		03/14/2017 09:30	3/15/17 14:22	NAH	EPA 6010C ^
Zinc	80.8	mg/kg	0.059	0.18	0.36	0.36	1.00		03/14/2017 09:30	3/15/17 14:22	NAH	EPA 6010C ^
Potassium	419	mg/kg	13	39	78	78	1.00		03/14/2017 09:30	3/15/17 12:46	MDS	EPA 6010C ^
Sodium	422	mg/kg	4.8	14	29	29	1.00		03/14/2017 09:30	3/15/17 12:46	MDS	EPA 6010C ^
Mercury	0.079	mg/kg	0.0027	0.0054	0.011	0.011	1.00		03/17/2017 08:00	3/20/17 08:34	LJF	EPA 7471B ^

Notes:

^ Indicates the laboratory is NELAP accredited for this analyte by the indicated matrix and method. DL (detection limit), LOD (limit of detection), loq (limit of quantitation) as defined by most recent DOD QSM version.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

**This report has been specifically prepared to satisfy project or program requirements.** These results are in compliance with NELAC requirements for the parameters where accreditation is required or available, unless noted in the case narrative.

Submitted by: Brett M. Szymanski  
Project Manager  
608-356-2760

QC Qualifiers	
Code	Description
B	Analyte detected in the associated Method Blank.
C	Toxicity present in BOD sample.
D	Diluted Out.
E	Safe, No Total Coliform detected.
F	Unsafe, Total Coliform detected, no E. Coli detected.
G	Unsafe, Total Coliform detected and E. Coli detected.
H	Holding time exceeded.
I	BOD incubator temperature was outside acceptance limits during test period.
J	Estimated value.
L	Significant peaks were detected outside the chromatographic window.
M	Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits.
N	Insufficient BOD oxygen depletion.
O	Complete BOD oxygen depletion.
P	Concentration of analyte differs more than 40% between primary and confirmation analysis.
Q	Laboratory Control Sample outside acceptance limits.
R	See Narrative at end of report.
S	Surrogate standard recovery outside acceptance limits due to apparent matrix effects.
T	Sample received with improper preservation or temperature.
U	Analyte concentration was below detection limit.
V	Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.
W	Sample amount received was below program minimum.
X	Analyte exceeded calibration range.
Y	Replicate/Duplicate precision outside acceptance limits.
Z	Specified calibration criteria was not met.

### Current CT Laboratories Certifications

Wisconsin (WDNR) Chemistry ID# 157066030  
 Wisconsin (DATCP) Bacteriology ID# 105-289  
 Louisiana NELAP (primary) ID# ACC20160002  
 Illinois NELAP Lab ID# 200073  
 Kansas NELAP Lab ID# E-10368  
 Virginia NELAP Lab ID# 460203  
 Maryland Lab ID# WI00061  
 ISO/IEC 17025-2005 A2LA Cert # 3806.01  
 DoD-ELAP A2LA 3806.01  
 GA EPD Stipulation ID ACC20160002

## QC SUMMARY REPORT

**TETRA TECH**

**Project Name: WILLIAMSON**

**SDG #: 0**

**Folder #: 125864**

**Project Number: S05-0001-1610-011**

### *Duplicate*

Analytical Run #:	135651	Analysis Date:	03/10/2017	Prep Batch #:	Matrix:	SOIL
CTLab #:	841120	Analysis Time:	14:20	Prep Date/Time:	Method:	SW8000C
Parent Sample #:	840364	Analyst:	BMM	Prep Analyst:		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Solids, Percent	84.7	%	87.3					3	8

TETRA TECH

Project Name: WILLIAMSON

SDG #: 0

Folder #: 125864

Project Number: S05-0001-1610-011

---

*Duplicate*

Analytical Run #:	135651	Analysis Date:	03/10/2017	Prep Batch #:	Matrix:	SOIL
CTLab #:	841135	Analysis Time:	14:20	Prep Date/Time:	Method:	SW8000C
Parent Sample #:	840364	Analyst:	BMM	Prep Analyst:		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Solids, Percent	84.7	%	87.3					3	8

TETRA TECH

Project Name: WILLIAMSON

SDG #: 0

Folder #: 125864

Project Number: S05-0001-1610-011

---

**Lab Control Spike Soil**

Analytical Run #:	135673	Analysis Date:	03/14/2017	Prep Batch #:	61523	Matrix:	SOLID
CTLab #:	840947	Analysis Time:	11:58	Prep Date/Time:	03/13/2017 12:00	Method:	SW9012A
Parent Sample #:		Analyst:	SAW	Prep Analyst:	SAW		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Cyanide	1.33	mg/kg			1.25	106	76 --- 120		

TETRA TECH

Project Name: WILLIAMSON

SDG #: 0

Folder #: 125864

Project Number: S05-0001-1610-011

---

**Method Blank Soil**

Analytical Run #:	135673	Analysis Date:	03/14/2017	Prep Batch #:	61523	Matrix:	SOLID
CTLab #:	840946	Analysis Time:	11:59	Prep Date/Time:	03/13/2017 12:00	Method:	SW9012A
Parent Sample #:		Analyst:	SAW	Prep Analyst:	SAW		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Cyanide	0.14	mg/kg		U	0		0.30		

TETRA TECH

Project Name: WILLIAMSON

SDG #: 0

Folder #: 125864

Project Number: S05-0001-1610-011

---

**Matrix Spike Duplicate Soil**

Analytical Run #:	135673	Analysis Date:	03/14/2017	Prep Batch #:	61523	Matrix:	SOIL
CTLab #:	841792	Analysis Time:	12:14	Prep Date/Time:	03/13/2017 12:00	Method:	SW9012A
Parent Sample #:	841791	Analyst:	LJS	Prep Analyst:	LJS		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Cyanide	1.97	mg/kg	1.01		1.42	68	76 --- 120	8	20

TETRA TECH

Project Name: WILLIAMSON

SDG #: 0

Folder #: 125864

Project Number: S05-0001-1610-011

---

***Matrix Spike Soil***

Analytical Run #:	135673	Analysis Date:	03/14/2017	Prep Batch #:	61523	Matrix:	SOIL
CTLab #:	841791	Analysis Time:	12:12	Prep Date/Time:	03/13/2017 12:00	Method:	SW9012A
Parent Sample #:	840364	Analyst:	LJS	Prep Analyst:	LJS		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Cyanide	2.13	mg/kg	1.01		1.41	79	76 --- 120		

TETRA TECH

Project Name: WILLIAMSON

SDG #: 0

Folder #: 125864

Project Number: S05-0001-1610-011

**Duplicate**

Analytical Run #:	135735	Analysis Date:	03/15/2017	Prep Batch #:	61531	Matrix:	SOIL
CTLab #:	841191	Analysis Time:	13:09	Prep Date/Time:	03/14/2017 09:30	Method:	SW6010
Parent Sample #:	840364	Analyst:	NAH	Prep Analyst:	MDS		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Aluminum	5390	mg/kg	5200				9.6	4	20
Antimony	0.147	mg/kg	<0.147	U			32	0	20
Arsenic	6.2	mg/kg	5.3				32	16	20
Barium	47.1	mg/kg	40.2				2.0	16	20
Beryllium	0.28	mg/kg	0.27				1.60	4	20
Cadmium	279	mg/kg	152				1.60	59	20
Calcium	43700	mg/kg	26500				56	49	20
Chromium	16.9	mg/kg	12.4				5.6	31	20
Cobalt	3.1	mg/kg	3.4				9.6	9	20
Copper	12.5	mg/kg	10.7				16.0	16	20
Iron	7630	mg/kg	7320				72	4	20
Lead	19.4	mg/kg	11.3				10.0	53	20
Magnesium	14600	mg/kg	10100				32	36	20
Manganese	323	mg/kg	273				6.0	17	20
Nickel	131	mg/kg	87.8				4.8	39	20
Selenium	0.44	mg/kg	0.41				16	7	20
Silver	0.18	mg/kg	0.17				4.0	6	20
Thallium	0.0907	mg/kg	<0.0907	U			19	0	20
Vanadium	14.8	mg/kg	13.1				3.2	12	20
Zinc	126	mg/kg	95.8				12.0	27	20

TETRA TECH

Project Name: WILLIAMSON

SDG #: 0

Folder #: 125864

Project Number: S05-0001-1610-011

**Lab Control Spike Soil**

Analytical Run #:	135735	Analysis Date:	03/15/2017	Prep Batch #:	61531	Matrix:	SOLID
CTLab #:	841190	Analysis Time:	12:29	Prep Date/Time:	03/14/2017 09:30	Method:	SW6010
Parent Sample #:		Analyst:	NAH	Prep Analyst:	MDS		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Aluminum	92.5	mg/kg			100	92	80 --- 120		
Antimony	23.2	mg/kg			25.0	93	80 --- 120		
Arsenic	93.8	mg/kg			100	94	80 --- 120		
Barium	95.8	mg/kg			100	96	80 --- 120		
Beryllium	2.2	mg/kg			2.5	88	80 --- 120		
Cadmium	2.1	mg/kg			2.5	84	80 --- 120		
Calcium	4080	mg/kg			5000	82	80 --- 120		
Chromium	8.6	mg/kg			10.0	86	80 --- 120		
Cobalt	21.1	mg/kg			25.0	84	80 --- 120		
Copper	11.0	mg/kg			12.5	88	80 --- 120		
Iron	49.0	mg/kg			50.0	98	80 --- 120		
Lead	21.1	mg/kg			25.0	84	80 --- 120		
Magnesium	2230	mg/kg			2500	89	80 --- 120		
Manganese	21.2	mg/kg			25.0	85	80 --- 120		
Nickel	21.5	mg/kg			25.0	86	80 --- 120		
Selenium	87.8	mg/kg			100	88	80 --- 120		
Silver	2.1	mg/kg			2.5	84	75 --- 120		
Thallium	80.5	mg/kg			100	80	80 --- 120		
Vanadium	22.3	mg/kg			25.0	89	80 --- 120		
Zinc	24.1	mg/kg			25.0	96	80 --- 120		

TETRA TECH

Project Name: WILLIAMSON

SDG #: 0

Folder #: 125864

Project Number: S05-0001-1610-011

**Method Blank Soil**

Analytical Run #:	135735	Analysis Date:	03/15/2017	Prep Batch #:	61531	Matrix:	SOLID
CTLab #:	841189	Analysis Time:	12:35	Prep Date/Time:	03/14/2017 09:30	Method:	SW6010
Parent Sample #:		Analyst:	NAH	Prep Analyst:	MDS		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Aluminum	0.58	mg/kg			0		0.12		
Antimony	0.13	mg/kg		U	0		0.40		
Arsenic	0.13	mg/kg		U	0		0.40		
Barium	0.021	mg/kg			0		0.025		
Beryllium	0.0063	mg/kg			0		0.020		
Cadmium	0.006	mg/kg		U	0		0.020		
Calcium	6.1	mg/kg			0		0.70		
Chromium	0.023	mg/kg		U	0		0.125		
Cobalt	0.04	mg/kg		U	0		0.12		
Copper	0.07	mg/kg		U	0		0.20		
Iron	1.2	mg/kg			0		0.9		
Lead	0.14	mg/kg			0		0.125		
Magnesium	1.8	mg/kg			0		0.40		
Manganese	0.032	mg/kg			0		0.075		
Nickel	0.021	mg/kg		U	0		0.060		
Selenium	0.085	mg/kg			0		0.20		
Silver	0.025	mg/kg			0		0.050		
Thallium	0.08	mg/kg		U	0		0.24		
Vanadium	0.012	mg/kg		U	0		0.040		
Zinc	0.10	mg/kg			0		0.15		

TETRA TECH

Project Name: WILLIAMSON

SDG #: 0

Folder #: 125864

Project Number: S05-0001-1610-011

**Matrix Spike Duplicate Soil**

Analytical Run #:	135735	Analysis Date:	03/15/2017	Prep Batch #:	61531	Matrix:	SOIL
CTLab #:	841193	Analysis Time:	13:22	Prep Date/Time:	03/14/2017 09:30	Method:	SW6010
Parent Sample #:	841192	Analyst:	NAH	Prep Analyst:	MDS		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Aluminum	6750	mg/kg	5200		110	1409	80 --- 120	15	20
Antimony	9.1	mg/kg	BDL		27.5	33	80 --- 120	11	20
Arsenic	112	mg/kg	5.3		110	97	80 --- 120	2	20
Barium	153	mg/kg	40.2		110	103	80 --- 120	3	20
Beryllium	2.3	mg/kg	0.27		2.8	72	80 --- 120	2	20
Cadmium	172	mg/kg	152		2.8	714	80 --- 120	25	20
Calcium	37700	mg/kg	26500		5510	203	80 --- 120	23	20
Chromium	21.1	mg/kg	12.4		11.0	79	80 --- 120	13	20
Cobalt	22.2	mg/kg	3.4		27.5	68	80 --- 120	2	20
Copper	21.9	mg/kg	10.7		13.8	81	80 --- 120	9	20
Iron	8290	mg/kg	7320		55.1	1760	80 --- 120	9	20
Lead	33.6	mg/kg	11.3		27.5	81	80 --- 120	3	20
Magnesium	0.154	mg/kg	BDL	U	2750	0	80 --- 120	0	20
Manganese	325	mg/kg	273		27.5	189	80 --- 120	17	20
Nickel	107	mg/kg	87.8		27.5	70	80 --- 120	6	20
Selenium	92.8	mg/kg	0.41		110	84	80 --- 120	4	20
Silver	2.8	mg/kg	0.17		2.8	94	75 --- 125	4	20
Thallium	63.1	mg/kg	BDL		110	57	80 --- 120	1	20
Vanadium	38.0	mg/kg	13.1		27.5	91	80 --- 120	3	20
Zinc	125	mg/kg	95.8		27.5	106	80 --- 120	8	20

TETRA TECH

Project Name: WILLIAMSON

SDG #: 0

Folder #: 125864

Project Number: S05-0001-1610-011

**Matrix Spike Soil**

Analytical Run #:	135735	Analysis Date:	03/15/2017	Prep Batch #:	61531	Matrix:	SOIL
CTLab #:	841192	Analysis Time:	13:15	Prep Date/Time:	03/14/2017 09:30	Method:	SW6010
Parent Sample #:	840364	Analyst:	NAH	Prep Analyst:	MDS		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Aluminum	5870	mg/kg	5200		112	598	80 --- 120		
Antimony	10.3	mg/kg	BDL		27.9	37	80 --- 120		
Arsenic	116	mg/kg	5.3		112	99	80 --- 120		
Barium	151	mg/kg	40.2		112	99	80 --- 120		
Beryllium	2.3	mg/kg	0.27		2.8	72	80 --- 120		
Cadmium	225	mg/kg	152		2.8	2607	80 --- 120		
Calcium	48100	mg/kg	26500		5590	386	80 --- 120		
Chromium	24.4	mg/kg	12.4		11.2	107	80 --- 120		
Cobalt	22.2	mg/kg	3.4		27.9	67	80 --- 120		
Copper	20.3	mg/kg	10.7		14.0	69	80 --- 120		
Iron	7710	mg/kg	7320		55.9	698	80 --- 120		
Lead	33.0	mg/kg	11.3		27.9	78	80 --- 120		
Magnesium	0.156	mg/kg	10100	U	2790	0	80 --- 120		
Manganese	278	mg/kg	273		27.9	18	80 --- 120		
Nickel	115	mg/kg	87.8		27.9	97	80 --- 120		
Selenium	97.8	mg/kg	0.41		112	87	80 --- 120		
Silver	2.9	mg/kg	0.17		2.8	98	75 --- 125		
Thallium	63.1	mg/kg	BDL		112	56	80 --- 120		
Vanadium	37.4	mg/kg	13.1		27.9	87	80 --- 120		
Zinc	118	mg/kg	95.8		27.9	80	80 --- 120		

TETRA TECH

Project Name: WILLIAMSON

SDG #: 0

Folder #: 125864

Project Number: S05-0001-1610-011

---

***Duplicate***

Analytical Run #:	135736	Analysis Date:	03/15/2017	Prep Batch #:	61531	Matrix:	SOIL
CTLab #:	841191	Analysis Time:	12:17	Prep Date/Time:	03/14/2017 09:30	Method:	SW6010
Parent Sample #:	840364	Analyst:	MDS	Prep Analyst:	MDS		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Potassium	499	mg/kg	471				2.64	6	20

TETRA TECH

Project Name: WILLIAMSON

SDG #: 0

Folder #: 125864

Project Number: S05-0001-1610-011

---

*Duplicate*

Analytical Run #:	135736	Analysis Date:	03/15/2017	Prep Batch #:	61531	Matrix:	SOIL
CTLab #:	841191	Analysis Time:	12:17	Prep Date/Time:	03/14/2017 09:30	Method:	SW6010
Parent Sample #:	840364	Analyst:	MDS	Prep Analyst:	MDS		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Sodium	133	mg/kg	110				0.96	19	20

TETRA TECH

Project Name: WILLIAMSON

SDG #: 0

Folder #: 125864

Project Number: S05-0001-1610-011

---

**Lab Control Spike Soil**

Analytical Run #:	135736	Analysis Date:	03/15/2017	Prep Batch #:	61531	Matrix:	SOLID
CTLab #:	841190	Analysis Time:	11:54	Prep Date/Time:	03/14/2017 09:30	Method:	SW6010
Parent Sample #:		Analyst:	MDS	Prep Analyst:	MDS		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Potassium	2330	mg/kg			2500	93	80 --- 120		

TETRA TECH

Project Name: WILLIAMSON

SDG #: 0

Folder #: 125864

Project Number: S05-0001-1610-011

---

**Lab Control Spike Soil**

Analytical Run #:	135736	Analysis Date:	03/15/2017	Prep Batch #:	61531	Matrix:	SOLID
CTLab #:	841190	Analysis Time:	11:54	Prep Date/Time:	03/14/2017 09:30	Method:	SW6010
Parent Sample #:		Analyst:	MDS	Prep Analyst:	MDS		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Sodium	2350	mg/kg			2500	94	80 --- 120		

TETRA TECH

Project Name: WILLIAMSON

SDG #: 0

Folder #: 125864

Project Number: S05-0001-1610-011

---

**Method Blank Soil**

Analytical Run #:	135736	Analysis Date:	03/15/2017	Prep Batch #:	61531	Matrix:	SOLID
CTLab #:	841189	Analysis Time:	11:56	Prep Date/Time:	03/14/2017 09:30	Method:	SW6010
Parent Sample #:		Analyst:	MDS	Prep Analyst:	MDS		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Potassium	11	mg/kg		U	0		33		

TETRA TECH

Project Name: WILLIAMSON

SDG #: 0

Folder #: 125864

Project Number: S05-0001-1610-011

---

**Method Blank Soil**

Analytical Run #:	135736	Analysis Date:	03/15/2017	Prep Batch #:	61531	Matrix:	SOLID
CTLab #:	841189	Analysis Time:	11:56	Prep Date/Time:	03/14/2017 09:30	Method:	SW6010
Parent Sample #:		Analyst:	MDS	Prep Analyst:	MDS		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Sodium	4	mg/kg		U	0		12		

TETRA TECH

Project Name: WILLIAMSON

SDG #: 0

Folder #: 125864

Project Number: S05-0001-1610-011

---

**Matrix Spike Duplicate Soil**

Analytical Run #:	135736	Analysis Date:	03/15/2017	Prep Batch #:	61531	Matrix:	SOIL
CTLab #:	841193	Analysis Time:	12:23	Prep Date/Time:	03/14/2017 09:30	Method:	SW6010
Parent Sample #:	841192	Analyst:	MDS	Prep Analyst:	MDS		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Potassium	3280	mg/kg	471		2750	102	80 --- 120	1	20

TETRA TECH

Project Name: WILLIAMSON

SDG #: 0

Folder #: 125864

Project Number: S05-0001-1610-011

---

**Matrix Spike Duplicate Soil**

Analytical Run #:	135736	Analysis Date:	03/15/2017	Prep Batch #:	61531	Matrix:	SOIL
CTLab #:	841193	Analysis Time:	12:23	Prep Date/Time:	03/14/2017 09:30	Method:	SW6010
Parent Sample #:	841192	Analyst:	MDS	Prep Analyst:	MDS		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Sodium	2740	mg/kg	110		2750	96	80 --- 120	1	20

TETRA TECH

Project Name: WILLIAMSON

SDG #: 0

Folder #: 125864

Project Number: S05-0001-1610-011

---

***Matrix Spike Soil***

Analytical Run #:	135736	Analysis Date:	03/15/2017	Prep Batch #:	61531	Matrix:	SOIL
CTLab #:	841192	Analysis Time:	12:20	Prep Date/Time:	03/14/2017 09:30	Method:	SW6010
Parent Sample #:	840364	Analyst:	MDS	Prep Analyst:	MDS		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Potassium	3300	mg/kg	471		2790	101	80 --- 120		

TETRA TECH

Project Name: WILLIAMSON

SDG #: 0

Folder #: 125864

Project Number: S05-0001-1610-011

---

**Matrix Spike Soil**

Analytical Run #:	135736	Analysis Date:	03/15/2017	Prep Batch #:	61531	Matrix:	SOIL
CTLab #:	841192	Analysis Time:	12:20	Prep Date/Time:	03/14/2017 09:30	Method:	SW6010
Parent Sample #:	840364	Analyst:	MDS	Prep Analyst:	MDS		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Sodium	2820	mg/kg	110		2790	97	80 --- 120		

TETRA TECH

Project Name: WILLIAMSON

SDG #: 0

Folder #: 125864

Project Number: S05-0001-1610-011

**Duplicate**

Analytical Run #:	135852	Analysis Date:	03/20/2017	Prep Batch #:	61546	Matrix:	SOIL
CTLab #:	841976	Analysis Time:	08:14	Prep Date/Time:	03/17/2017 08:00	Method:	SW7471B
Parent Sample #:	840364	Analyst:	LJF	Prep Analyst:	LJF		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Mercury	0.00249	mg/kg	0.034	U			0.20	200	20

TETRA TECH

Project Name: WILLIAMSON

SDG #: 0

Folder #: 125864

Project Number: S05-0001-1610-011

---

**Lab Control Spike Soil**

Analytical Run #:	135852	Analysis Date:	03/20/2017	Prep Batch #:	61546	Matrix:	SOLID
CTLab #:	841975	Analysis Time:	08:03	Prep Date/Time:	03/17/2017 08:00	Method:	SW7471B
Parent Sample #:		Analyst:	LJF	Prep Analyst:	LJF		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Mercury	0.089	mg/kg			0.083	107	80 --- 120		

TETRA TECH

Project Name: WILLIAMSON

SDG #: 0

Folder #: 125864

Project Number: S05-0001-1610-011

---

**Method Blank Soil**

Analytical Run #:	135852	Analysis Date:	03/20/2017	Prep Batch #:	61546	Matrix:	SOLID
CTLab #:	841974	Analysis Time:	08:05	Prep Date/Time:	03/17/2017 08:00	Method:	SW7471B
Parent Sample #:		Analyst:	LJF	Prep Analyst:	LJF		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Mercury	0.0021	mg/kg		U	0		00415		

TETRA TECH

Project Name: WILLIAMSON

SDG #: 0

Folder #: 125864

Project Number: S05-0001-1610-011

---

**Matrix Spike Duplicate Soil**

Analytical Run #:	135852	Analysis Date:	03/20/2017	Prep Batch #:	61546	Matrix:	SOIL
CTLab #:	841978	Analysis Time:	08:23	Prep Date/Time:	03/17/2017 08:00	Method:	SW7471B
Parent Sample #:	841977	Analyst:	LJF	Prep Analyst:	LJF		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Mercury	0.11	mg/kg	0.034		0.097	78	80 --- 120	9	20

TETRA TECH

Project Name: WILLIAMSON

SDG #: 0

Folder #: 125864

Project Number: S05-0001-1610-011

---

**Matrix Spike Soil**

Analytical Run #:	135852	Analysis Date:	03/20/2017	Prep Batch #:	61546	Matrix:	SOIL
CTLab #:	841977	Analysis Time:	08:20	Prep Date/Time:	03/17/2017 08:00	Method:	SW7471B
Parent Sample #:	840364	Analyst:	LJF	Prep Analyst:	LJF		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Mercury	0.12	mg/kg	0.034		0.097	89	80 --- 120		

**Lab Control Spike Soil**

Analytical Run #:	135657	Analysis Date:	03/12/2017	Prep Batch #:	61505	Matrix:	SOLID
CTLab #:	840420	Analysis Time:	11:13	Prep Date/Time:	03/10/2017 12:50	Method:	SW8260C
Parent Sample #:		Analyst:	RLD	Prep Analyst:	MDS		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
1,1,1-Trichloroethane	478	ug/kg			500	96	70 --- 135		
1,1,2,2-Tetrachloroethane	511	ug/kg			500	102	55 --- 130		
1,1,2-Trichloroethane	490	ug/kg			500	98	60 --- 125		
1,1-Dichloroethane	499	ug/kg			500	100	75 --- 125		
1,1-Dichloroethene	480	ug/kg			500	96	65 --- 135		
1,2,3-Trichlorobenzene	530	ug/kg			500	106	60 --- 135		
1,2,4-Trichlorobenzene	527	ug/kg			500	105	65 --- 130		
1,2-Dibromo-3-chloropropane	455	ug/kg			500	91	40 --- 135		
1,2-Dibromoethane	499	ug/kg			500	100	70 --- 125		
1,2-Dichlorobenzene	513	ug/kg			500	103	75 --- 120		
1,2-Dichloroethane	508	ug/kg			500	102	70 --- 135		
1,2-Dichloropropane	510	ug/kg			500	102	70 --- 120		
1,3-Dichlorobenzene	525	ug/kg			500	105	70 --- 125		
1,4-Dichlorobenzene	509	ug/kg			500	102	70 --- 125		
1,4-Dioxane	45900	ug/kg			25000	184	58 --- 138		
1,1,2-Trichloro-1,2,2-trifluoroethane	983	ug/kg			1000	98	75 --- 129		
2-Butanone	5690	ug/kg			5000	114	30 --- 160		
2-Hexanone	6060	ug/kg			5000	121	45 --- 145		
4-Methyl-2-pentanone	5840	ug/kg			5000	117	45 --- 145		
Acetone	5430	ug/kg			5000	109	20 --- 160		
Benzene	511	ug/kg			500	102	75 --- 125		
Bromochloromethane	507	ug/kg			500	101	70 --- 125		
Bromodichloromethane	482	ug/kg			500	96	70 --- 130		
Bromoform	460	ug/kg			500	92	55 --- 135		
Bromomethane	462	ug/kg			500	92	30 --- 160		
Carbon disulfide	1010	ug/kg			1000	101	45 --- 160		
Carbon tetrachloride	469	ug/kg			500	94	65 --- 135		
Chlorobenzene	522	ug/kg			500	104	75 --- 125		
Chloroethane	464	ug/kg			500	93	40 --- 155		
Chloroform	504	ug/kg			500	101	70 --- 125		
Chloromethane	476	ug/kg			500	95	50 --- 130		
cis-1,2-Dichloroethene	506	ug/kg			500	101	65 --- 125		
cis-1,3-Dichloropropene	451	ug/kg			500	90	70 --- 125		
Cyclohexane	496	ug/kg			500	99	73 --- 128		
Dibromochloromethane	472	ug/kg			500	94	65 --- 130		
Dichlorodifluoromethane	493	ug/kg			500	99	35 --- 135		
Ethylbenzene	523	ug/kg			500	105	75 --- 125		
Isopropylbenzene	538	ug/kg			500	108	75 --- 130		
m & p-Xylene	1050	ug/kg			1000	105	80 --- 125		
Methyl acetate	606	ug/kg			500	121	37 --- 176		
Methyl tert-butyl ether	511	ug/kg			500	102	74 --- 125		
Methylcyclohexane	516	ug/kg			500	103	73 --- 126		
Methylene chloride	409	ug/kg			500	82	55 --- 140		

TETRA TECH

Project Name: WILLIAMSON

SDG #: 0

Folder #: 125864

Project Number: S05-0001-1610-011

**Lab Control Spike Soil**

Analytical Run #:	135657	Analysis Date:	03/12/2017	Prep Batch #:	61505	Matrix:	SOLID
CTLab #:	840420	Analysis Time:	11:13	Prep Date/Time:	03/10/2017 12:50	Method:	SW8260C
Parent Sample #:		Analyst:	RLD	Prep Analyst:	MDS		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
o-Xylene	519	ug/kg			500	104	75 --- 125		
Styrene	525	ug/kg			500	105	75 --- 125		
Tetrachloroethene	503	ug/kg			500	101	65 --- 140		
Toluene	512	ug/kg			500	102	70 --- 125		
trans-1,2-Dichloroethene	504	ug/kg			500	101	65 --- 135		
trans-1,3-Dichloropropene	427	ug/kg			500	85	65 --- 125		
Trichloroethene	526	ug/kg			500	105	75 --- 125		
Trichlorofluoromethane	193	ug/kg			500	39	25 --- 185		
Vinyl chloride	503	ug/kg			500	101	60 --- 125		

**Method Blank Soil**

Analytical Run #:	135657	Analysis Date:	03/12/2017	Prep Batch #:	61505	Matrix:	SOLID
CTLab #:	840419	Analysis Time:	12:09	Prep Date/Time:	03/10/2017 12:50	Method:	SW8260C
Parent Sample #:		Analyst:	RLD	Prep Analyst:	MDS		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
1,1,1-Trichloroethane	10	ug/kg		U	0		25		
1,1,2,2-Tetrachloroethane	6	ug/kg		U	0		25		
1,1,2-Trichloroethane	8	ug/kg		U	0		25		
1,1-Dichloroethane	11	ug/kg		U	0		25		
1,1-Dichloroethene	16	ug/kg		U	0		25		
1,2,3-Trichlorobenzene	8	ug/kg		U	0		25		
1,2,4-Trichlorobenzene	9	ug/kg		U	0		25		
1,2-Dibromo-3-chloropropane	12	ug/kg		U	0		25		
1,2-Dibromoethane	10	ug/kg		U	0		25		
1,2-Dichlorobenzene	9	ug/kg		U	0		25		
1,2-Dichloroethane	12	ug/kg		U	0		25		
1,2-Dichloropropane	7	ug/kg		U	0		25		
1,3-Dichlorobenzene	8	ug/kg		U	0		25		
1,4-Dichlorobenzene	8	ug/kg		U	0		25		
1,4-Dioxane	400	ug/kg		U	0		2500		
1,1,2-Trichloro-1,2,2-trifluoroethane	20	ug/kg		U	0		50		
2-Butanone	100	ug/kg		U	0		250		
2-Hexanone	68	ug/kg		U	0		250		
4-Methyl-2-pentanone	82	ug/kg		U	0		250		
Acetone	135	ug/kg			0		250		
Benzene	5	ug/kg		U	0		25		
Bromochloromethane	8	ug/kg		U	0		25		
Bromodichloromethane	9	ug/kg		U	0		25		
Bromoform	6	ug/kg		U	0		25		
Bromomethane	59.6	ug/kg			0		50		
Carbon disulfide	15	ug/kg		U	0		50		
Carbon tetrachloride	11	ug/kg		U	0		25		
Chlorobenzene	8	ug/kg		U	0		25		
Chloroethane	19	ug/kg		U	0		25		
Chloroform	9	ug/kg		U	0		25		
Chloromethane	25	ug/kg		U	0		50		
cis-1,2-Dichloroethene	10	ug/kg		U	0		25		
cis-1,3-Dichloropropene	10	ug/kg		U	0		25		
Cyclohexane	12	ug/kg		U	0		25		
Dibromochloromethane	8	ug/kg		U	0		25		
Dichlorodifluoromethane	13	ug/kg		U	0		25		
Ethylbenzene	8	ug/kg		U	0		25		
Isopropylbenzene	8	ug/kg		U	0		25		
m & p-Xylene	18	ug/kg		U	0		50		
Methyl acetate	12	ug/kg		U	0		25		
Methyl tert-butyl ether	28	ug/kg		U	0		50		
Methylcyclohexane	9	ug/kg		U	0		25		
Methylene chloride	40	ug/kg		U	0		50		

TETRA TECH

Project Name: WILLIAMSON

SDG #: 0

Folder #: 125864

Project Number: S05-0001-1610-011

---

**Method Blank Soil**

Analytical Run #:	135657	Analysis Date:	03/12/2017	Prep Batch #:	61505	Matrix:	SOLID
CTLab #:	840419	Analysis Time:	12:09	Prep Date/Time:	03/10/2017 12:50	Method:	SW8260C
Parent Sample #:		Analyst:	RLD	Prep Analyst:	MDS		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
o-Xylene	8	ug/kg		U	0		25		
Styrene	6	ug/kg		U	0		25		
Tetrachloroethene	8	ug/kg		U	0		25		
Toluene	7	ug/kg		U	0		25		
trans-1,2-Dichloroethene	11	ug/kg		U	0		25		
trans-1,3-Dichloropropene	7	ug/kg		U	0		25		
Trichloroethene	10	ug/kg		U	0		25		
Trichlorofluoromethane	13	ug/kg		U	0		25		
Vinyl chloride	14	ug/kg		U	0		25		

**Matrix Spike Duplicate Soil**

Analytical Run #:	135657	Analysis Date:	03/12/2017	Prep Batch #:	61505	Matrix:	SOIL
CTLab #:	840422	Analysis Time:	19:07	Prep Date/Time:	03/10/2017 12:50	Method:	SW8260C
Parent Sample #:	840421	Analyst:	RLD	Prep Analyst:	MDS		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
1,1,1-Trichloroethane	451	ug/kg	BDL		508	89	70 --- 135	0	30
1,1,2,2-Tetrachloroethane	448	ug/kg	BDL		508	88	55 --- 130	1	30
1,1,2-Trichloroethane	505	ug/kg	BDL		508	99	60 --- 125	1	30
1,1-Dichloroethane	505	ug/kg	BDL		508	99	75 --- 125	2	30
1,1-Dichloroethene	511	ug/kg	BDL		508	101	65 --- 135	0	30
1,2 Dichloroethane-d4	100	% Recovery			100	100	80 --- 117		30
1,2,3-Trichlorobenzene	566	ug/kg	BDL		508	111	60 --- 135	3	30
1,2,4-Trichlorobenzene	543	ug/kg	BDL		508	107	65 --- 130	0	30
1,2-Dibromo-3-chloropropane	403	ug/kg	BDL		508	79	40 --- 135	2	30
1,2-Dibromoethane	512	ug/kg	BDL		508	101	70 --- 125	5	30
1,2-Dichlorobenzene	525	ug/kg	BDL		508	103	75 --- 120	0	30
1,2-Dichloroethane	520	ug/kg	BDL		508	102	70 --- 135	1	30
1,2-Dichloropropane	523	ug/kg	BDL		508	103	70 --- 120	1	30
1,3-Dichlorobenzene	548	ug/kg	BDL		508	108	70 --- 125	0	30
1,4-Dichlorobenzene	539	ug/kg	BDL		508	106	70 --- 125	3	30
1,4-Dioxane	43200	ug/kg	BDL		25400	170	58 --- 138	7	30
112Trichloro122trifluoroethane	1010	ug/kg	BDL		1020	99	75 --- 129	1	30
2-Butanone	5820	ug/kg	BDL		5080	115	30 --- 160	2	30
2-Hexanone	6110	ug/kg	BDL		5080	120	45 --- 145	4	30
4-Methyl-2-pentanone	5830	ug/kg	BDL		5080	115	20 --- 145	2	30
Acetone	6340	ug/kg	130		5080	122	20 --- 160	1	30
Benzene	530	ug/kg	BDL		508	104	75 --- 125	1	30
Bromochloromethane	519	ug/kg	BDL		508	102	70 --- 125	3	30
Bromodichloromethane	447	ug/kg	BDL		508	88	70 --- 130	1	30
Bromofluorobenzene	101	% Recovery			100	101	85 --- 120		30
Bromoform	418	ug/kg	BDL		508	82	55 --- 135	6	30
Bromomethane	481	ug/kg	34.7		508	88	30 --- 160	7	30
Carbon disulfide	1000	ug/kg	BDL		1020	98	45 --- 160	1	30
Carbon tetrachloride	447	ug/kg	BDL		508	88	65 --- 135	3	30
Chlorobenzene	537	ug/kg	BDL		508	106	75 --- 125	1	30
Chloroethane	491	ug/kg	BDL		508	97	40 --- 155	2	30
Chloroform	511	ug/kg	BDL		508	101	70 --- 125	0	30
Chloromethane	481	ug/kg	BDL		508	95	50 --- 130	1	30
cis-1,2-Dichloroethene	524	ug/kg	BDL		508	103	65 --- 125	3	30
cis-1,3-Dichloropropene	438	ug/kg	BDL		508	86	70 --- 125	0	30
Cyclohexane	517	ug/kg	BDL		508	102	73 --- 128	2	30
d8-Toluene	99.0	% Recovery			100	99.0	85 --- 115		30
Dibromochloromethane	411	ug/kg	BDL		508	81	65 --- 130	5	30
Dibromofluoromethane	92.0	% Recovery			100	92.0	82 --- 118		30
Dichlorodifluoromethane	514	ug/kg	BDL		508	101	35 --- 135	7	30
Ethylbenzene	543	ug/kg	BDL		508	107	75 --- 125	2	30
Isopropylbenzene	562	ug/kg	BDL		508	111	75 --- 130	4	30
m & p-Xylene	1110	ug/kg	BDL		1020	109	80 --- 125	3	30

TETRA TECH

Project Name: WILLIAMSON

SDG #: 0

Folder #: 125864

Project Number: S05-0001-1610-011

**Matrix Spike Duplicate Soil**

Analytical Run #:	135657	Analysis Date:	03/12/2017	Prep Batch #:	61505	Matrix:	SOIL
CTLab #:	840422	Analysis Time:	19:07	Prep Date/Time:	03/10/2017 12:50	Method:	SW8260C
Parent Sample #:	840421	Analyst:	RLD	Prep Analyst:	MDS		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Methyl acetate	1340	ug/kg	BDL		508	264	37 --- 176	4	30
Methyl tert-butyl ether	527	ug/kg	BDL		508	104	55 --- 140	0	30
Methylcyclohexane	552	ug/kg	BDL		508	109	73 --- 126	0	30
Methylene chloride	419	ug/kg	BDL		508	82	55 --- 140	3	30
o-Xylene	540	ug/kg	BDL		508	106	75 --- 125	1	30
Styrene	556	ug/kg	BDL		508	109	75 --- 125	4	30
Tetrachloroethene	536	ug/kg	25.1		508	101	65 --- 140	4	30
Toluene	518	ug/kg	BDL		508	102	70 --- 125	1	30
trans-1,2-Dichloroethene	516	ug/kg	BDL		508	102	65 --- 135	3	30
trans-1,3-Dichloropropene	431	ug/kg	BDL		508	85	65 --- 125	2	30
Trichloroethene	567	ug/kg	BDL		508	112	75 --- 125	2	30
Trichlorofluoromethane	489	ug/kg	BDL		508	96	25 --- 185	7	30
Vinyl chloride	512	ug/kg	BDL		508	101	60 --- 125	3	30

**Matrix Spike Soil**

Analytical Run #:	135657	Analysis Date:	03/12/2017	Prep Batch #:	61505	Matrix:	SOIL
CTLab #:	840421	Analysis Time:	18:39	Prep Date/Time:	03/10/2017 12:50	Method:	SW8260C
Parent Sample #:	840364	Analyst:	RLD	Prep Analyst:	MDS		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
1,1,1-Trichloroethane	451	ug/kg	BDL		508	89	70 --- 135		
1,1,2,2-Tetrachloroethane	444	ug/kg	BDL		508	87	55 --- 130		
1,1,2-Trichloroethane	501	ug/kg	BDL		508	99	60 --- 125		
1,1-Dichloroethane	513	ug/kg	BDL		508	101	75 --- 125		
1,1-Dichloroethene	513	ug/kg	BDL		508	101	65 --- 135		
1,2 Dichloroethane-d4	99.0	% Recovery			100	99.0	80 --- 117		
1,2,3-Trichlorobenzene	552	ug/kg	BDL		508	109	60 --- 135		
1,2,4-Trichlorobenzene	544	ug/kg	BDL		508	107	65 --- 130		
1,2-Dibromo-3-chloropropane	394	ug/kg	BDL		508	78	40 --- 135		
1,2-Dibromoethane	485	ug/kg	BDL		508	95	70 --- 125		
1,2-Dichlorobenzene	527	ug/kg	BDL		508	104	75 --- 120		
1,2-Dichloroethane	524	ug/kg	BDL		508	103	70 --- 135		
1,2-Dichloropropane	518	ug/kg	BDL		508	102	70 --- 120		
1,3-Dichlorobenzene	547	ug/kg	BDL		508	108	70 --- 125		
1,4-Dichlorobenzene	523	ug/kg	BDL		508	103	70 --- 125		
1,4-Dioxane	40400	ug/kg	BDL		25400	159	58 --- 138		
112Trichloro122trifluoroethane	1030	ug/kg	BDL		1020	101	75 --- 129		
2-Butanone	5730	ug/kg	BDL		5080	113	30 --- 160		
2-Hexanone	5850	ug/kg	BDL		5080	115	45 --- 145		
4-Methyl-2-pentanone	5720	ug/kg	BDL		5080	113	20 --- 145		
Acetone	6260	ug/kg	130		5080	121	20 --- 160		
Benzene	524	ug/kg	BDL		508	103	75 --- 125		
Bromochloromethane	503	ug/kg	BDL		508	99	70 --- 125		
Bromodichloromethane	444	ug/kg	BDL		508	87	70 --- 130		
Bromofluorobenzene	101	% Recovery			100	101	85 --- 120		
Bromoform	393	ug/kg	BDL		508	77	55 --- 135		
Bromomethane	515	ug/kg	34.7		508	95	30 --- 160		
Carbon disulfide	1020	ug/kg	BDL		1020	100	45 --- 160		
Carbon tetrachloride	434	ug/kg	BDL		508	85	65 --- 135		
Chlorobenzene	530	ug/kg	BDL		508	104	75 --- 125		
Chloroethane	502	ug/kg	BDL		508	99	40 --- 155		
Chloroform	511	ug/kg	BDL		508	101	70 --- 125		
Chloromethane	487	ug/kg	BDL		508	96	50 --- 130		
cis-1,2-Dichloroethene	507	ug/kg	BDL		508	100	65 --- 125		
cis-1,3-Dichloropropene	437	ug/kg	BDL		508	86	70 --- 125		
Cyclohexane	525	ug/kg	BDL		508	103	73 --- 128		
d8-Toluene	100	% Recovery			100	100	85 --- 115		
Dibromochloromethane	391	ug/kg	BDL		508	77	65 --- 130		
Dibromofluoromethane	88.0	% Recovery			100	88.0	82 --- 118		
Dichlorodifluoromethane	553	ug/kg	BDL		508	109	35 --- 135		
Ethylbenzene	533	ug/kg	BDL		508	105	75 --- 125		
Isopropylbenzene	538	ug/kg	BDL		508	106	75 --- 130		
m & p-Xylene	1070	ug/kg	BDL		1020	105	80 --- 125		

TETRA TECH

Project Name: WILLIAMSON

SDG #: 0

Folder #: 125864

Project Number: S05-0001-1610-011

**Matrix Spike Soil**

Analytical Run #:	135657	Analysis Date:	03/12/2017	Prep Batch #:	61505	Matrix:	SOIL
CTLab #:	840421	Analysis Time:	18:39	Prep Date/Time:	03/10/2017 12:50	Method:	SW8260C
Parent Sample #:	840364	Analyst:	RLD	Prep Analyst:	MDS		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Methyl acetate	1280	ug/kg	BDL		508	252	37 --- 176		
Methyl tert-butyl ether	529	ug/kg	BDL		508	104	55 --- 140		
Methylcyclohexane	553	ug/kg	BDL		508	109	73 --- 126		
Methylene chloride	432	ug/kg	BDL		508	85	55 --- 140		
o-Xylene	535	ug/kg	BDL		508	105	75 --- 125		
Styrene	536	ug/kg	BDL		508	106	75 --- 125		
Tetrachloroethene	560	ug/kg	25.1		508	105	65 --- 140		
Toluene	523	ug/kg	BDL		508	103	70 --- 125		
trans-1,2-Dichloroethene	502	ug/kg	BDL		508	99	65 --- 135		
trans-1,3-Dichloropropene	424	ug/kg	BDL		508	83	65 --- 125		
Trichloroethene	581	ug/kg	BDL		508	114	75 --- 125		
Trichlorofluoromethane	524	ug/kg	BDL		508	103	25 --- 185		
Vinyl chloride	527	ug/kg	BDL		508	104	60 --- 125		

## Sample Condition Report

Folder #: 125864	Print Date / Time: 03/10/2017 12:21
Client: TETRA TECH	Received Date / Time / By: 03/10/2017 11:15 JLS
Project Name: WILLIAMSON	Log-In Date / Time / By: 03/10/2017 11:49 DRT
Project Phase: INDIANAPOLIS, IN	Project #: S05-0001-1610-011 PM: BMS
Coolers: 5905	Temperature: 1.1 C On Ice: Y
Custody Seals Present : Y	COC Present?: Y Complete? Y
Seal Intact? Y	Numbers: DATED AND SIGNED
Ship Method: FEDEX EXPRESS	Tracking Number: 899270028734
Adequate Packaging: Y	Temp Blank Enclosed? Y

Notes: THE SAMPLES WERE RECEIVED IN GOOD CONDITION ON ICE.

TWO CUSTODY SEALS WERE PRESENT AND INTACT UPON RECEIPT - BOTH WERE DATED 3/9/17 AND SIGNED. THE CUSTODY SEALS WERE DAMAGE BY LOG-IN UPON REMOVAL FROM THE COOLER.

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
840336 WPP-SB1 (0-2)	SOLIDS	1	/	%SOL,CYN,HG,ICP
Total # of Containers of Type ( SOLIDS ) = 1				

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
840361 WPP-SB1 (0-2) D	SOLIDS	1	/	%SOL,CYN,HG,ICP
Total # of Containers of Type ( SOLIDS ) = 1				

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
840362 WPP-SB1 (2-4)	SOLIDS	1	/	%SOL
Total # of Containers of Type ( SOLIDS ) = 1				

840362 WPP-SB1 (2-4)	MEOH TARED	1	/	VOC
	MEOH TARED	1	/	VOC
Total # of Containers of Type ( MEOH TARED ) = 2				

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
840363 WPP-SB1 (2-4) D	SOLIDS	1	/	%SOL
Total # of Containers of Type ( SOLIDS ) = 1				

840363 WPP-SB1 (2-4) D				
------------------------	--	--	--	--

MEOH TARED	1	/	VOC
MEOH TARED	1	/	VOC
<b>Total # of Containers of Type ( MEOH TARED ) = 2</b>			

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
<b>840364</b> WPP-SB2 (4-6)	SOLIDS	1	/	%SOL,CYN,HG,ICP
	SOLIDS	1	/	%SOL,CYN,HG,ICP
	<b>Total # of Containers of Type ( SOLIDS ) = 2</b>			

<b>840364</b> WPP-SB2 (4-6)	MEOH TARED	1	/	VOC
	MEOH TARED	1	/	VOC
	<b>Total # of Containers of Type ( MEOH TARED ) = 2</b>			

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
<b>840365</b> WPP-SB3 (0-2)	SOLIDS	1	/	%SOL,CYN,HG,ICP
	SOLIDS	1	/	%SOL,CYN,HG,ICP
	<b>Total # of Containers of Type ( SOLIDS ) = 2</b>			

<b>840365</b> WPP-SB3 (0-2)	MEOH TARED	1	/	VOC
	MEOH TARED	1	/	VOC
	<b>Total # of Containers of Type ( MEOH TARED ) = 2</b>			

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
<b>840366</b> WPP-SB4 (0-2)	SOLIDS	1	/	%SOL,CYN,HG,ICP
	<b>Total # of Containers of Type ( SOLIDS ) = 1</b>			

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
<b>840367</b> WPP-SB5 (0-2)	SOLIDS	1	/	%SOL,CYN,HG,ICP
	<b>Total # of Containers of Type ( SOLIDS ) = 1</b>			

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
<b>840368</b> WPP-SB6 (0-2)	SOLIDS	1	/	%SOL,CYN,HG,ICP
	<b>Total # of Containers of Type ( SOLIDS ) = 1</b>			

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
<b>840369</b> WPP-SB7 (0-2)	SOLIDS	1	/	%SOL,CYN,HG,ICP
	<b>Total # of Containers of Type ( SOLIDS ) = 1</b>			

---

<i>Condition Code</i>	<i>Condition Description</i>
1	Sample Received OK

Company: Tetra Tech  
 Project Contact: Lucas Stamps  
 Telephone: 317-797-2420  
 Project Name: Williamson  
 Project #: 505-0001-1610-011  
 Location: Indianapolis IN  
 Sampled By: LGS

CT LABORATORIES

1230 Lange Court, Baraboo, WI 53913  
 608-356-2760 Fax 608-356-2766  
 www.ctlaboratories.com

Report To: Lucas Stamps  
 EMAIL:  
 Company: lstamps@qepi.com  
 Address:

Folder #: 125864

Company: TETRA TECH

Project: WILLIAMSON

Logged By: LGS

Program:

IM ☒ RCRA SDWA NPDES  
 lid Waste Other

#

Invoice To: Chris Burns  
 EMAIL: Chris.Burns@Tetratech.com  
 Address:

\*Party listed is responsible for payment of invoice as per CT Laboratories' terms and conditions

## Client Special Instructions

Level IV  
 Scribe EDD

## ANALYSES REQUESTED

Filtered? Y/N

TAL Metals

Cyanide

VOCs

Total # Containers

Designated MS/MSD

Turnaround Time

Normal RUSH\*

Date Needed:

Rush analysis requires prior  
 CT Laboratories' approval

Surcharges:

24 hr 200%

2-3 days 100%

4-9 days 50%

## Matrix:

GW - groundwater SW - surface water WW - wastewater DW - drinking water  
 S - soil/sediment SL - sludge A - air M - misc/waste

Collection		Matrix	Grab/ Comp	Sample #	Sample ID Description	Fill in Spaces with Bottles per Test																CT Lab ID # <small>Lab use only</small>	
Date	Time																						
3/9/17	1117	G	G		WPP-SB1 (0-2)	X	X													1		840336	
	1117				WPP-SB1 (0-2) D	X	X													1		840361	
	1122				WPP-SB1 (2-4)			X												3		840362	
	1122				WPP-SB1 (2-4) D			X												3		840363	
	1145				WPP-SB2 (4-6)	X	X	X												4	X	840364	
	0835				WPP-SB3 (0-2)	X	X	X												4		840365	
	0910				WPP-SB4 (0-2)	X	X													1		840366	
	0940				WPP-SB5 (0-2)	X	X													1		840367	
	1015				WPP-SB6 (0-2)	X	X													1		840368	
✓	1050	✓	✓		WPP-SB7 (0-2)	X	X													1		840369	

Relinquished By:

Date/Time

3/9/17 1400

Received By:

Date/Time

3/10/17 1115

Received by:

Date/Time

Received for Laboratory by:

Date/Time

3/10/17 1149

125864 - Page 59 of 61

Lab Use Only

Ice Present ☒ Yes ☐ No

Temp 1.1 IR Gun # 14

Cooler # 5905

## CT Laboratories Terms and Conditions

Where a purchaser (Client) places an order for laboratory, consulting or sampling services from CT Laboratories (CTL), CTL shall provide the ordered services pursuant to these Terms and Conditions, and the related Quotation, or as agreed in a negotiated contract. In the absence of a written agreement to the contrary, the Order constitutes an acceptance by the Client of CTL's offer to do business under these Terms and Conditions, and an agreement to be bound by these Terms and Conditions. No contrary or additional terms and conditions expressed in a Client's document shall be deemed to become a part of the contract created upon acceptance of these Terms and Conditions, unless accepted by CTL in advance of the start of the project and in writing.

### 1. ORDERS AND RECEIPT OF SAMPLES (Sample Acceptance Policy)

- 1.1 The Client may place the Order (i.e., specify a Scope of Work) either by submitting a purchase order to CTL in writing, by telephone (confirmed in writing) or by negotiated contract. Whichever option the Client selects for placing the Order, the Order shall not be valid unless it contains sufficient specification to enable CTL to carry out the Client's requirements. It is the policy of CT Laboratories that samples not meeting the acceptance criteria, outlined in the NELAP standards and Section 5.8.3.2 of the DOD QSM, will not be accepted by the laboratory or will be qualified on the final report. All samples submitted to the laboratory must: (1) be accompanied by proper, full and complete documentation, including sample identification, location, date and time of collection, the collector's name, type of preservation (if any), type of sample, any special comments concerning the sample and any additional pertinent fields on the chain-of-custody. In the absence of any of the required information, the laboratory will attempt to contact the client to obtain the information; if unable to obtain the necessary information, the final report will be qualified. (2) be labeled appropriately with a unique sample identification written with indelible ink on water resistant labels. If the laboratory cannot determine the identity of a sample, it will be rejected and the client will be contacted for further instructions or resampling. (3) be in an appropriate sample container. If the container is inappropriate, the client will be contacted for further instructions or resampling. If analysis is possible, the final report will be qualified. CT Laboratories can provide a sampling guide containing approved containers and preservations for analytical methods requested. (4) adhere to specified holding times. If samples are received with less than ½ the holding time remaining for the requested test, CT Laboratories will make its best effort to analyze the samples and notify the client. If holding times are exceeded, the final report will be qualified. (5) contain adequate sample volume to perform the necessary testing. If sufficient volume is not present, the sample will be rejected and the client will be contacted for further instructions or resampling. If samples show signs of damage, contamination or inadequate preservation, the client will be notified. If analysis can be performed, the final report will be qualified. If not, the samples will be rejected and the client notified for further instructions or resampling.
- 1.2 CT Laboratories must be supplied with complete written disclosure of the known or suspected presence of any hazardous substances, as defined by applicable federal or state law. Where any samples which were not accompanied by the required disclosure, cause interruptions in the lab's ability to process work due to contamination of instruments or work areas, the Client will be responsible for the costs of clean up and recovery.
- 1.3 Prior to Sample Acceptance, the entire risk of loss or damage to samples remains with the Client. In no event will CTL have any responsibility or liability for the action or inaction of any carrier shipping or delivering any sample to or from CTL's premises. Client is responsible to assure that any sample containing any hazardous substance which is to be delivered to CTL's premises will be packaged, labeled, transported and delivered properly and in accordance with applicable laws.

### 2. PAYMENT TERMS

- 2.1 Services performed by CTL will be in accordance with prices quoted and later confirmed in writing or as stated in the Price Schedule. Invoices may be submitted to Client upon completion of any sample delivery group. Payment in advance is required for all Clients except those whose credit has been established with CTL. For Clients with approved credit, payment terms are net 30 days from the date of invoice by CTL. All overdue payments are subject to an additional interest and service charge of one and one-half percent (1.5%) (or the maximum rate permissible by law, whichever is lesser) per month or portion thereof from the due date until the date of payment. All fees are charged or billed directly to the Client. The billing of a third party will not be accepted without a statement, signed by the third party that acknowledges and accepts payment responsibility. CTL may suspend work and withhold delivery of data under this order at any time in the event Client fails to make timely payment of its invoices. Client shall be responsible for all costs and expenses of collection including reasonable attorney's fees. CTL reserves the right to refuse to proceed with work at any time based upon an unfavorable Client credit report.

### 3. CHANGE ORDERS, TERMINATION

- 3.1 Changes to the Scope of Work, price, or result delivery date may be initiated by CTL after Sample Acceptance due to any condition which conflicts with analytical, QA or other protocols warranted in these Terms and Conditions. CTL will not proceed with such changes until an agreement with the Client is reached on the amount of any cost, schedule change or technical change to the Scope of Work, and such agreement is documented in writing.
- 3.2 Changes to the Scope of Work, including but not limited to increasing or decreasing the work, changing test and analysis specification or acceleration in the performance of the work may be initiated by the Client after sample acceptance. Such a change will be documented in writing and may result in a change in cost and turnaround time commitment. CTL's acceptance of such changes is contingent upon technical feasibility and operational capacity.
- 3.3 Suspension or termination of all or any part of the work may be initiated by the Client. CTL will be compensated consistent with Section 2 of these Terms and Conditions. CTL will complete all work in progress and be paid in full for all work completed.

### 4. WARRANTIES AND LIABILITY

- 4.1 Where applicable, CTL will use analytical methodologies which are in substantial conformity with published test methods. CTL has implemented these methods in its Laboratory Quality Manuals and referenced Standard Operating Procedures and where the nature or composition of the sample requires it, CTL reserves the right to deviate from these methodologies as necessary or appropriate, based on the reasonable judgment of CTL, which deviations, if any, will be made on a basis consistent with recognized standards of the industry and/or CTL's Laboratory Quality Manuals. Client may request that CTL perform according to a mutually agreed Quality Assurance Project Plan (QAPP). In the event that samples arrive prior to agreement on a QAPP, CTL will proceed with analyses under its standard Quality Manuals then in effect, and CTL will not be responsible for any resampling or other charges if work must be repeated to comply with a subsequently finalized QAPP.
- 4.2 CTL shall start preparation and/or analysis within holding times provided that Sample Acceptance occurs within 48 hours of sampling or 1/2 of the holding time for the test, whichever is less. Where resolution of inconsistencies leading to Sample Acceptance does not occur within this period, CTL will use its best efforts to meet holding times and will proceed with the work provided that, in CTL's judgment, the chain-of-custody or definition of the Scope of Work provide sufficient guidance. Reanalysis of samples to comply with CTL's Quality Manuals will be deemed to have met holding times provided the initial analysis was performed within the applicable holding time. Where reanalysis demonstrates that sample matrix interference is the cause of failure to meet any Quality Manual requirements, the warranty will be deemed to have been met.
- 4.3 CTL warrants that it possesses and maintains all licenses and certifications which are required to perform services under these Terms and Conditions provided that such requirements are specified in writing to CTL prior to Sample Acceptance. CTL will notify the Client in writing of any decertification or revocation of any license, or notice of either, which affects work in progress.
- 4.4 The warranty obligations set forth in Sections 4.1, 4.2 and 4.3 are the sole and exclusive warranties given by CTL in connection with any services performed by CTL or any Results generated from such services, and CTL gives and makes NO OTHER REPRESENTATION OR WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. No representative of CTL is authorized to give or make any other representation or warranty or modify this warranty in any way.
- 4.5 Client's sole and exclusive remedy for the breach of warranty in connection with any services performed by CTL, will be limited to repeating any services performed, contingent on the Client's providing, at the request of CTL and at the Client's expense, additional sample(s) if necessary. Any reanalysis requested by the Client generating Results consistent with the original Results will be at the Client's expense. If resampling is necessary, CTL's liability for resampling costs will be limited to actual cost or one hundred or one hundred fifty dollars (\$150) per sample, whichever is less.
- 4.6 CTL's liability for any and all causes of action arising hereunder, whether based in contract, tort, warranty, negligence or otherwise, shall be limited to the lesser amount of compensation for the services performed or \$100,000. All claims, including those for negligence, shall be deemed waived unless suit thereon is filed within one year after CTL's completion of the services. Under no circumstances, whether arising in contract, tort (including negligence), or otherwise, shall CTL be responsible for loss of use, loss of profits, or for any special, indirect, incidental or consequential damages occasioned by the services performed or by application or use of the reports prepared.
- 4.7 In no event shall CTL have any responsibility or liability to the Client for any failure or delay in performance by CTL which results, directly or indirectly, in whole or in part, from any cause or circumstance beyond the reasonable control of CTL. Such causes and circumstances shall include, but not be limited to, acts of God, acts of Client, acts or orders of any governmental authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, equipment breakdown, matrix interference or unknown highly contaminated samples that impact instrument operation, unavailability of supplies from usual suppliers, difficulties or delays in transportation, mail or delivery services, or any other cause beyond CTL's reasonable control.

### 5. RESULTS, WORK PRODUCT

- 5.1 Data or information provided to CTL or generated by services performed under this agreement shall only become the property of the Client upon receipt in full by CTL of payment for the whole Order. Ownership of any analytical method, QA/QC protocols, software programs or equipment developed by CTL for performance of work will be retained by CTL, and Client shall not disclose such information to any third party.
- 5.2 Data and sample materials provided by Client or at Client's request, and the result obtained by CTL shall be held in confidence (unless such information is generally available to the public or is in the public domain or Client has failed to pay CTL for all services rendered or is otherwise in breach of these Terms and Conditions), subject to any disclosure required by law or legal process.
- 5.3 Should the Results delivered by CTL be used by the Client or Client's client, even though subsequently determined not to meet the warranties described in these Terms and Conditions, then the compensation will be adjusted based upon mutual agreement. In no case shall the Client unreasonably withhold CTL's right to independently defend its data.
- 5.4 CTL reserves the right to subcontract services ordered by the Client to another laboratory or laboratories. If, in CTL's sole judgment, it is reasonably necessary, appropriate or advisable to do so, and with the Client's permission, CTL will in no way be liable for any subcontracted services and all applicable warranties, guarantees and insurance are those of the subcontracted laboratory.
- 5.5 CTL shall dispose of the Client's samples 30 days after the analytical report is issued, unless instructed to store them for an alternate period of time or to return such samples to the Client, in a manner consistent with U.S. Environmental Protection Agency regulations or other applicable Federal, state or local requirements. Any samples for projects that are canceled or not accepted, or for which return was requested, will be returned to the Client at their own expense. CTL reserves the right to return to the Client any sample or unused portion of a sample that is not within CTL's permitted capability or the capabilities of CTL's designated waste disposal vendor(s).
- 5.6 Unless a different time period is agreed to in any order under these Terms and Conditions, CTL agrees to retain all records for five (5) years.
- 5.7 In the event that CTL is required to respond to legal process related to services for Client, Client agrees to reimburse CTL for hourly charges for personnel involved in the response and attorney fees reasonably incurred in obtaining advice concerning the response, preparation to testify, and appearances related to the legal process, travel and all reasonable expenses associated with the litigation.

### 6. INSURANCE

- 6.1 CTL shall maintain in force during the performance of services under these Terms and Conditions, Workers' Compensation and Employer's Liability Insurance in accordance with the laws of the states having jurisdiction over CTL's employees who are engaged in the performance of the work. CTL shall also maintain during such period, Comprehensive General and Contractual Liability (limit of \$2,000,000 per occurrence/aggregate), Comprehensive Automobile Liability, owned and hired, (\$1,000,000 combined single limit), and Professional/Pollution Liability Insurance (limit of \$5,000,000 per occurrence/aggregate). Any Client required changes to these limits or conditions may result in a change in cost to the Client.

### 7. AUDIT

- 7.1 Upon prior notice to CTL, the Client may audit and inspect CTL's records and accounts covering reimbursable costs related to work done for the Client, for a period of one (1) year after completion of the work. The purpose of any such audit shall be only for verification of such costs, and CTL shall not be required to provide access to cost records where prices are expressed as fixed fees or published unit prices.

Ice Present YES NO

Temperature 1.1

IR Gun # 14

Initials js

Date 3/10/17 Time 1115

Cooler #: 5905

## Cooler Receipt Form

*Seals were intact -  
damaged by fog in  
on removal - js*

**QEC**

Quality Environmental Containers  
800-255-3950 • 304-255-3900

**CUSTODY SEAL**

DATE 3/9/17

SIGNATURE [Signature]

**FedEx** NEW Package  
Express US Airbill

FedEx Tracking Number **8992 7002 8734**

1 From  
Date 3/9/17 FedEx Tracking Number **899270028734**

Sender's Name Lucas Stamps Phone 317 351-4255

Company QUALITY ENVIRONMENTAL PROF

Address 1611 S FRANKLIN RD

City INDIANAPOLIS State IN ZIP 46239-1196

2 Your Internal Billing Reference 505-0001-1610-011

3 To Recipient's Name Dennis Liley Phone 608 356-2706

Company CT Labs

Address 1230 Lange Ct

Address Perambou State WI ZIP 53913

City Perambou State WI ZIP 53913

City Perambou State WI ZIP 53913

City Perambou State WI ZIP 53913

City Perambou State WI ZIP 53913

City Perambou State WI ZIP 53913

City Perambou State WI ZIP 53913

City Perambou State WI ZIP 53913

4 Express Package Service \* To most locations.  
NOTE: Service order has changed. Please select carefully.

Next Business Day

☐ FedEx First Overnight  
Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Priority Overnight  
Next business morning \* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☒ FedEx Standard Overnight  
Next business afternoon \* Saturday Delivery NOT available

5 Packaging \* Declared value limit \$500

☐ FedEx Envelope\* ☐ FedEx Pak\* ☐ FedEx Box ☐ FedEx Tube ☒ Other

6 Special Handling and Delivery Signature Options

☐ SATURDAY Delivery  
NOT available for FedEx Standard Overnight, FedEx 2Day A.M. or FedEx Express Saver

☒ No Signature Required  
Package may be left without obtaining a signature for delivery

☐ Direct Signature  
Someone at recipient's address may sign for delivery. Fee applies.

☐ Indirect Signature  
If no one is available at recipient's address, someone at a neighboring address may sign for delivery. Fee applies.

Does this shipment contain dangerous goods?  
One box must be checked.

☒ No ☐ Yes  
All per attached Shipper's Declaration

☐ Dry Ice  
Dry Ice, 8 UY 1045

☐ Cargo Aircraft Only

7 Payment Bill to:

Enter FedEx Acct. No. or Credit Card No. below.

☒ Sender's Acct. No. or Credit Card No. ☐ Recipient ☐ Third Party ☒ Credit Card ☐ Cash/Check

Total Packages 1 Total Weight 34 lbs



8992 7002 8734



---

2655 Park Center Dr., Suite A  
Simi Valley, CA 93065  
T: +1 805 526 7161  
F: +1 805 526 7270  
[www.alsglobal.com](http://www.alsglobal.com)

## LABORATORY REPORT

April 4, 2017

Dennis Linley  
CT Laboratories  
1230 Lange Court  
Baraboo, WI 53913

**RE: Tetra Tech - IN Sampling / S05-0001-1610-011**

Dear Dennis:

Enclosed are the results of the samples submitted to our laboratory on March 14, 2017. For your reference, these analyses have been assigned our service request number P1701233.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at [www.alsglobal.com](http://www.alsglobal.com). Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

**ALS | Environmental**

By Sue Anderson at 1:15 pm, Apr 04, 2017

For Samantha Henningsen  
Project Manager



2655 Park Center Dr., Suite A  
Simi Valley, CA 93065  
T: +1 805 526 7161  
F: +1 805 526 7270  
[www.alsglobal.com](http://www.alsglobal.com)

Client: CT Laboratories  
Project: Tetra Tech - IN Sampling / S05-0001-1610-011

Service Request No: P1701233

---

## CASE NARRATIVE

The samples were received intact under chain of custody on March 14, 2017 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

### Volatile Organic Compound Analysis

The samples were analyzed for volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is included on the laboratory's NELAP and DoD-ELAP scope of accreditation. Any analytes flagged with an X are not included on the NELAP or DoD-ELAP accreditation.

The containers were cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

---

*The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.*

*Use of ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.*



2655 Park Center Dr., Suite A  
 Simi Valley, CA 93065  
 T: +1 805 526 7161  
 F: +1 805 526 7270  
[www.alsglobal.com](http://www.alsglobal.com)

# ALS Environmental – Simi Valley

## CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
Arizona DHS	<a href="http://www.azdhs.gov/preparedness/state-laboratory/lab-licensure-certification/index.php#laboratory-licensure-home">http://www.azdhs.gov/preparedness/state-laboratory/lab-licensure-certification/index.php#laboratory-licensure-home</a>	AZ0694
Florida DOH (NELAP)	<a href="http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm">http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm</a>	E871020
Louisiana DEQ (NELAP)	<a href="http://www.deq.louisiana.gov/portal/DIVISIONS/PublicParticipationandPermitSupport/LouisianaLaboratoryAccreditationProgram.aspx">http://www.deq.louisiana.gov/portal/DIVISIONS/PublicParticipationandPermitSupport/LouisianaLaboratoryAccreditationProgram.aspx</a>	05071
Maine DHHS	<a href="http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/labcert.htm">http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/labcert.htm</a>	2016036
Minnesota DOH (NELAP)	<a href="http://www.health.state.mn.us/accreditation">http://www.health.state.mn.us/accreditation</a>	1177034
New Jersey DEP (NELAP)	<a href="http://www.nj.gov/dep/oqa/">http://www.nj.gov/dep/oqa/</a>	CA009
New York DOH (NELAP)	<a href="http://www.wadsworth.org/labcert/elap/elap.html">http://www.wadsworth.org/labcert/elap/elap.html</a>	11221
Oregon PHD (NELAP)	<a href="http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx">http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx</a>	4068-004
Pennsylvania DEP	<a href="http://www.depweb.state.pa.us/labs">http://www.depweb.state.pa.us/labs</a>	68-03307 (Registration)
PJLA (DoD ELAP)	<a href="http://www.pjlabs.com/search-accredited-labs">http://www.pjlabs.com/search-accredited-labs</a>	65818 (Testing)
Texas CEQ (NELAP)	<a href="http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html">http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html</a>	T104704413-16-7
Utah DOH (NELAP)	<a href="http://health.utah.gov/lab/environmental-lab-certification/">http://health.utah.gov/lab/environmental-lab-certification/</a>	CA01627201 6-6
Washington DOE	<a href="http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html">http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html</a>	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at [www.alsglobal.com](http://www.alsglobal.com), or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

# ALS ENVIRONMENTAL

## DETAIL SUMMARY REPORT

Client: CT Laboratories  
Project ID: Tetra Tech - IN Sampling / S05-0001-1610-011

Service Request: P1701233

Date Received: 3/14/2017  
Time Received: 09:26

TO-15 - VOC Cans

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	
WPP-SG3	P1701233-001	Air	3/10/2017	09:34	1SS00004	-1.32	5.30	X
WPP-SG4	P1701233-002	Air	3/10/2017	10:05	1SS00186	0.00	5.28	X
WPP-SG5	P1701233-003	Air	3/10/2017	10:37	1SC01017	-0.97	5.45	X
WPP-SG6	P1701233-004	Air	3/10/2017	11:02	1SC01194	-0.01	5.34	X
WPP-SG7	P1701233-005	Air	3/10/2017	11:44	1SC01266	-1.27	6.28	X
WPP-SG1	P1701233-006	Air	3/10/2017	12:14	1SC01121	-1.56	5.75	X
WPP-SG2	P1701233-007	Air	3/10/2017	12:46	1SC00459	-1.03	5.15	X
WPP-SG2-D	P1701233-008	Air	3/10/2017	12:46	1SS00128	-1.29	5.97	X



Page 1 of 1

## Air - Chain of Custody Record & Analytical Service Request

5 of 250

# **ALS Environmental** **Sample Acceptance Check Form**

Client: CT Laboratories Work order: P1701233  
 Project: Tetra Tech - IN Sampling / 605-0001-1610-011  
 Sample(s) received on: 3/14/17 Date opened: 3/14/17 by: KKELPE

**Note:** This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

- |   | <u>Yes</u>                          | <u>No</u>                           | <u>N/A</u>                          |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1 Were <b>sample containers</b> properly marked with client sample ID?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 2 Did <b>sample containers</b> arrive in good condition?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 3 Were <b>chain-of-custody</b> papers used and filled out?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 4 Did <b>sample container labels</b> and/or tags agree with custody papers?                                     | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 5 Was <b>sample volume</b> received adequate for analysis?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 6 Are samples within specified holding times?   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 7 Was proper <b>temperature</b> (thermal preservation) of cooler at receipt adhered to?                         | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 8 Were <b>custody seals</b> on outside of cooler/Box/Container?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Location of seal(s)? _____ Sealing Lid?   | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Were signature and date included?   | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Were seals intact?  | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 9 Do containers have appropriate <b>preservation</b> , according to method/SOP or Client specified information? | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Is there a client indication that the submitted samples are <b>pH</b> preserved?                                | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Were <b>VOA vials</b> checked for presence/absence of air bubbles?  | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Does the client/method/SOP require that the analyst check the sample pH and <u>if necessary</u> alter it?       | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 10 <b>Tubes:</b> Are the tubes capped and intact?   | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 11 <b>Badges:</b> Are the badges properly capped and intact?  | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Are dual bed badges separated and individually capped and intact?   | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1701233-001.01	1.0 L Source Silonite Canister					
P1701233-002.01	1.0 L Source Silonite Canister					
P1701233-003.01	1.0 L Source Can					
P1701233-004.01	1.0 L Source Can					
P1701233-005.01	1.0 L Source Can					
P1701233-006.01	1.0 L Source Can					
P1701233-007.01	1.0 L Source Can					
P1701233-008.01	1.0 L Source Silonite Canister					
P1701233-009.02	1.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers): \_\_\_\_\_

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** CT Laboratories

**Client Sample ID:** WPP-SG3

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P1701233-001

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Silonite Summa Canister

Test Notes:

Container ID: 1SS00004

Date Collected: 3/10/17

Date Received: 3/14/17

Date Analyzed: 3/15/17

Volume(s) Analyzed: 0.050 Liter(s)

Initial Pressure (psig): -1.32 Final Pressure (psig): 5.30

Canister Dilution Factor: 1.49

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	15	ND	8.7	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	15	ND	3.0	
74-87-3	Chloromethane	ND	15	ND	7.2	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	15	ND	2.1	
75-01-4	Vinyl Chloride	ND	15	ND	5.8	
106-99-0	1,3-Butadiene	ND	15	ND	6.7	
74-83-9	Bromomethane	ND	15	ND	3.8	
75-00-3	Chloroethane	ND	15	ND	5.6	
64-17-5	Ethanol	ND	150	ND	79	
75-05-8	Acetonitrile	ND	15	ND	8.9	
107-02-8	Acrolein	ND	60	ND	26	
67-64-1	Acetone	ND	150	ND	63	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	15	ND	2.7	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	150	ND	61	
107-13-1	Acrylonitrile	ND	15	ND	6.9	
75-35-4	1,1-Dichloroethene	ND	15	ND	3.8	
75-09-2	Methylene Chloride	ND	15	ND	4.3	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	15	ND	4.8	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	15	ND	1.9	
75-15-0	Carbon Disulfide	ND	150	ND	48	
156-60-5	trans-1,2-Dichloroethene	ND	15	ND	3.8	
75-34-3	1,1-Dichloroethane	ND	15	ND	3.7	
1634-04-4	Methyl tert-Butyl Ether	ND	15	ND	4.1	
108-05-4	Vinyl Acetate	ND	150	ND	42	
78-93-3	2-Butanone (MEK)	ND	150	ND	51	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** CT Laboratories

**Client Sample ID:** WPP-SG3

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P1701233-001

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Silonite Summa Canister

Test Notes:

Container ID: 1SS00004

Date Collected: 3/10/17

Date Received: 3/14/17

Date Analyzed: 3/15/17

Volume(s) Analyzed: 0.050 Liter(s)

Initial Pressure (psig): -1.32 Final Pressure (psig): 5.30

Canister Dilution Factor: 1.49

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	15	ND	3.8	
141-78-6	Ethyl Acetate	ND	30	ND	8.3	
110-54-3	n-Hexane	ND	15	ND	4.2	
67-66-3	Chloroform	ND	15	ND	3.1	
109-99-9	Tetrahydrofuran (THF)	ND	15	ND	5.1	
107-06-2	1,2-Dichloroethane	ND	15	ND	3.7	
71-55-6	1,1,1-Trichloroethane	ND	15	ND	2.7	
71-43-2	Benzene	ND	15	ND	4.7	
56-23-5	Carbon Tetrachloride	ND	15	ND	2.4	
110-82-7	Cyclohexane	ND	30	ND	8.7	
78-87-5	1,2-Dichloropropane	ND	15	ND	3.2	
75-27-4	Bromodichloromethane	ND	15	ND	2.2	
79-01-6	Trichloroethene	350	15	65	2.8	
123-91-1	1,4-Dioxane	ND	15	ND	4.1	
80-62-6	Methyl Methacrylate	ND	30	ND	7.3	
142-82-5	n-Heptane	ND	15	ND	3.6	
10061-01-5	cis-1,3-Dichloropropene	ND	15	ND	3.3	
108-10-1	4-Methyl-2-pentanone	ND	15	ND	3.6	
10061-02-6	trans-1,3-Dichloropropene	ND	15	ND	3.3	
79-00-5	1,1,2-Trichloroethane	ND	15	ND	2.7	
108-88-3	Toluene	17	15	4.5	4.0	
591-78-6	2-Hexanone	17	15	4.1	3.6	
124-48-1	Dibromochloromethane	ND	15	ND	1.7	
106-93-4	1,2-Dibromoethane	ND	15	ND	1.9	
123-86-4	n-Butyl Acetate	ND	15	ND	3.1	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** CT Laboratories

**Client Sample ID:** WPP-SG3

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P1701233-001

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Silonite Summa Canister

Test Notes:

Container ID: 1SS00004

Date Collected: 3/10/17

Date Received: 3/14/17

Date Analyzed: 3/15/17

Volume(s) Analyzed: 0.050 Liter(s)

Initial Pressure (psig): -1.32 Final Pressure (psig): 5.30

Canister Dilution Factor: 1.49

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	15	ND	3.2	
127-18-4	Tetrachloroethene	2,900	15	430	2.2	
108-90-7	Chlorobenzene	ND	15	ND	3.2	
100-41-4	Ethylbenzene	ND	15	ND	3.4	
179601-23-1	m,p-Xylenes	ND	30	ND	6.9	
75-25-2	Bromoform	ND	15	ND	1.4	
100-42-5	Styrene	ND	15	ND	3.5	
95-47-6	o-Xylene	ND	15	ND	3.4	
111-84-2	n-Nonane	ND	15	ND	2.8	
79-34-5	1,1,2,2-Tetrachloroethane	ND	15	ND	2.2	
98-82-8	Cumene	ND	15	ND	3.0	
80-56-8	alpha-Pinene	ND	15	ND	2.7	
103-65-1	n-Propylbenzene	ND	15	ND	3.0	
622-96-8	4-Ethyltoluene	ND	15	ND	3.0	
108-67-8	1,3,5-Trimethylbenzene	ND	15	ND	3.0	
95-63-6	1,2,4-Trimethylbenzene	ND	15	ND	3.0	
100-44-7	Benzyl Chloride	ND	15	ND	2.9	
541-73-1	1,3-Dichlorobenzene	ND	15	ND	2.5	
106-46-7	1,4-Dichlorobenzene	ND	15	ND	2.5	
95-50-1	1,2-Dichlorobenzene	ND	15	ND	2.5	
5989-27-5	d-Limonene	ND	15	ND	2.7	
96-12-8	1,2-Dibromo-3-chloropropane	ND	15	ND	1.5	
120-82-1	1,2,4-Trichlorobenzene	ND	15	ND	2.0	
91-20-3	Naphthalene	ND	15	ND	2.8	
87-68-3	Hexachlorobutadiene	ND	15	ND	1.4	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** CT Laboratories

**Client Sample ID:** WPP-SG4

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P1701233-002

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Silonite Summa Canister

Test Notes:

Container ID: 1SS00186

Date Collected: 3/10/17

Date Received: 3/14/17

Date Analyzed: 3/15/17

Volume(s) Analyzed: 0.060 Liter(s)

Initial Pressure (psig): 0.0 Final Pressure (psig): 5.28

Canister Dilution Factor: 1.36

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	11	ND	6.6	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	11	ND	2.3	
74-87-3	Chloromethane	ND	11	ND	5.5	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	11	ND	1.6	
75-01-4	Vinyl Chloride	ND	11	ND	4.4	
106-99-0	1,3-Butadiene	ND	11	ND	5.1	
74-83-9	Bromomethane	ND	11	ND	2.9	
75-00-3	Chloroethane	ND	11	ND	4.3	
64-17-5	Ethanol	ND	110	ND	60	
75-05-8	Acetonitrile	ND	11	ND	6.8	
107-02-8	Acrolein	ND	45	ND	20	
67-64-1	Acetone	ND	110	ND	48	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	11	ND	2.0	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	110	ND	46	
107-13-1	Acrylonitrile	ND	11	ND	5.2	
75-35-4	1,1-Dichloroethene	ND	11	ND	2.9	
75-09-2	Methylene Chloride	12	11	3.5	3.3	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	11	ND	3.6	
76-13-1	Trichlorotrifluoroethane (CFC 113)	17	11	2.2	1.5	
75-15-0	Carbon Disulfide	ND	110	ND	36	
156-60-5	trans-1,2-Dichloroethene	ND	11	ND	2.9	
75-34-3	1,1-Dichloroethane	ND	11	ND	2.8	
1634-04-4	Methyl tert-Butyl Ether	ND	11	ND	3.1	
108-05-4	Vinyl Acetate	ND	110	ND	32	
78-93-3	2-Butanone (MEK)	ND	110	ND	38	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** CT Laboratories

**Client Sample ID:** WPP-SG4

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P1701233-002

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Silonite Summa Canister

Test Notes:

Container ID: 1SS00186

Date Collected: 3/10/17

Date Received: 3/14/17

Date Analyzed: 3/15/17

Volume(s) Analyzed: 0.060 Liter(s)

Initial Pressure (psig): 0.0

Final Pressure (psig): 5.28

Canister Dilution Factor: 1.36

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	11	ND	2.9	
141-78-6	Ethyl Acetate	ND	23	ND	6.3	
110-54-3	n-Hexane	ND	11	ND	3.2	
67-66-3	Chloroform	ND	11	ND	2.3	
109-99-9	Tetrahydrofuran (THF)	ND	11	ND	3.8	
107-06-2	1,2-Dichloroethane	ND	11	ND	2.8	
71-55-6	1,1,1-Trichloroethane	ND	11	ND	2.1	
71-43-2	Benzene	ND	11	ND	3.5	
56-23-5	Carbon Tetrachloride	ND	11	ND	1.8	
110-82-7	Cyclohexane	ND	23	ND	6.6	
78-87-5	1,2-Dichloropropane	ND	11	ND	2.5	
75-27-4	Bromodichloromethane	ND	11	ND	1.7	
79-01-6	Trichloroethene	1,200	11	220	2.1	
123-91-1	1,4-Dioxane	ND	11	ND	3.1	
80-62-6	Methyl Methacrylate	ND	23	ND	5.5	
142-82-5	n-Heptane	ND	11	ND	2.8	
10061-01-5	cis-1,3-Dichloropropene	ND	11	ND	2.5	
108-10-1	4-Methyl-2-pentanone	ND	11	ND	2.8	
10061-02-6	trans-1,3-Dichloropropene	ND	11	ND	2.5	
79-00-5	1,1,2-Trichloroethane	ND	11	ND	2.1	
108-88-3	Toluene	28	11	7.3	3.0	
591-78-6	2-Hexanone	14	11	3.3	2.8	
124-48-1	Dibromochloromethane	ND	11	ND	1.3	
106-93-4	1,2-Dibromoethane	ND	11	ND	1.5	
123-86-4	n-Butyl Acetate	ND	11	ND	2.4	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** CT Laboratories

**Client Sample ID:** WPP-SG4

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P1701233-002

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Silonite Summa Canister

Test Notes:

Container ID: 1SS00186

Date Collected: 3/10/17

Date Received: 3/14/17

Date Analyzed: 3/15/17

Volume(s) Analyzed: 0.060 Liter(s)

Initial Pressure (psig): 0.0      Final Pressure (psig): 5.28

Canister Dilution Factor: 1.36

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	11	ND	2.4	
127-18-4	Tetrachloroethene	1,800	11	270	1.7	
108-90-7	Chlorobenzene	ND	11	ND	2.5	
100-41-4	Ethylbenzene	ND	11	ND	2.6	
179601-23-1	m,p-Xylenes	ND	23	ND	5.2	
75-25-2	Bromoform	ND	11	ND	1.1	
100-42-5	Styrene	ND	11	ND	2.7	
95-47-6	o-Xylene	ND	11	ND	2.6	
111-84-2	n-Nonane	ND	11	ND	2.2	
79-34-5	1,1,2,2-Tetrachloroethane	ND	11	ND	1.7	
98-82-8	Cumene	ND	11	ND	2.3	
80-56-8	alpha-Pinene	ND	11	ND	2.0	
103-65-1	n-Propylbenzene	ND	11	ND	2.3	
622-96-8	4-Ethyltoluene	ND	11	ND	2.3	
108-67-8	1,3,5-Trimethylbenzene	ND	11	ND	2.3	
95-63-6	1,2,4-Trimethylbenzene	ND	11	ND	2.3	
100-44-7	Benzyl Chloride	ND	11	ND	2.2	
541-73-1	1,3-Dichlorobenzene	ND	11	ND	1.9	
106-46-7	1,4-Dichlorobenzene	ND	11	ND	1.9	
95-50-1	1,2-Dichlorobenzene	ND	11	ND	1.9	
5989-27-5	d-Limonene	ND	11	ND	2.0	
96-12-8	1,2-Dibromo-3-chloropropane	ND	11	ND	1.2	
120-82-1	1,2,4-Trichlorobenzene	ND	11	ND	1.5	
91-20-3	Naphthalene	ND	11	ND	2.2	
87-68-3	Hexachlorobutadiene	ND	11	ND	1.1	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** CT Laboratories

**Client Sample ID:** WPP-SG5

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P1701233-003

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC01017

Date Collected: 3/10/17

Date Received: 3/14/17

Date Analyzed: 3/15/17

Volume(s) Analyzed: 0.050 Liter(s)

Initial Pressure (psig): -0.97      Final Pressure (psig): 5.45

Canister Dilution Factor: 1.47

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	15	ND	8.5	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	15	ND	3.0	
74-87-3	Chloromethane	ND	15	ND	7.1	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	15	ND	2.1	
75-01-4	Vinyl Chloride	ND	15	ND	5.8	
106-99-0	1,3-Butadiene	ND	15	ND	6.6	
74-83-9	Bromomethane	ND	15	ND	3.8	
75-00-3	Chloroethane	ND	15	ND	5.6	
64-17-5	Ethanol	ND	150	ND	78	
75-05-8	Acetonitrile	ND	15	ND	8.8	
107-02-8	Acrolein	ND	59	ND	26	
67-64-1	Acetone	ND	150	ND	62	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	15	ND	2.6	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	150	ND	60	
107-13-1	Acrylonitrile	ND	15	ND	6.8	
75-35-4	1,1-Dichloroethene	ND	15	ND	3.7	
75-09-2	Methylene Chloride	ND	15	ND	4.2	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	15	ND	4.7	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	15	ND	1.9	
75-15-0	Carbon Disulfide	ND	150	ND	47	
156-60-5	trans-1,2-Dichloroethene	ND	15	ND	3.7	
75-34-3	1,1-Dichloroethane	ND	15	ND	3.6	
1634-04-4	Methyl tert-Butyl Ether	ND	15	ND	4.1	
108-05-4	Vinyl Acetate	ND	150	ND	42	
78-93-3	2-Butanone (MEK)	160	150	54	50	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** CT Laboratories

**Client Sample ID:** WPP-SG5

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P1701233-003

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC01017

Date Collected: 3/10/17

Date Received: 3/14/17

Date Analyzed: 3/15/17

Volume(s) Analyzed: 0.050 Liter(s)

Initial Pressure (psig): -0.97      Final Pressure (psig): 5.45

Canister Dilution Factor: 1.47

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	15	ND	3.7	
141-78-6	Ethyl Acetate	ND	29	ND	8.2	
110-54-3	n-Hexane	ND	15	ND	4.2	
67-66-3	Chloroform	ND	15	ND	3.0	
109-99-9	Tetrahydrofuran (THF)	ND	15	ND	5.0	
107-06-2	1,2-Dichloroethane	ND	15	ND	3.6	
71-55-6	1,1,1-Trichloroethane	ND	15	ND	2.7	
71-43-2	Benzene	ND	15	ND	4.6	
56-23-5	Carbon Tetrachloride	ND	15	ND	2.3	
110-82-7	Cyclohexane	ND	29	ND	8.5	
78-87-5	1,2-Dichloropropane	ND	15	ND	3.2	
75-27-4	Bromodichloromethane	ND	15	ND	2.2	
79-01-6	Trichloroethene	2,200	15	410	2.7	
123-91-1	1,4-Dioxane	ND	15	ND	4.1	
80-62-6	Methyl Methacrylate	ND	29	ND	7.2	
142-82-5	n-Heptane	ND	15	ND	3.6	
10061-01-5	cis-1,3-Dichloropropene	ND	15	ND	3.2	
108-10-1	4-Methyl-2-pentanone	ND	15	ND	3.6	
10061-02-6	trans-1,3-Dichloropropene	ND	15	ND	3.2	
79-00-5	1,1,2-Trichloroethane	ND	15	ND	2.7	
108-88-3	Toluene	15	15	4.1	3.9	
591-78-6	2-Hexanone	19	15	4.6	3.6	
124-48-1	Dibromochloromethane	ND	15	ND	1.7	
106-93-4	1,2-Dibromoethane	ND	15	ND	1.9	
123-86-4	n-Butyl Acetate	ND	15	ND	3.1	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** CT Laboratories

**Client Sample ID:** WPP-SG5

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P1701233-003

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC01017

Date Collected: 3/10/17

Date Received: 3/14/17

Date Analyzed: 3/15/17

Volume(s) Analyzed: 0.050 Liter(s)

Initial Pressure (psig): -0.97 Final Pressure (psig): 5.45

Canister Dilution Factor: 1.47

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	15	ND	3.1	
127-18-4	Tetrachloroethene	ND	15	ND	2.2	
108-90-7	Chlorobenzene	ND	15	ND	3.2	
100-41-4	Ethylbenzene	ND	15	ND	3.4	
179601-23-1	m,p-Xylenes	ND	29	ND	6.8	
75-25-2	Bromoform	ND	15	ND	1.4	
100-42-5	Styrene	ND	15	ND	3.5	
95-47-6	o-Xylene	ND	15	ND	3.4	
111-84-2	n-Nonane	ND	15	ND	2.8	
79-34-5	1,1,2,2-Tetrachloroethane	ND	15	ND	2.1	
98-82-8	Cumene	ND	15	ND	3.0	
80-56-8	alpha-Pinene	ND	15	ND	2.6	
103-65-1	n-Propylbenzene	ND	15	ND	3.0	
622-96-8	4-Ethyltoluene	ND	15	ND	3.0	
108-67-8	1,3,5-Trimethylbenzene	ND	15	ND	3.0	
95-63-6	1,2,4-Trimethylbenzene	ND	15	ND	3.0	
100-44-7	Benzyl Chloride	ND	15	ND	2.8	
541-73-1	1,3-Dichlorobenzene	ND	15	ND	2.4	
106-46-7	1,4-Dichlorobenzene	ND	15	ND	2.4	
95-50-1	1,2-Dichlorobenzene	ND	15	ND	2.4	
5989-27-5	d-Limonene	ND	15	ND	2.6	
96-12-8	1,2-Dibromo-3-chloropropane	ND	15	ND	1.5	
120-82-1	1,2,4-Trichlorobenzene	ND	15	ND	2.0	
91-20-3	Naphthalene	ND	15	ND	2.8	
87-68-3	Hexachlorobutadiene	ND	15	ND	1.4	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** CT Laboratories

**Client Sample ID:** WPP-SG6

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P1701233-004

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC01194

Date Collected: 3/10/17

Date Received: 3/14/17

Date Analyzed: 3/15/17

Volume(s) Analyzed: 0.015 Liter(s)

Initial Pressure (psig): -0.01 Final Pressure (psig): 5.34

Canister Dilution Factor: 1.36

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	45	ND	26	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	45	ND	9.2	
74-87-3	Chloromethane	ND	45	ND	22	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	45	ND	6.5	
75-01-4	Vinyl Chloride	ND	45	ND	18	
106-99-0	1,3-Butadiene	ND	45	ND	21	
74-83-9	Bromomethane	ND	45	ND	12	
75-00-3	Chloroethane	ND	45	ND	17	
64-17-5	Ethanol	ND	450	ND	240	
75-05-8	Acetonitrile	ND	45	ND	27	
107-02-8	Acrolein	ND	180	ND	79	
67-64-1	Acetone	ND	450	ND	190	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	45	ND	8.1	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	450	ND	180	
107-13-1	Acrylonitrile	ND	45	ND	21	
75-35-4	1,1-Dichloroethene	ND	45	ND	11	
75-09-2	Methylene Chloride	ND	45	ND	13	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	45	ND	14	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	45	ND	5.9	
75-15-0	Carbon Disulfide	ND	450	ND	150	
156-60-5	trans-1,2-Dichloroethene	260	45	65	11	
75-34-3	1,1-Dichloroethane	ND	45	ND	11	
1634-04-4	Methyl tert-Butyl Ether	ND	45	ND	13	
108-05-4	Vinyl Acetate	ND	450	ND	130	
78-93-3	2-Butanone (MEK)	ND	450	ND	150	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** CT Laboratories

**Client Sample ID:** WPP-SG6

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P1701233-004

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC01194

Date Collected: 3/10/17

Date Received: 3/14/17

Date Analyzed: 3/15/17

Volume(s) Analyzed: 0.015 Liter(s)

Initial Pressure (psig): -0.01      Final Pressure (psig): 5.34

Canister Dilution Factor: 1.36

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	85	45	21	11	
141-78-6	Ethyl Acetate	ND	91	ND	25	
110-54-3	n-Hexane	45	45	13	13	
67-66-3	Chloroform	ND	45	ND	9.3	
109-99-9	Tetrahydrofuran (THF)	ND	45	ND	15	
107-06-2	1,2-Dichloroethane	ND	45	ND	11	
71-55-6	1,1,1-Trichloroethane	320	45	59	8.3	
71-43-2	Benzene	ND	45	ND	14	
56-23-5	Carbon Tetrachloride	ND	45	ND	7.2	
110-82-7	Cyclohexane	ND	91	ND	26	
78-87-5	1,2-Dichloropropane	ND	45	ND	9.8	
75-27-4	Bromodichloromethane	ND	45	ND	6.8	
79-01-6	Trichloroethene	9,300	45	1,700	8.4	
123-91-1	1,4-Dioxane	ND	45	ND	13	
80-62-6	Methyl Methacrylate	ND	91	ND	22	
142-82-5	n-Heptane	ND	45	ND	11	
10061-01-5	cis-1,3-Dichloropropene	ND	45	ND	10	
108-10-1	4-Methyl-2-pentanone	ND	45	ND	11	
10061-02-6	trans-1,3-Dichloropropene	ND	45	ND	10	
79-00-5	1,1,2-Trichloroethane	ND	45	ND	8.3	
108-88-3	Toluene	ND	45	ND	12	
591-78-6	2-Hexanone	ND	45	ND	11	
124-48-1	Dibromochloromethane	ND	45	ND	5.3	
106-93-4	1,2-Dibromoethane	ND	45	ND	5.9	
123-86-4	n-Butyl Acetate	ND	45	ND	9.5	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** CT Laboratories

**Client Sample ID:** WPP-SG6

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P1701233-004

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC01194

Date Collected: 3/10/17

Date Received: 3/14/17

Date Analyzed: 3/15/17

Volume(s) Analyzed: 0.015 Liter(s)

Initial Pressure (psig): -0.01 Final Pressure (psig): 5.34

Canister Dilution Factor: 1.36

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	45	ND	9.7	
127-18-4	Tetrachloroethene	ND	45	ND	6.7	
108-90-7	Chlorobenzene	ND	45	ND	9.8	
100-41-4	Ethylbenzene	ND	45	ND	10	
179601-23-1	m,p-Xylenes	ND	91	ND	21	
75-25-2	Bromoform	ND	45	ND	4.4	
100-42-5	Styrene	ND	45	ND	11	
95-47-6	o-Xylene	ND	45	ND	10	
111-84-2	n-Nonane	ND	45	ND	8.6	
79-34-5	1,1,2,2-Tetrachloroethane	ND	45	ND	6.6	
98-82-8	Cumene	ND	45	ND	9.2	
80-56-8	alpha-Pinene	ND	45	ND	8.1	
103-65-1	n-Propylbenzene	ND	45	ND	9.2	
622-96-8	4-Ethyltoluene	ND	45	ND	9.2	
108-67-8	1,3,5-Trimethylbenzene	ND	45	ND	9.2	
95-63-6	1,2,4-Trimethylbenzene	ND	45	ND	9.2	
100-44-7	Benzyl Chloride	ND	45	ND	8.8	
541-73-1	1,3-Dichlorobenzene	ND	45	ND	7.5	
106-46-7	1,4-Dichlorobenzene	ND	45	ND	7.5	
95-50-1	1,2-Dichlorobenzene	ND	45	ND	7.5	
5989-27-5	d-Limonene	ND	45	ND	8.1	
96-12-8	1,2-Dibromo-3-chloropropane	ND	45	ND	4.7	
120-82-1	1,2,4-Trichlorobenzene	ND	45	ND	6.1	
91-20-3	Naphthalene	ND	45	ND	8.7	
87-68-3	Hexachlorobutadiene	ND	45	ND	4.3	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** CT Laboratories

**Client Sample ID:** WPP-SG7

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P1701233-005

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC01266

Date Collected: 3/10/17

Date Received: 3/14/17

Date Analyzed: 3/15/17

Volume(s) Analyzed: 0.030 Liter(s)

Initial Pressure (psig): -1.27 Final Pressure (psig): 6.28

Canister Dilution Factor: 1.56

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	26	ND	15	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	26	ND	5.3	
74-87-3	Chloromethane	ND	26	ND	13	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	26	ND	3.7	
75-01-4	Vinyl Chloride	ND	26	ND	10	
106-99-0	1,3-Butadiene	ND	26	ND	12	
74-83-9	Bromomethane	ND	26	ND	6.7	
75-00-3	Chloroethane	ND	26	ND	9.9	
64-17-5	Ethanol	ND	260	ND	140	
75-05-8	Acetonitrile	ND	26	ND	15	
107-02-8	Acrolein	ND	100	ND	45	
67-64-1	Acetone	ND	260	ND	110	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	26	ND	4.6	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	260	ND	110	
107-13-1	Acrylonitrile	ND	26	ND	12	
75-35-4	1,1-Dichloroethene	ND	26	ND	6.6	
75-09-2	Methylene Chloride	ND	26	ND	7.5	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	26	ND	8.3	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	26	ND	3.4	
75-15-0	Carbon Disulfide	ND	260	ND	84	
156-60-5	trans-1,2-Dichloroethene	830	26	210	6.6	
75-34-3	1,1-Dichloroethane	ND	26	ND	6.4	
1634-04-4	Methyl tert-Butyl Ether	ND	26	ND	7.2	
108-05-4	Vinyl Acetate	ND	260	ND	74	
78-93-3	2-Butanone (MEK)	350	260	120	88	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** CT Laboratories

**Client Sample ID:** WPP-SG7

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P1701233-005

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC01266

Date Collected: 3/10/17

Date Received: 3/14/17

Date Analyzed: 3/15/17

Volume(s) Analyzed: 0.030 Liter(s)

Initial Pressure (psig): -1.27 Final Pressure (psig): 6.28

Canister Dilution Factor: 1.56

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	33	26	8.4	6.6	
141-78-6	Ethyl Acetate	ND	52	ND	14	
110-54-3	n-Hexane	ND	26	ND	7.4	
67-66-3	Chloroform	ND	26	ND	5.3	
109-99-9	Tetrahydrofuran (THF)	ND	26	ND	8.8	
107-06-2	1,2-Dichloroethane	ND	26	ND	6.4	
71-55-6	1,1,1-Trichloroethane	ND	26	ND	4.8	
71-43-2	Benzene	ND	26	ND	8.1	
56-23-5	Carbon Tetrachloride	ND	26	ND	4.1	
110-82-7	Cyclohexane	ND	52	ND	15	
78-87-5	1,2-Dichloropropane	ND	26	ND	5.6	
75-27-4	Bromodichloromethane	ND	26	ND	3.9	
79-01-6	Trichloroethene	4,000	26	750	4.8	
123-91-1	1,4-Dioxane	ND	26	ND	7.2	
80-62-6	Methyl Methacrylate	ND	52	ND	13	
142-82-5	n-Heptane	ND	26	ND	6.3	
10061-01-5	cis-1,3-Dichloropropene	ND	26	ND	5.7	
108-10-1	4-Methyl-2-pentanone	ND	26	ND	6.3	
10061-02-6	trans-1,3-Dichloropropene	ND	26	ND	5.7	
79-00-5	1,1,2-Trichloroethane	ND	26	ND	4.8	
108-88-3	Toluene	ND	26	ND	6.9	
591-78-6	2-Hexanone	34	26	8.3	6.3	
124-48-1	Dibromochloromethane	ND	26	ND	3.1	
106-93-4	1,2-Dibromoethane	ND	26	ND	3.4	
123-86-4	n-Butyl Acetate	ND	26	ND	5.5	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** CT Laboratories

**Client Sample ID:** WPP-SG7

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P1701233-005

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC01266

Date Collected: 3/10/17

Date Received: 3/14/17

Date Analyzed: 3/15/17

Volume(s) Analyzed: 0.030 Liter(s)

Initial Pressure (psig): -1.27 Final Pressure (psig): 6.28

Canister Dilution Factor: 1.56

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	26	ND	5.6	
127-18-4	Tetrachloroethene	ND	26	ND	3.8	
108-90-7	Chlorobenzene	ND	26	ND	5.6	
100-41-4	Ethylbenzene	ND	26	ND	6.0	
179601-23-1	m,p-Xylenes	ND	52	ND	12	
75-25-2	Bromoform	ND	26	ND	2.5	
100-42-5	Styrene	ND	26	ND	6.1	
95-47-6	o-Xylene	ND	26	ND	6.0	
111-84-2	n-Nonane	ND	26	ND	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	ND	26	ND	3.8	
98-82-8	Cumene	ND	26	ND	5.3	
80-56-8	alpha-Pinene	ND	26	ND	4.7	
103-65-1	n-Propylbenzene	ND	26	ND	5.3	
622-96-8	4-Ethyltoluene	ND	26	ND	5.3	
108-67-8	1,3,5-Trimethylbenzene	ND	26	ND	5.3	
95-63-6	1,2,4-Trimethylbenzene	ND	26	ND	5.3	
100-44-7	Benzyl Chloride	ND	26	ND	5.0	
541-73-1	1,3-Dichlorobenzene	ND	26	ND	4.3	
106-46-7	1,4-Dichlorobenzene	ND	26	ND	4.3	
95-50-1	1,2-Dichlorobenzene	ND	26	ND	4.3	
5989-27-5	d-Limonene	ND	26	ND	4.7	
96-12-8	1,2-Dibromo-3-chloropropane	ND	26	ND	2.7	
120-82-1	1,2,4-Trichlorobenzene	ND	26	ND	3.5	
91-20-3	Naphthalene	ND	26	ND	5.0	
87-68-3	Hexachlorobutadiene	ND	26	ND	2.4	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** CT Laboratories

**Client Sample ID:** WPP-SG1

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P1701233-006

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC01121

Date Collected: 3/10/17

Date Received: 3/14/17

Date Analyzed: 3/15/17

Volume(s) Analyzed: 0.10 Liter(s)

Initial Pressure (psig): -1.56 Final Pressure (psig): 5.75

Canister Dilution Factor: 1.56

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	30	7.8	17	4.5	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	7.8	ND	1.6	
74-87-3	Chloromethane	ND	7.8	ND	3.8	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	7.8	ND	1.1	
75-01-4	Vinyl Chloride	ND	7.8	ND	3.1	
106-99-0	1,3-Butadiene	ND	7.8	ND	3.5	
74-83-9	Bromomethane	ND	7.8	ND	2.0	
75-00-3	Chloroethane	ND	7.8	ND	3.0	
64-17-5	Ethanol	ND	78	ND	41	
75-05-8	Acetonitrile	ND	7.8	ND	4.6	
107-02-8	Acrolein	ND	31	ND	14	
67-64-1	Acetone	ND	78	ND	33	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	7.8	ND	1.4	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	78	ND	32	
107-13-1	Acrylonitrile	ND	7.8	ND	3.6	
75-35-4	1,1-Dichloroethene	ND	7.8	ND	2.0	
75-09-2	Methylene Chloride	ND	7.8	ND	2.2	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	7.8	ND	2.5	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	7.8	ND	1.0	
75-15-0	Carbon Disulfide	ND	78	ND	25	
156-60-5	trans-1,2-Dichloroethene	14	7.8	3.6	2.0	
75-34-3	1,1-Dichloroethane	ND	7.8	ND	1.9	
1634-04-4	Methyl tert-Butyl Ether	ND	7.8	ND	2.2	
108-05-4	Vinyl Acetate	ND	78	ND	22	
78-93-3	2-Butanone (MEK)	360	78	120	26	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** CT Laboratories

**Client Sample ID:** WPP-SG1

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P1701233-006

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC01121

Date Collected: 3/10/17

Date Received: 3/14/17

Date Analyzed: 3/15/17

Volume(s) Analyzed: 0.10 Liter(s)

Initial Pressure (psig): -1.56 Final Pressure (psig): 5.75

Canister Dilution Factor: 1.56

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	7.8	ND	2.0	
141-78-6	Ethyl Acetate	ND	16	ND	4.3	
110-54-3	n-Hexane	16	7.8	4.5	2.2	
67-66-3	Chloroform	ND	7.8	ND	1.6	
109-99-9	Tetrahydrofuran (THF)	ND	7.8	ND	2.6	
107-06-2	1,2-Dichloroethane	ND	7.8	ND	1.9	
71-55-6	1,1,1-Trichloroethane	48	7.8	8.8	1.4	
71-43-2	Benzene	ND	7.8	ND	2.4	
56-23-5	Carbon Tetrachloride	ND	7.8	ND	1.2	
110-82-7	Cyclohexane	ND	16	ND	4.5	
78-87-5	1,2-Dichloropropane	ND	7.8	ND	1.7	
75-27-4	Bromodichloromethane	ND	7.8	ND	1.2	
79-01-6	Trichloroethene	1,400	7.8	270	1.5	
123-91-1	1,4-Dioxane	ND	7.8	ND	2.2	
80-62-6	Methyl Methacrylate	ND	16	ND	3.8	
142-82-5	n-Heptane	11	7.8	2.8	1.9	
10061-01-5	cis-1,3-Dichloropropene	ND	7.8	ND	1.7	
108-10-1	4-Methyl-2-pentanone	ND	7.8	ND	1.9	
10061-02-6	trans-1,3-Dichloropropene	ND	7.8	ND	1.7	
79-00-5	1,1,2-Trichloroethane	ND	7.8	ND	1.4	
108-88-3	Toluene	15	7.8	4.0	2.1	
591-78-6	2-Hexanone	41	7.8	10	1.9	
124-48-1	Dibromochloromethane	ND	7.8	ND	0.92	
106-93-4	1,2-Dibromoethane	ND	7.8	ND	1.0	
123-86-4	n-Butyl Acetate	ND	7.8	ND	1.6	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** CT Laboratories

**Client Sample ID:** WPP-SG1

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P1701233-006

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC01121

Date Collected: 3/10/17

Date Received: 3/14/17

Date Analyzed: 3/15/17

Volume(s) Analyzed: 0.10 Liter(s)

Initial Pressure (psig): -1.56 Final Pressure (psig): 5.75

Canister Dilution Factor: 1.56

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	7.8	7.8	1.7	1.7	
127-18-4	Tetrachloroethene	42	7.8	6.1	1.2	
108-90-7	Chlorobenzene	ND	7.8	ND	1.7	
100-41-4	Ethylbenzene	ND	7.8	ND	1.8	
179601-23-1	m,p-Xylenes	ND	16	ND	3.6	
75-25-2	Bromoform	ND	7.8	ND	0.75	
100-42-5	Styrene	ND	7.8	ND	1.8	
95-47-6	o-Xylene	ND	7.8	ND	1.8	
111-84-2	n-Nonane	ND	7.8	ND	1.5	
79-34-5	1,1,2,2-Tetrachloroethane	ND	7.8	ND	1.1	
98-82-8	Cumene	ND	7.8	ND	1.6	
80-56-8	alpha-Pinene	ND	7.8	ND	1.4	
103-65-1	n-Propylbenzene	ND	7.8	ND	1.6	
622-96-8	4-Ethyltoluene	ND	7.8	ND	1.6	
108-67-8	1,3,5-Trimethylbenzene	ND	7.8	ND	1.6	
95-63-6	1,2,4-Trimethylbenzene	ND	7.8	ND	1.6	
100-44-7	Benzyl Chloride	ND	7.8	ND	1.5	
541-73-1	1,3-Dichlorobenzene	ND	7.8	ND	1.3	
106-46-7	1,4-Dichlorobenzene	ND	7.8	ND	1.3	
95-50-1	1,2-Dichlorobenzene	ND	7.8	ND	1.3	
5989-27-5	d-Limonene	ND	7.8	ND	1.4	
96-12-8	1,2-Dibromo-3-chloropropane	ND	7.8	ND	0.81	
120-82-1	1,2,4-Trichlorobenzene	ND	7.8	ND	1.1	
91-20-3	Naphthalene	ND	7.8	ND	1.5	
87-68-3	Hexachlorobutadiene	ND	7.8	ND	0.73	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** CT Laboratories

**Client Sample ID:** WPP-SG2

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P1701233-007

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00459

Date Collected: 3/10/17

Date Received: 3/14/17

Date Analyzed: 3/15 - 3/16/17

Volume(s) Analyzed: 0.40 Liter(s)

0.040 Liter(s)

Initial Pressure (psig): -1.03      Final Pressure (psig): 5.15

Canister Dilution Factor: 1.45

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	12	1.8	6.8	1.1	
75-71-8	Dichlorodifluoromethane (CFC 12)	2.4	1.8	0.48	0.37	
74-87-3	Chloromethane	ND	1.8	ND	0.88	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	1.8	ND	0.26	
75-01-4	Vinyl Chloride	ND	1.8	ND	0.71	
106-99-0	1,3-Butadiene	ND	1.8	ND	0.82	
74-83-9	Bromomethane	ND	1.8	ND	0.47	
75-00-3	Chloroethane	ND	1.8	ND	0.69	
64-17-5	Ethanol	67	18	35	9.6	
75-05-8	Acetonitrile	ND	1.8	ND	1.1	
107-02-8	Acrolein	ND	7.3	ND	3.2	
67-64-1	Acetone	41	18	17	7.6	
75-69-4	Trichlorofluoromethane (CFC 11)	5.6	1.8	1.0	0.32	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	18	ND	7.4	
107-13-1	Acrylonitrile	ND	1.8	ND	0.84	
75-35-4	1,1-Dichloroethene	ND	1.8	ND	0.46	
75-09-2	Methylene Chloride	ND	1.8	ND	0.52	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	1.8	ND	0.58	
76-13-1	Trichlorotrifluoroethane (CFC 113)	8.4	1.8	1.1	0.24	
75-15-0	Carbon Disulfide	ND	18	ND	5.8	
156-60-5	trans-1,2-Dichloroethene	ND	1.8	ND	0.46	
75-34-3	1,1-Dichloroethane	ND	1.8	ND	0.45	
1634-04-4	Methyl tert-Butyl Ether	ND	1.8	ND	0.50	
108-05-4	Vinyl Acetate	ND	18	ND	5.1	
78-93-3	2-Butanone (MEK)	130	18	45	6.1	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** CT Laboratories

**Client Sample ID:** WPP-SG2

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P1701233-007

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00459

Date Collected: 3/10/17

Date Received: 3/14/17

Date Analyzed: 3/15 - 3/16/17

Volume(s) Analyzed: 0.40 Liter(s)

0.040 Liter(s)

Initial Pressure (psig): -1.03 Final Pressure (psig): 5.15

Canister Dilution Factor: 1.45

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	1.8	ND	0.46	
141-78-6	Ethyl Acetate	13	3.6	3.7	1.0	
110-54-3	n-Hexane	4.3	1.8	1.2	0.51	
67-66-3	Chloroform	6.3	1.8	1.3	0.37	
109-99-9	Tetrahydrofuran (THF)	ND	1.8	ND	0.61	
107-06-2	1,2-Dichloroethane	ND	1.8	ND	0.45	
71-55-6	1,1,1-Trichloroethane	33	1.8	6.1	0.33	
71-43-2	Benzene	8.1	1.8	2.5	0.57	
56-23-5	Carbon Tetrachloride	ND	1.8	ND	0.29	
110-82-7	Cyclohexane	ND	3.6	ND	1.1	
78-87-5	1,2-Dichloropropane	ND	1.8	ND	0.39	
75-27-4	Bromodichloromethane	ND	1.8	ND	0.27	
79-01-6	Trichloroethene	490	18	91	3.4	D
123-91-1	1,4-Dioxane	ND	1.8	ND	0.50	
80-62-6	Methyl Methacrylate	ND	3.6	ND	0.89	
142-82-5	n-Heptane	4.2	1.8	1.0	0.44	
10061-01-5	cis-1,3-Dichloropropene	ND	1.8	ND	0.40	
108-10-1	4-Methyl-2-pentanone	ND	1.8	ND	0.44	
10061-02-6	trans-1,3-Dichloropropene	ND	1.8	ND	0.40	
79-00-5	1,1,2-Trichloroethane	ND	1.8	ND	0.33	
108-88-3	Toluene	17	1.8	4.6	0.48	
591-78-6	2-Hexanone	18	1.8	4.4	0.44	
124-48-1	Dibromochloromethane	ND	1.8	ND	0.21	
106-93-4	1,2-Dibromoethane	ND	1.8	ND	0.24	
123-86-4	n-Butyl Acetate	ND	1.8	ND	0.38	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

D = The reported result is from a dilution.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** CT Laboratories

**Client Sample ID:** WPP-SG2

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P1701233-007

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00459

Date Collected: 3/10/17

Date Received: 3/14/17

Date Analyzed: 3/15 - 3/16/17

Volume(s) Analyzed: 0.40 Liter(s)

0.040 Liter(s)

Initial Pressure (psig): -1.03 Final Pressure (psig): 5.15

Canister Dilution Factor: 1.45

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	4.4	1.8	0.95	0.39	
127-18-4	Tetrachloroethene	360	18	54	2.7	D
108-90-7	Chlorobenzene	ND	1.8	ND	0.39	
100-41-4	Ethylbenzene	6.6	1.8	1.5	0.42	
179601-23-1	m,p-Xylenes	15	3.6	3.5	0.83	
75-25-2	Bromoform	ND	1.8	ND	0.18	
100-42-5	Styrene	ND	1.8	ND	0.43	
95-47-6	o-Xylene	6.1	1.8	1.4	0.42	
111-84-2	n-Nonane	3.0	1.8	0.57	0.35	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.8	ND	0.26	
98-82-8	Cumene	ND	1.8	ND	0.37	
80-56-8	alpha-Pinene	2.9	1.8	0.52	0.33	
103-65-1	n-Propylbenzene	ND	1.8	ND	0.37	
622-96-8	4-Ethyltoluene	1.8	1.8	0.38	0.37	
108-67-8	1,3,5-Trimethylbenzene	ND	1.8	ND	0.37	
95-63-6	1,2,4-Trimethylbenzene	5.4	1.8	1.1	0.37	
100-44-7	Benzyl Chloride	ND	1.8	ND	0.35	
541-73-1	1,3-Dichlorobenzene	ND	1.8	ND	0.30	
106-46-7	1,4-Dichlorobenzene	ND	1.8	ND	0.30	
95-50-1	1,2-Dichlorobenzene	ND	1.8	ND	0.30	
5989-27-5	d-Limonene	2.0	1.8	0.36	0.33	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.8	ND	0.19	
120-82-1	1,2,4-Trichlorobenzene	ND	1.8	ND	0.24	
91-20-3	Naphthalene	ND	1.8	ND	0.35	
87-68-3	Hexachlorobutadiene	ND	1.8	ND	0.17	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

D = The reported result is from a dilution.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** CT Laboratories

**Client Sample ID:** WPP-SG2-D

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P1701233-008

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Silonite Summa Canister

Test Notes:

Container ID: 1SS00128

Date Collected: 3/10/17

Date Received: 3/14/17

Date Analyzed: 3/15 - 3/16/17

Volume(s) Analyzed: 0.40 Liter(s)

0.040 Liter(s)

Initial Pressure (psig): -1.29 Final Pressure (psig): 5.97

Canister Dilution Factor: 1.54

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	12	1.9	7.0	1.1	
75-71-8	Dichlorodifluoromethane (CFC 12)	2.3	1.9	0.47	0.39	
74-87-3	Chloromethane	ND	1.9	ND	0.93	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	1.9	ND	0.28	
75-01-4	Vinyl Chloride	ND	1.9	ND	0.75	
106-99-0	1,3-Butadiene	ND	1.9	ND	0.87	
74-83-9	Bromomethane	ND	1.9	ND	0.50	
75-00-3	Chloroethane	ND	1.9	ND	0.73	
64-17-5	Ethanol	88	19	46	10	
75-05-8	Acetonitrile	ND	1.9	ND	1.1	
107-02-8	Acrolein	ND	7.7	ND	3.4	
67-64-1	Acetone	41	19	17	8.1	
75-69-4	Trichlorofluoromethane (CFC 11)	5.5	1.9	0.98	0.34	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	19	ND	7.8	
107-13-1	Acrylonitrile	ND	1.9	ND	0.89	
75-35-4	1,1-Dichloroethene	ND	1.9	ND	0.49	
75-09-2	Methylene Chloride	ND	1.9	ND	0.55	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	1.9	ND	0.62	
76-13-1	Trichlorotrifluoroethane (CFC 113)	8.3	1.9	1.1	0.25	
75-15-0	Carbon Disulfide	ND	19	ND	6.2	
156-60-5	trans-1,2-Dichloroethene	ND	1.9	ND	0.49	
75-34-3	1,1-Dichloroethane	ND	1.9	ND	0.48	
1634-04-4	Methyl tert-Butyl Ether	ND	1.9	ND	0.53	
108-05-4	Vinyl Acetate	ND	19	ND	5.5	
78-93-3	2-Butanone (MEK)	140	19	46	6.5	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** CT Laboratories

**Client Sample ID:** WPP-SG2-D

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P1701233-008

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Silonite Summa Canister

Test Notes:

Container ID: 1SS00128

Date Collected: 3/10/17

Date Received: 3/14/17

Date Analyzed: 3/15 - 3/16/17

Volume(s) Analyzed: 0.40 Liter(s)

0.040 Liter(s)

Initial Pressure (psig): -1.29

Final Pressure (psig): 5.97

Canister Dilution Factor: 1.54

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	1.9	ND	0.49	
141-78-6	Ethyl Acetate	10	3.9	2.8	1.1	
110-54-3	n-Hexane	3.8	1.9	1.1	0.55	
67-66-3	Chloroform	6.2	1.9	1.3	0.39	
109-99-9	Tetrahydrofuran (THF)	ND	1.9	ND	0.65	
107-06-2	1,2-Dichloroethane	ND	1.9	ND	0.48	
71-55-6	1,1,1-Trichloroethane	33	1.9	6.0	0.35	
71-43-2	Benzene	6.4	1.9	2.0	0.60	
56-23-5	Carbon Tetrachloride	ND	1.9	ND	0.31	
110-82-7	Cyclohexane	ND	3.9	ND	1.1	
78-87-5	1,2-Dichloropropane	ND	1.9	ND	0.42	
75-27-4	Bromodichloromethane	ND	1.9	ND	0.29	
79-01-6	Trichloroethene	500	19	93	3.6	D
123-91-1	1,4-Dioxane	ND	1.9	ND	0.53	
80-62-6	Methyl Methacrylate	ND	3.9	ND	0.94	
142-82-5	n-Heptane	3.7	1.9	0.90	0.47	
10061-01-5	cis-1,3-Dichloropropene	ND	1.9	ND	0.42	
108-10-1	4-Methyl-2-pentanone	ND	1.9	ND	0.47	
10061-02-6	trans-1,3-Dichloropropene	ND	1.9	ND	0.42	
79-00-5	1,1,2-Trichloroethane	ND	1.9	ND	0.35	
108-88-3	Toluene	16	1.9	4.4	0.51	
591-78-6	2-Hexanone	17	1.9	4.2	0.47	
124-48-1	Dibromochloromethane	ND	1.9	ND	0.23	
106-93-4	1,2-Dibromoethane	ND	1.9	ND	0.25	
123-86-4	n-Butyl Acetate	ND	1.9	ND	0.41	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

D = The reported result is from a dilution.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** CT Laboratories

**Client Sample ID:** WPP-SG2-D

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P1701233-008

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Silonite Summa Canister

Test Notes:

Container ID: 1SS00128

Date Collected: 3/10/17

Date Received: 3/14/17

Date Analyzed: 3/15 - 3/16/17

Volume(s) Analyzed: 0.40 Liter(s)

0.040 Liter(s)

Initial Pressure (psig): -1.29 Final Pressure (psig): 5.97

Canister Dilution Factor: 1.54

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	4.2	1.9	0.89	0.41	
127-18-4	Tetrachloroethene	400	1.9	60	0.28	
108-90-7	Chlorobenzene	ND	1.9	ND	0.42	
100-41-4	Ethylbenzene	3.5	1.9	0.81	0.44	
179601-23-1	m,p-Xylenes	14	3.9	3.1	0.89	
75-25-2	Bromoform	ND	1.9	ND	0.19	
100-42-5	Styrene	ND	1.9	ND	0.45	
95-47-6	o-Xylene	5.3	1.9	1.2	0.44	
111-84-2	n-Nonane	3.0	1.9	0.58	0.37	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.9	ND	0.28	
98-82-8	Cumene	ND	1.9	ND	0.39	
80-56-8	alpha-Pinene	3.0	1.9	0.54	0.35	
103-65-1	n-Propylbenzene	ND	1.9	ND	0.39	
622-96-8	4-Ethyltoluene	ND	1.9	ND	0.39	
108-67-8	1,3,5-Trimethylbenzene	ND	1.9	ND	0.39	
95-63-6	1,2,4-Trimethylbenzene	5.7	1.9	1.2	0.39	
100-44-7	Benzyl Chloride	ND	1.9	ND	0.37	
541-73-1	1,3-Dichlorobenzene	ND	1.9	ND	0.32	
106-46-7	1,4-Dichlorobenzene	ND	1.9	ND	0.32	
95-50-1	1,2-Dichlorobenzene	ND	1.9	ND	0.32	
5989-27-5	d-Limonene	2.7	1.9	0.48	0.35	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.9	ND	0.20	
120-82-1	1,2,4-Trichlorobenzene	ND	1.9	ND	0.26	
91-20-3	Naphthalene	ND	1.9	ND	0.37	
87-68-3	Hexachlorobutadiene	ND	1.9	ND	0.18	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** CT Laboratories

**Client Sample ID:** Method Blank

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P170315-MB

**Test Code:** EPA TO-15

**Instrument ID:** Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

**Analyst:** Simon Cao

**Sample Type:** 1.0 L Silonite Summa Canister

**Test Notes:**

Date Collected: NA

Date Received: NA

Date Analyzed: 3/15/17

Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.50	ND	0.29	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.50	ND	0.10	
74-87-3	Chloromethane	ND	0.50	ND	0.24	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.50	ND	0.072	
75-01-4	Vinyl Chloride	ND	0.50	ND	0.20	
106-99-0	1,3-Butadiene	ND	0.50	ND	0.23	
74-83-9	Bromomethane	ND	0.50	ND	0.13	
75-00-3	Chloroethane	ND	0.50	ND	0.19	
64-17-5	Ethanol	ND	5.0	ND	2.7	
75-05-8	Acetonitrile	ND	0.50	ND	0.30	
107-02-8	Acrolein	ND	2.0	ND	0.87	
67-64-1	Acetone	ND	5.0	ND	2.1	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	0.50	ND	0.089	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	5.0	ND	2.0	
107-13-1	Acrylonitrile	ND	0.50	ND	0.23	
75-35-4	1,1-Dichloroethene	ND	0.50	ND	0.13	
75-09-2	Methylene Chloride	ND	0.50	ND	0.14	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.50	ND	0.16	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	0.50	ND	0.065	
75-15-0	Carbon Disulfide	ND	5.0	ND	1.6	
156-60-5	trans-1,2-Dichloroethene	ND	0.50	ND	0.13	
75-34-3	1,1-Dichloroethane	ND	0.50	ND	0.12	
1634-04-4	Methyl tert-Butyl Ether	ND	0.50	ND	0.14	
108-05-4	Vinyl Acetate	ND	5.0	ND	1.4	
78-93-3	2-Butanone (MEK)	ND	5.0	ND	1.7	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** CT Laboratories

**Client Sample ID:** Method Blank

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P170315-MB

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Silonite Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 3/15/17

Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.50	ND	0.13	
141-78-6	Ethyl Acetate	ND	1.0	ND	0.28	
110-54-3	n-Hexane	ND	0.50	ND	0.14	
67-66-3	Chloroform	ND	0.50	ND	0.10	
109-99-9	Tetrahydrofuran (THF)	ND	0.50	ND	0.17	
107-06-2	1,2-Dichloroethane	ND	0.50	ND	0.12	
71-55-6	1,1,1-Trichloroethane	ND	0.50	ND	0.092	
71-43-2	Benzene	ND	0.50	ND	0.16	
56-23-5	Carbon Tetrachloride	ND	0.50	ND	0.080	
110-82-7	Cyclohexane	ND	1.0	ND	0.29	
78-87-5	1,2-Dichloropropane	ND	0.50	ND	0.11	
75-27-4	Bromodichloromethane	ND	0.50	ND	0.075	
79-01-6	Trichloroethene	ND	0.50	ND	0.093	
123-91-1	1,4-Dioxane	ND	0.50	ND	0.14	
80-62-6	Methyl Methacrylate	ND	1.0	ND	0.24	
142-82-5	n-Heptane	ND	0.50	ND	0.12	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ND	0.11	
108-10-1	4-Methyl-2-pentanone	ND	0.50	ND	0.12	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ND	0.11	
79-00-5	1,1,2-Trichloroethane	ND	0.50	ND	0.092	
108-88-3	Toluene	ND	0.50	ND	0.13	
591-78-6	2-Hexanone	ND	0.50	ND	0.12	
124-48-1	Dibromochloromethane	ND	0.50	ND	0.059	
106-93-4	1,2-Dibromoethane	ND	0.50	ND	0.065	
123-86-4	n-Butyl Acetate	ND	0.50	ND	0.11	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** CT Laboratories

**Client Sample ID:** Method Blank

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P170315-MB

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Silonite Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 3/15/17

Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.50	ND	0.11	
127-18-4	Tetrachloroethene	ND	0.50	ND	0.074	
108-90-7	Chlorobenzene	ND	0.50	ND	0.11	
100-41-4	Ethylbenzene	ND	0.50	ND	0.12	
179601-23-1	m,p-Xylenes	ND	1.0	ND	0.23	
75-25-2	Bromoform	ND	0.50	ND	0.048	
100-42-5	Styrene	ND	0.50	ND	0.12	
95-47-6	o-Xylene	ND	0.50	ND	0.12	
111-84-2	n-Nonane	ND	0.50	ND	0.095	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ND	0.073	
98-82-8	Cumene	ND	0.50	ND	0.10	
80-56-8	alpha-Pinene	ND	0.50	ND	0.090	
103-65-1	n-Propylbenzene	ND	0.50	ND	0.10	
622-96-8	4-Ethyltoluene	ND	0.50	ND	0.10	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	ND	0.10	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	ND	0.10	
100-44-7	Benzyl Chloride	ND	0.50	ND	0.097	
541-73-1	1,3-Dichlorobenzene	ND	0.50	ND	0.083	
106-46-7	1,4-Dichlorobenzene	ND	0.50	ND	0.083	
95-50-1	1,2-Dichlorobenzene	ND	0.50	ND	0.083	
5989-27-5	d-Limonene	ND	0.50	ND	0.090	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.50	ND	0.052	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	ND	0.067	
91-20-3	Naphthalene	ND	0.50	ND	0.095	
87-68-3	Hexachlorobutadiene	ND	0.50	ND	0.047	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** CT Laboratories

**Client Sample ID:** Method Blank

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P170316-MB

**Test Code:** EPA TO-15

**Instrument ID:** Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

**Analyst:** Simon Cao

**Sample Type:** 1.0 L Summa Canister

**Test Notes:**

Date Collected: NA

Date Received: NA

Date Analyzed: 3/16/17

Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.50	ND	0.29	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.50	ND	0.10	
74-87-3	Chloromethane	ND	0.50	ND	0.24	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.50	ND	0.072	
75-01-4	Vinyl Chloride	ND	0.50	ND	0.20	
106-99-0	1,3-Butadiene	ND	0.50	ND	0.23	
74-83-9	Bromomethane	ND	0.50	ND	0.13	
75-00-3	Chloroethane	ND	0.50	ND	0.19	
64-17-5	Ethanol	ND	5.0	ND	2.7	
75-05-8	Acetonitrile	ND	0.50	ND	0.30	
107-02-8	Acrolein	ND	2.0	ND	0.87	
67-64-1	Acetone	ND	5.0	ND	2.1	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	0.50	ND	0.089	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	5.0	ND	2.0	
107-13-1	Acrylonitrile	ND	0.50	ND	0.23	
75-35-4	1,1-Dichloroethene	ND	0.50	ND	0.13	
75-09-2	Methylene Chloride	ND	0.50	ND	0.14	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.50	ND	0.16	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	0.50	ND	0.065	
75-15-0	Carbon Disulfide	ND	5.0	ND	1.6	
156-60-5	trans-1,2-Dichloroethene	ND	0.50	ND	0.13	
75-34-3	1,1-Dichloroethane	ND	0.50	ND	0.12	
1634-04-4	Methyl tert-Butyl Ether	ND	0.50	ND	0.14	
108-05-4	Vinyl Acetate	ND	5.0	ND	1.4	
78-93-3	2-Butanone (MEK)	ND	5.0	ND	1.7	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** CT Laboratories

**Client Sample ID:** Method Blank

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P170316-MB

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 3/16/17

Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.50	ND	0.13	
141-78-6	Ethyl Acetate	ND	1.0	ND	0.28	
110-54-3	n-Hexane	ND	0.50	ND	0.14	
67-66-3	Chloroform	ND	0.50	ND	0.10	
109-99-9	Tetrahydrofuran (THF)	ND	0.50	ND	0.17	
107-06-2	1,2-Dichloroethane	ND	0.50	ND	0.12	
71-55-6	1,1,1-Trichloroethane	ND	0.50	ND	0.092	
71-43-2	Benzene	ND	0.50	ND	0.16	
56-23-5	Carbon Tetrachloride	ND	0.50	ND	0.080	
110-82-7	Cyclohexane	ND	1.0	ND	0.29	
78-87-5	1,2-Dichloropropane	ND	0.50	ND	0.11	
75-27-4	Bromodichloromethane	ND	0.50	ND	0.075	
79-01-6	Trichloroethene	ND	0.50	ND	0.093	
123-91-1	1,4-Dioxane	ND	0.50	ND	0.14	
80-62-6	Methyl Methacrylate	ND	1.0	ND	0.24	
142-82-5	n-Heptane	ND	0.50	ND	0.12	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ND	0.11	
108-10-1	4-Methyl-2-pentanone	ND	0.50	ND	0.12	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ND	0.11	
79-00-5	1,1,2-Trichloroethane	ND	0.50	ND	0.092	
108-88-3	Toluene	ND	0.50	ND	0.13	
591-78-6	2-Hexanone	ND	0.50	ND	0.12	
124-48-1	Dibromochloromethane	ND	0.50	ND	0.059	
106-93-4	1,2-Dibromoethane	ND	0.50	ND	0.065	
123-86-4	n-Butyl Acetate	ND	0.50	ND	0.11	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** CT Laboratories

**Client Sample ID:** Method Blank

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P170316-MB

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 3/16/17

Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.50	ND	0.11	
127-18-4	Tetrachloroethene	ND	0.50	ND	0.074	
108-90-7	Chlorobenzene	ND	0.50	ND	0.11	
100-41-4	Ethylbenzene	ND	0.50	ND	0.12	
179601-23-1	m,p-Xylenes	ND	1.0	ND	0.23	
75-25-2	Bromoform	ND	0.50	ND	0.048	
100-42-5	Styrene	ND	0.50	ND	0.12	
95-47-6	o-Xylene	ND	0.50	ND	0.12	
111-84-2	n-Nonane	ND	0.50	ND	0.095	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ND	0.073	
98-82-8	Cumene	ND	0.50	ND	0.10	
80-56-8	alpha-Pinene	ND	0.50	ND	0.090	
103-65-1	n-Propylbenzene	ND	0.50	ND	0.10	
622-96-8	4-Ethyltoluene	ND	0.50	ND	0.10	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	ND	0.10	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	ND	0.10	
100-44-7	Benzyl Chloride	ND	0.50	ND	0.097	
541-73-1	1,3-Dichlorobenzene	ND	0.50	ND	0.083	
106-46-7	1,4-Dichlorobenzene	ND	0.50	ND	0.083	
95-50-1	1,2-Dichlorobenzene	ND	0.50	ND	0.083	
5989-27-5	d-Limonene	ND	0.50	ND	0.090	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.50	ND	0.052	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	ND	0.067	
91-20-3	Naphthalene	ND	0.50	ND	0.095	
87-68-3	Hexachlorobutadiene	ND	0.50	ND	0.047	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## SURROGATE SPIKE RECOVERY RESULTS

Page 1 of 1

**Client:** CT Laboratories  
**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
**Analyst:** Simon Cao  
**Sample Type:** 1.0 L Silonite Summa Canister(s) / 1.0 L Summa Canister(s)  
**Test Notes:**

**Date(s) Collected:** 3/10/17  
**Date(s) Received:** 3/14/17  
**Date(s) Analyzed:** 3/15 - 3/16/17

Client Sample ID	ALS Sample ID	1,2-Dichloroethane-d4	Toluene-d8	Bromofluorobenzene	Acceptance Limits	Data Qualifier
		Percent Recovered	Percent Recovered	Percent Recovered		
Method Blank	P170315-MB	100	99	99	70-130	
Method Blank	P170316-MB	101	100	100	70-130	
Lab Control Sample	P170315-LCS	100	98	99	70-130	
Lab Control Sample	P170316-LCS	102	102	102	70-130	
WPP-SG3	P1701233-001	100	99	98	70-130	
WPP-SG4	P1701233-002	100	99	98	70-130	
WPP-SG5	P1701233-003	100	100	99	70-130	
WPP-SG6	P1701233-004	100	100	98	70-130	
WPP-SG6	P1701233-004DUP	99	96	95	70-130	
WPP-SG7	P1701233-005	101	100	99	70-130	
WPP-SG1	P1701233-006	100	100	100	70-130	
WPP-SG2	P1701233-007	100	98	100	70-130	
WPP-SG2-D	P1701233-008	100	97	99	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.

Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

# ALS ENVIRONMENTAL

## LABORATORY CONTROL SAMPLE SUMMARY

Page 1 of 3

**Client:** CT Laboratories

**Client Sample ID:** Lab Control Sample

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P170315-LCS

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Silonite Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 3/15/17

Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m <sup>3</sup>	Result µg/m <sup>3</sup>	% Recovery	ALS Acceptance Limits	Data Qualifier
115-07-1	Propene	210	210	100	52-127	
75-71-8	Dichlorodifluoromethane (CFC 12)	210	197	94	68-109	
74-87-3	Chloromethane	210	187	89	51-130	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	211	192	91	66-114	
75-01-4	Vinyl Chloride	210	198	94	61-125	
106-99-0	1,3-Butadiene	210	237	113	62-144	
74-83-9	Bromomethane	210	204	97	73-123	
75-00-3	Chloroethane	210	198	94	69-122	
64-17-5	Ethanol	1,060	957	90	62-124	
75-05-8	Acetonitrile	213	196	92	57-114	
107-02-8	Acrolein	212	202	95	62-116	
67-64-1	Acetone	1,060	984	93	57-117	
75-69-4	Trichlorofluoromethane (CFC 11)	210	191	91	63-98	
67-63-0	2-Propanol (Isopropyl Alcohol)	424	418	99	66-121	
107-13-1	Acrylonitrile	213	213	100	68-123	
75-35-4	1,1-Dichloroethene	213	200	94	76-118	
75-09-2	Methylene Chloride	212	185	87	60-118	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	212	210	99	65-126	
76-13-1	Trichlorotrifluoroethane (CFC 113)	212	198	93	73-114	
75-15-0	Carbon Disulfide	213	210	99	57-102	
156-60-5	trans-1,2-Dichloroethene	213	216	101	74-123	
75-34-3	1,1-Dichloroethane	212	204	96	69-111	
1634-04-4	Methyl tert-Butyl Ether	213	205	96	69-113	
108-05-4	Vinyl Acetate	1,060	1110	105	76-128	
78-93-3	2-Butanone (MEK)	212	216	102	63-127	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.

Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

# ALS ENVIRONMENTAL

## LABORATORY CONTROL SAMPLE SUMMARY

Page 2 of 3

**Client:** CT Laboratories

**Client Sample ID:** Lab Control Sample

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P170315-LCS

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Silonite Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 3/15/17

Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m <sup>3</sup>	Result µg/m <sup>3</sup>	% Recovery	ALS Acceptance Limits	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	212	202	95	72-117	
141-78-6	Ethyl Acetate	426	449	105	68-127	
110-54-3	n-Hexane	213	199	93	55-116	
67-66-3	Chloroform	212	197	93	70-109	
109-99-9	Tetrahydrofuran (THF)	213	193	91	72-113	
107-06-2	1,2-Dichloroethane	212	203	96	69-113	
71-55-6	1,1,1-Trichloroethane	212	199	94	72-115	
71-43-2	Benzene	212	186	88	65-107	
56-23-5	Carbon Tetrachloride	213	206	97	71-113	
110-82-7	Cyclohexane	425	401	94	71-115	
78-87-5	1,2-Dichloropropane	212	197	93	71-115	
75-27-4	Bromodichloromethane	214	204	95	75-118	
79-01-6	Trichloroethene	212	189	89	68-114	
123-91-1	1,4-Dioxane	213	208	98	81-131	
80-62-6	Methyl Methacrylate	424	443	104	72-130	
142-82-5	n-Heptane	213	202	95	68-116	
10061-01-5	cis-1,3-Dichloropropene	210	211	100	77-126	
108-10-1	4-Methyl-2-pentanone	213	208	98	69-126	
10061-02-6	trans-1,3-Dichloropropene	213	227	107	79-125	
79-00-5	1,1,2-Trichloroethane	212	205	97	75-119	
108-88-3	Toluene	212	193	91	59-118	
591-78-6	2-Hexanone	213	207	97	69-129	
124-48-1	Dibromochloromethane	213	210	99	74-136	
106-93-4	1,2-Dibromoethane	212	209	99	73-131	
123-86-4	n-Butyl Acetate	216	216	100	69-130	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.

Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

# ALS ENVIRONMENTAL

## LABORATORY CONTROL SAMPLE SUMMARY

Page 3 of 3

<b>Client:</b>	<b>CT Laboratories</b>	
<b>Client Sample ID:</b>	<b>Lab Control Sample</b>	ALS Project ID: P1701233
<b>Client Project ID:</b>	<b>Tetra Tech - IN Sampling / S05-0001-1610-011</b>	ALS Sample ID: P170315-LCS
<b>Test Code:</b>	EPA TO-15	Date Collected: NA
<b>Instrument ID:</b>	Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9	Date Received: NA
<b>Analyst:</b>	Simon Cao	Date Analyzed: 3/15/17
<b>Sample Type:</b>	1.0 L Silonite Summa Canister	Volume(s) Analyzed: 0.125 Liter(s)
<b>Test Notes:</b>		

CAS #	Compound	Spike Amount µg/m <sup>3</sup>	Result µg/m <sup>3</sup>	% Recovery	ALS Acceptance Limits	Data Qualifier
111-65-9	n-Octane	212	196	92	66-120	
127-18-4	Tetrachloroethene	213	200	94	65-130	
108-90-7	Chlorobenzene	212	196	92	68-120	
100-41-4	Ethylbenzene	212	201	95	68-122	
179601-23-1	m,p-Xylenes	424	410	97	68-123	
75-25-2	Bromoform	212	218	103	69-130	
100-42-5	Styrene	212	211	100	71-133	
95-47-6	o-Xylene	212	200	94	68-122	
111-84-2	n-Nonane	212	198	93	65-120	
79-34-5	1,1,2,2-Tetrachloroethane	212	210	99	69-130	
98-82-8	Cumene	212	200	94	70-123	
80-56-8	alpha-Pinene	213	208	98	70-128	
103-65-1	n-Propylbenzene	214	203	95	69-125	
622-96-8	4-Ethyltoluene	212	215	101	67-130	
108-67-8	1,3,5-Trimethylbenzene	212	204	96	67-124	
95-63-6	1,2,4-Trimethylbenzene	212	215	101	67-129	
100-44-7	Benzyl Chloride	212	226	107	79-138	
541-73-1	1,3-Dichlorobenzene	212	210	99	65-136	
106-46-7	1,4-Dichlorobenzene	213	206	97	66-141	
95-50-1	1,2-Dichlorobenzene	212	206	97	67-136	
5989-27-5	d-Limonene	212	212	100	71-134	
96-12-8	1,2-Dibromo-3-chloropropane	212	217	102	73-136	
120-82-1	1,2,4-Trichlorobenzene	212	219	103	64-134	
91-20-3	Naphthalene	214	237	111	62-136	
87-68-3	Hexachlorobutadiene	213	204	96	60-133	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.  
 Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

# ALS ENVIRONMENTAL

## LABORATORY CONTROL SAMPLE SUMMARY

Page 1 of 3

**Client:** CT Laboratories

**Client Sample ID:** Lab Control Sample

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P170316-LCS

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 3/16/17

Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m <sup>3</sup>	Result µg/m <sup>3</sup>	% Recovery	ALS Acceptance Limits	Data Qualifier
115-07-1	Propene	210	208	99	52-127	
75-71-8	Dichlorodifluoromethane (CFC 12)	210	193	92	68-109	
74-87-3	Chloromethane	210	214	102	51-130	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	211	184	87	66-114	
75-01-4	Vinyl Chloride	210	192	91	61-125	
106-99-0	1,3-Butadiene	210	217	103	62-144	
74-83-9	Bromomethane	210	196	93	73-123	
75-00-3	Chloroethane	210	190	90	69-122	
64-17-5	Ethanol	1,060	910	86	62-124	
75-05-8	Acetonitrile	213	187	88	57-114	
107-02-8	Acrolein	212	191	90	62-116	
67-64-1	Acetone	1,060	932	88	57-117	
75-69-4	Trichlorofluoromethane (CFC 11)	210	187	89	63-98	
67-63-0	2-Propanol (Isopropyl Alcohol)	424	390	92	66-121	
107-13-1	Acrylonitrile	213	202	95	68-123	
75-35-4	1,1-Dichloroethene	213	194	91	76-118	
75-09-2	Methylene Chloride	212	178	84	60-118	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	212	200	94	65-126	
76-13-1	Trichlorotrifluoroethane (CFC 113)	212	192	91	73-114	
75-15-0	Carbon Disulfide	213	202	95	57-102	
156-60-5	trans-1,2-Dichloroethene	213	206	97	74-123	
75-34-3	1,1-Dichloroethane	212	189	89	69-111	
1634-04-4	Methyl tert-Butyl Ether	213	195	92	69-113	
108-05-4	Vinyl Acetate	1,060	1060	100	76-128	
78-93-3	2-Butanone (MEK)	212	211	100	63-127	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.

Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

# ALS ENVIRONMENTAL

## LABORATORY CONTROL SAMPLE SUMMARY

Page 2 of 3

**Client:** CT Laboratories

**Client Sample ID:** Lab Control Sample

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P170316-LCS

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 3/16/17

Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m <sup>3</sup>	Result µg/m <sup>3</sup>	% Recovery	ALS Acceptance Limits	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	212	203	96	72-117	
141-78-6	Ethyl Acetate	426	448	105	68-127	
110-54-3	n-Hexane	213	199	93	55-116	
67-66-3	Chloroform	212	198	93	70-109	
109-99-9	Tetrahydrofuran (THF)	213	191	90	72-113	
107-06-2	1,2-Dichloroethane	212	201	95	69-113	
71-55-6	1,1,1-Trichloroethane	212	196	92	72-115	
71-43-2	Benzene	212	184	87	65-107	
56-23-5	Carbon Tetrachloride	213	202	95	71-113	
110-82-7	Cyclohexane	425	400	94	71-115	
78-87-5	1,2-Dichloropropane	212	192	91	71-115	
75-27-4	Bromodichloromethane	214	200	93	75-118	
79-01-6	Trichloroethene	212	180	85	68-114	
123-91-1	1,4-Dioxane	213	201	94	81-131	
80-62-6	Methyl Methacrylate	424	418	99	72-130	
142-82-5	n-Heptane	213	191	90	68-116	
10061-01-5	cis-1,3-Dichloropropene	210	200	95	77-126	
108-10-1	4-Methyl-2-pentanone	213	197	92	69-126	
10061-02-6	trans-1,3-Dichloropropene	213	224	105	79-125	
79-00-5	1,1,2-Trichloroethane	212	208	98	75-119	
108-88-3	Toluene	212	199	94	59-118	
591-78-6	2-Hexanone	213	206	97	69-129	
124-48-1	Dibromochloromethane	213	211	99	74-136	
106-93-4	1,2-Dibromoethane	212	208	98	73-131	
123-86-4	n-Butyl Acetate	216	207	96	69-130	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.

Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

# ALS ENVIRONMENTAL

## LABORATORY CONTROL SAMPLE SUMMARY

Page 3 of 3

**Client:** CT Laboratories

**Client Sample ID:** Lab Control Sample

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P170316-LCS

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 3/16/17

Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m <sup>3</sup>	Result µg/m <sup>3</sup>	% Recovery	ALS Acceptance Limits	Data Qualifier
111-65-9	n-Octane	212	193	91	66-120	
127-18-4	Tetrachloroethene	213	199	93	65-130	
108-90-7	Chlorobenzene	212	194	92	68-120	
100-41-4	Ethylbenzene	212	200	94	68-122	
179601-23-1	m,p-Xylenes	424	410	97	68-123	
75-25-2	Bromoform	212	221	104	69-130	
100-42-5	Styrene	212	227	107	71-133	
95-47-6	o-Xylene	212	217	102	68-122	
111-84-2	n-Nonane	212	221	104	65-120	
79-34-5	1,1,2,2-Tetrachloroethane	212	232	109	69-130	
98-82-8	Cumene	212	213	100	70-123	
80-56-8	alpha-Pinene	213	211	99	70-128	
103-65-1	n-Propylbenzene	214	207	97	69-125	
622-96-8	4-Ethyltoluene	212	221	104	67-130	
108-67-8	1,3,5-Trimethylbenzene	212	215	101	67-124	
95-63-6	1,2,4-Trimethylbenzene	212	234	110	67-129	
100-44-7	Benzyl Chloride	212	252	119	79-138	
541-73-1	1,3-Dichlorobenzene	212	221	104	65-136	
106-46-7	1,4-Dichlorobenzene	213	218	102	66-141	
95-50-1	1,2-Dichlorobenzene	212	212	100	67-136	
5989-27-5	d-Limonene	212	218	103	71-134	
96-12-8	1,2-Dibromo-3-chloropropane	212	218	103	73-136	
120-82-1	1,2,4-Trichlorobenzene	212	224	106	64-134	
91-20-3	Naphthalene	214	246	115	62-136	
87-68-3	Hexachlorobutadiene	213	209	98	60-133	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.

Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

# ALS ENVIRONMENTAL

## LABORATORY DUPLICATE SUMMARY RESULTS

Page 1 of 3

**Client:** CT Laboratories

**Client Sample ID:** WPP-SG6

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P1701233-004DUP

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC01194

Date Collected: 3/10/17

Date Received: 3/14/17

Date Analyzed: 3/15/17

Volume(s) Analyzed: 0.015 Liter(s)

Initial Pressure (psig): -0.01

Final Pressure (psig): 5.34

Canister Dilution Factor: 1.36

Compound	Sample Result		Duplicate Sample Result		Average µg/m³	% RPD	RPD Limit	Data Qualifier
	µg/m³	ppbV	µg/m³	ppbV				
Propene	ND	ND	ND	ND	-	-	25	
Dichlorodifluoromethane (CFC 12)	ND	ND	ND	ND	-	-	25	
Chloromethane	ND	ND	ND	ND	-	-	25	
1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	ND	ND	ND	-	-	25	
Vinyl Chloride	ND	ND	ND	ND	-	-	25	
1,3-Butadiene	ND	ND	ND	ND	-	-	25	
Bromomethane	ND	ND	ND	ND	-	-	25	
Chloroethane	ND	ND	ND	ND	-	-	25	
Ethanol	ND	ND	ND	ND	-	-	25	
Acetonitrile	ND	ND	ND	ND	-	-	25	
Acrolein	ND	ND	ND	ND	-	-	25	
Acetone	ND	ND	ND	ND	-	-	25	
Trichlorofluoromethane	ND	ND	ND	ND	-	-	25	
2-Propanol (Isopropyl Alcohol)	ND	ND	ND	ND	-	-	25	
Acrylonitrile	ND	ND	ND	ND	-	-	25	
1,1-Dichloroethene	ND	ND	ND	ND	-	-	25	
Methylene Chloride	ND	ND	ND	ND	-	-	25	
3-Chloro-1-propene (Allyl Chloride)	ND	ND	ND	ND	-	-	25	
Trichlorotrifluoroethane	ND	ND	ND	ND	-	-	25	
Carbon Disulfide	ND	ND	ND	ND	-	-	25	
trans-1,2-Dichloroethene	256	64.6	238	60.0	247	7	25	
1,1-Dichloroethane	ND	ND	ND	ND	-	-	25	
Methyl tert-Butyl Ether	ND	ND	ND	ND	-	-	25	
Vinyl Acetate	ND	ND	ND	ND	-	-	25	
2-Butanone (MEK)	ND	ND	ND	ND	-	-	25	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

# ALS ENVIRONMENTAL

## LABORATORY DUPLICATE SUMMARY RESULTS

Page 2 of 3

**Client:** CT Laboratories

**Client Sample ID:** WPP-SG6

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P1701233-004DUP

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC01194

Date Collected: 3/10/17

Date Received: 3/14/17

Date Analyzed: 3/15/17

Volume(s) Analyzed: 0.015 Liter(s)

Initial Pressure (psig): -0.01

Final Pressure (psig): 5.34

Canister Dilution Factor: 1.36

Compound	Sample Result		Duplicate Sample Result		Average µg/m³	% RPD	RPD Limit	Data Qualifier
	µg/m³	ppbV	µg/m³	ppbV				
cis-1,2-Dichloroethene	85.0	21.4	81.9	20.7	83.45	4	25	
Ethyl Acetate	ND	ND	ND	ND	-	-	25	
n-Hexane	45.4	12.9	ND	ND	-	-	25	
Chloroform	ND	ND	ND	ND	-	-	25	
Tetrahydrofuran (THF)	ND	ND	ND	ND	-	-	25	
1,2-Dichloroethane	ND	ND	ND	ND	-	-	25	
1,1,1-Trichloroethane	323	59.2	308	56.5	315.5	5	25	
Benzene	ND	ND	ND	ND	-	-	25	
Carbon Tetrachloride	ND	ND	ND	ND	-	-	25	
Cyclohexane	ND	ND	ND	ND	-	-	25	
1,2-Dichloropropane	ND	ND	ND	ND	-	-	25	
Bromodichloromethane	ND	ND	ND	ND	-	-	25	
Trichloroethene	9,290	1,730	8,950	1,670	9120	4	25	
1,4-Dioxane	ND	ND	ND	ND	-	-	25	
Methyl Methacrylate	ND	ND	ND	ND	-	-	25	
n-Heptane	ND	ND	ND	ND	-	-	25	
cis-1,3-Dichloropropene	ND	ND	ND	ND	-	-	25	
4-Methyl-2-pentanone	ND	ND	ND	ND	-	-	25	
trans-1,3-Dichloropropene	ND	ND	ND	ND	-	-	25	
1,1,2-Trichloroethane	ND	ND	ND	ND	-	-	25	
Toluene	ND	ND	ND	ND	-	-	25	
2-Hexanone	ND	ND	ND	ND	-	-	25	
Dibromochloromethane	ND	ND	ND	ND	-	-	25	
1,2-Dibromoethane	ND	ND	ND	ND	-	-	25	
n-Butyl Acetate	ND	ND	ND	ND	-	-	25	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

# ALS ENVIRONMENTAL

## LABORATORY DUPLICATE SUMMARY RESULTS

Page 3 of 3

**Client:** CT Laboratories

**Client Sample ID:** WPP-SG6

**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

ALS Sample ID: P1701233-004DUP

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9

Analyst: Simon Cao

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC01194

Date Collected: 3/10/17

Date Received: 3/14/17

Date Analyzed: 3/15/17

Volume(s) Analyzed: 0.015 Liter(s)

Initial Pressure (psig): -0.01

Final Pressure (psig): 5.34

Canister Dilution Factor: 1.36

Compound	Sample Result		Duplicate Sample Result		Average µg/m³	% RPD	RPD Limit	Data Qualifier
	µg/m³	ppbV	µg/m³	ppbV				
n-Octane	ND	ND	ND	ND	-	-	25	
Tetrachloroethene	ND	ND	ND	ND	-	-	25	
Chlorobenzene	ND	ND	ND	ND	-	-	25	
Ethylbenzene	ND	ND	ND	ND	-	-	25	
m,p-Xylenes	ND	ND	ND	ND	-	-	25	
Bromoform	ND	ND	ND	ND	-	-	25	
Styrene	ND	ND	ND	ND	-	-	25	
o-Xylene	ND	ND	ND	ND	-	-	25	
n-Nonane	ND	ND	ND	ND	-	-	25	
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	-	-	25	
Cumene	ND	ND	ND	ND	-	-	25	
alpha-Pinene	ND	ND	ND	ND	-	-	25	
n-Propylbenzene	ND	ND	ND	ND	-	-	25	
4-Ethyltoluene	ND	ND	ND	ND	-	-	25	
1,3,5-Trimethylbenzene	ND	ND	ND	ND	-	-	25	
1,2,4-Trimethylbenzene	ND	ND	ND	ND	-	-	25	
Benzyl Chloride	ND	ND	ND	ND	-	-	25	
1,3-Dichlorobenzene	ND	ND	ND	ND	-	-	25	
1,4-Dichlorobenzene	ND	ND	ND	ND	-	-	25	
1,2-Dichlorobenzene	ND	ND	ND	ND	-	-	25	
d-Limonene	ND	ND	ND	ND	-	-	25	
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	-	-	25	
1,2,4-Trichlorobenzene	ND	ND	ND	ND	-	-	25	
Naphthalene	ND	ND	ND	ND	-	-	25	
Hexachlorobutadiene	ND	ND	ND	ND	-	-	25	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 1

**Client:** CT Laboratories  
**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

### Internal Standard Area and RT Summary

Test Code: EPA TO-15  
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
Analyst: Simon Cao  
Sample Type: 1.0 L Silonite Summa Canister(s)  
Test Notes:

Lab File ID: 03151702.D  
Date Analyzed: 3/15/17  
Time Analyzed: 11:58

	IS1 (BCM)		IS2 (DFB)		IS3 (CBZ)	
	AREA	#	RT	#	AREA	#
<b>24 Hour Standard</b>	143956	9.13	717366	11.10	318951	15.44
<b>Upper Limit</b>	201538	9.46	1004312	11.43	446531	15.77
<b>Lower Limit</b>	86374	8.80	430420	10.77	191371	15.11

Client Sample ID		IS1 (BCM)		IS2 (DFB)		IS3 (CBZ)	
		AREA	#	RT	#	AREA	#
01	Method Blank	141129	9.11	708915	11.08	313043	15.44
02	Lab Control Sample	140136	9.13	698117	11.10	311153	15.44
03	WPP-SG3	145103	9.11	727667	11.09	323293	15.44
04	WPP-SG4	141183	9.11	708434	11.09	315366	15.44
05	WPP-SG5	141088	9.11	708973	11.09	309162	15.44
06	WPP-SG6	139759	9.11	698862	11.09	306569	15.44
07	WPP-SG6 (Lab Duplicate)	140935	9.11	700539	11.09	319159	15.44
08	WPP-SG7	137733	9.11	688445	11.09	301345	15.44
09	WPP-SG1	136963	9.11	676746	11.09	301716	15.44
10	WPP-SG2	137171	9.11	681792	11.09	306534	15.44
11	WPP-SG2-D	138613	9.11	690575	11.09	313651	15.44
12							
13							
14							
15							
16							
17							
18							
19							
20							

IS1 (BCM) = Bromochloromethane

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = 140% of internal standard area

AREA LOWER LIMIT = 60% of internal standard area

RT UPPER LIMIT = 0.33 minutes of internal standard RT

RT LOWER LIMIT = 0.33 minutes of internal standard RT

# Column used to flag values outside QC limits with an I.

I = Internal standard not within the specified limits.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 1

**Client:** CT Laboratories  
**Client Project ID:** Tetra Tech - IN Sampling / S05-0001-1610-011

ALS Project ID: P1701233

### Internal Standard Area and RT Summary

Test Code: EPA TO-15  
Instrument ID: Tekmar AUTOCAN/Agilent 5973inert/6890N/MS9  
Analyst: Simon Cao  
Sample Type: 1.0 L Summa Canister(s)  
Test Notes:

Lab File ID: 03161701.D  
Date Analyzed: 3/16/17  
Time Analyzed: 09:18

	IS1 (BCM)		IS2 (DFB)		IS3 (CBZ)	
	AREA	#	RT	#	AREA	#
<b>24 Hour Standard</b>	129719	9.13	653065	11.10	280576	15.44
<b>Upper Limit</b>	181607	9.46	914291	11.43	392806	15.77
<b>Lower Limit</b>	77831	8.80	391839	10.77	168346	15.11

Client Sample ID						
01	Method Blank	136002	9.11	679988	11.08	295213
02	Lab Control Sample	136639	9.13	689099	11.10	295582
03	WPP-SG2 (Dilution)	140127	9.11	696440	11.09	313059
04	WPP-SG2-D (Dilution)	139031	9.11	686836	11.09	305128
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

IS1 (BCM) = Bromochloromethane

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = 140% of internal standard area

AREA LOWER LIMIT = 60% of internal standard area

RT UPPER LIMIT = 0.33 minutes of internal standard RT

RT LOWER LIMIT = 0.33 minutes of internal standard RT

# Column used to flag values outside QC limits with an I.

I = Internal standard not within the specified limits.

***ANALYTICAL REPORT***

This report at a minimum contains the following information:

- Analytical Report of Test Results
- Description of QC Qualifiers
- Chain of Custody (copy)
- Quality Control Summary
- Case Narrative (if applicable)
- Correspondence with Client (if applicable)

*This report has been specifically prepared to satisfy project or program requirements. These results are in compliance with NELAC requirements for parameters where accreditation is required or available, unless otherwise noted in the case narrative.*



## ANALYTICAL REPORT

TETRA TECH  
 CHRIS BURNS  
 1 S WACKER DRIVE  
 SUITE 3700  
 CHICAGO, IL 60606

Project Name: WILLIAMSON POLISHING & PLATING  
 Project Phase: INDIANAPOLIS, IN  
 Contract #: 3001  
 Project #: S05-0001-1610-011  
 Folder #: 127039  
 Purchase Order #: 1111200

Page 1 of 35  
 Arrival Temperature: 0.9  
 Report Date: 05/15/2017  
 Date Received: 05/02/2017  
 Reprint Date: 05/16/2017

CT LAB#: 862356

Sample Description: WPP-GW13-170427

Client Sample #:

Sampled: 04/27/2017 0930

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Organic Results</b>												
1,1,1-Trichloroethane	<0.21	ug/L	0.21	0.25	0.50	0.50	1.00	U		5/9/17 10:33 AGK	EPA 8260C	^
1,1,2,2-Tetrachloroethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 10:33 AGK	EPA 8260C	^
1,1,2-Trichloroethane	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 10:33 AGK	EPA 8260C	^
1,1-Dichloroethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 10:33 AGK	EPA 8260C	^
1,1-Dichloroethene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 10:33 AGK	EPA 8260C	^
1,2,3-Trichlorobenzene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 10:33 AGK	EPA 8260C	^
1,2,4-Trichlorobenzene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 10:33 AGK	EPA 8260C	^
1,2-Dibromo-3-chloropropane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 10:33 AGK	EPA 8260C	^
1,2-Dibromoethane	<0.16	ug/L	0.16	0.25	0.50	0.50	1.00	U		5/9/17 10:33 AGK	EPA 8260C	^
1,2-Dichlorobenzene	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 10:33 AGK	EPA 8260C	^
1,2-Dichloroethane	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 10:33 AGK	EPA 8260C	^
1,2-Dichloropropane	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 10:33 AGK	EPA 8260C	^
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 10:33 AGK	EPA 8260C	^
1,4-Dichlorobenzene	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 10:33 AGK	EPA 8260C	^
1,4-Dioxane	<5.0	ug/L	5.0	13	25	25	1.00	U Z,Q		5/9/17 10:33 AGK	EPA 8260C	
112Trichloro122trifluoroethane	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 10:33 AGK	EPA 8260C	
2-Butanone	<2.4	ug/L	2.4	2.5	5.0	5.0	1.00	U		5/9/17 10:33 AGK	EPA 8260C	^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 862356

Sample Description: WPP-GW13-170427

Client Sample #:

Sampled: 04/27/2017 0930

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
2-Hexanone	<4.0	ug/L	4.0	5.0	10	10	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^
4-Methyl-2-pentanone	<3.0	ug/L	3.0	5.0	10	10	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^
Acetone	<5.0	ug/L	5.0	5.0	10	10	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^
Benzene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^
Bromochloromethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^
Bromodichloromethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^
Bromoform	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^
Bromomethane	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^
Carbon disulfide	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^
Carbon tetrachloride	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^
Chlorobenzene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^
Chloroethane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^
Chloroform	<0.15	ug/L	0.15	0.25	0.50	0.50	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^
Chloromethane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^
cis-1,2-Dichloroethene	<0.25	ug/L	0.25	0.25	0.50	0.50	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^
cis-1,3-Dichloropropene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^
Cyclohexane	<0.28	ug/L	0.28	0.50	1.0	1.0	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^
Dibromochloromethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^
Dichlorodifluoromethane	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^
Ethylbenzene	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^
Isopropylbenzene	<0.18	ug/L	0.18	0.25	0.50	0.50	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^
m & p-Xylene	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^
Methyl acetate	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^
Methyl tert-butyl ether	<0.29	ug/L	0.29	0.50	1.0	1.0	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^
Methylcyclohexane	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^
Methylene chloride	<0.40	ug/L	0.40	0.50	2.0	2.0	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^
o-Xylene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^
Styrene	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 862356	Sample Description: WPP-GW13-170427	Client Sample #:	Sampled: 04/27/2017 0930
-----------------	-------------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Tetrachloroethene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^
Toluene	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^
trans-1,2-Dichloroethene	<0.25	ug/L	0.25	0.25	0.50	0.50	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^
trans-1,3-Dichloropropene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^
Trichloroethene	<0.21	ug/L	0.21	0.25	0.50	0.50	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^
Trichlorofluoromethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^
Vinyl chloride	<0.18	ug/L	0.18	0.25	0.50	0.50	1.00	U		5/9/17 10:33	AGK	EPA 8260C ^
1,2 Dichloroethane-d4	97	% Recovery	70			120	1.00			5/9/17 10:33	AGK	EPA 8260C
Bromofluorobenzene	102	% Recovery	75			120	1.00			5/9/17 10:33	AGK	EPA 8260C
d8-Toluene	99	% Recovery	85			120	1.00			5/9/17 10:33	AGK	EPA 8260C
Dibromofluoromethane	101	% Recovery	85			115	1.00			5/9/17 10:33	AGK	EPA 8260C

CT LAB#: 862357	Sample Description: WPP-GW12-170427	Client Sample #:	Sampled: 04/27/2017 1030
-----------------	-------------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Organic Results</b>												
1,1,1-Trichloroethane	0.22	ug/L	0.21	0.25	0.50	0.50	1.00	J		5/9/17 11:02	AGK	EPA 8260C ^
1,1,2,2-Tetrachloroethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 11:02	AGK	EPA 8260C ^
1,1,2-Trichloroethane	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 11:02	AGK	EPA 8260C ^
1,1-Dichloroethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 11:02	AGK	EPA 8260C ^
1,1-Dichloroethene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 11:02	AGK	EPA 8260C ^
1,2,3-Trichlorobenzene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 11:02	AGK	EPA 8260C ^
1,2,4-Trichlorobenzene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 11:02	AGK	EPA 8260C ^
1,2-Dibromo-3-chloropropane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 11:02	AGK	EPA 8260C ^
1,2-Dibromoethane	<0.16	ug/L	0.16	0.25	0.50	0.50	1.00	U		5/9/17 11:02	AGK	EPA 8260C ^
1,2-Dichlorobenzene	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 11:02	AGK	EPA 8260C ^

CT LAB#: 862357

Sample Description: WPP-GW12-170427

Client Sample #:

Sampled: 04/27/2017 1030

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,2-Dichloroethane	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 11:02 AGK	EPA 8260C	^
1,2-Dichloropropane	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 11:02 AGK	EPA 8260C	^
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 11:02 AGK	EPA 8260C	^
1,4-Dichlorobenzene	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 11:02 AGK	EPA 8260C	^
1,4-Dioxane	<5.0	ug/L	5.0	13	25	25	1.00	U Z,Q		5/9/17 11:02 AGK	EPA 8260C	
112Trichloro122trifluoroethane	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 11:02 AGK	EPA 8260C	
2-Butanone	<2.4	ug/L	2.4	2.5	5.0	5.0	1.00	U		5/9/17 11:02 AGK	EPA 8260C	^
2-Hexanone	<4.0	ug/L	4.0	5.0	10	10	1.00	U		5/9/17 11:02 AGK	EPA 8260C	^
4-Methyl-2-pentanone	<3.0	ug/L	3.0	5.0	10	10	1.00	U		5/9/17 11:02 AGK	EPA 8260C	^
Acetone	<5.0	ug/L	5.0	5.0	10	10	1.00	U		5/9/17 11:02 AGK	EPA 8260C	^
Benzene	0.27	ug/L	0.19	0.25	0.50	0.50	1.00	J		5/9/17 11:02 AGK	EPA 8260C	^
Bromochloromethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 11:02 AGK	EPA 8260C	^
Bromodichloromethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 11:02 AGK	EPA 8260C	^
Bromoform	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 11:02 AGK	EPA 8260C	^
Bromomethane	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 11:02 AGK	EPA 8260C	^
Carbon disulfide	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 11:02 AGK	EPA 8260C	^
Carbon tetrachloride	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 11:02 AGK	EPA 8260C	^
Chlorobenzene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 11:02 AGK	EPA 8260C	^
Chloroethane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 11:02 AGK	EPA 8260C	^
Chloroform	0.17	ug/L	0.15	0.25	0.50	0.50	1.00	J		5/9/17 11:02 AGK	EPA 8260C	^
Chloromethane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 11:02 AGK	EPA 8260C	^
cis-1,2-Dichloroethene	0.42	ug/L	0.25	0.25	0.50	0.50	1.00	J		5/9/17 11:02 AGK	EPA 8260C	^
cis-1,3-Dichloropropene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 11:02 AGK	EPA 8260C	^
Cyclohexane	<0.28	ug/L	0.28	0.50	1.0	1.0	1.00	U		5/9/17 11:02 AGK	EPA 8260C	
Dibromochloromethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 11:02 AGK	EPA 8260C	^
Dichlorodifluoromethane	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 11:02 AGK	EPA 8260C	^
Ethylbenzene	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 11:02 AGK	EPA 8260C	^
Isopropylbenzene	<0.18	ug/L	0.18	0.25	0.50	0.50	1.00	U		5/9/17 11:02 AGK	EPA 8260C	^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 862357	Sample Description: WPP-GW12-170427	Client Sample #:	Sampled: 04/27/2017 1030
-----------------	-------------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
m & p-Xylene	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 11:02	AGK	EPA 8260C ^
Methyl acetate	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 11:02	AGK	EPA 8260C
Methyl tert-butyl ether	<0.29	ug/L	0.29	0.50	1.0	1.0	1.00	U		5/9/17 11:02	AGK	EPA 8260C ^
Methylcyclohexane	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 11:02	AGK	EPA 8260C
Methylene chloride	<0.40	ug/L	0.40	0.50	2.0	2.0	1.00	U		5/9/17 11:02	AGK	EPA 8260C ^
o-Xylene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 11:02	AGK	EPA 8260C ^
Styrene	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 11:02	AGK	EPA 8260C ^
Tetrachloroethene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 11:02	AGK	EPA 8260C ^
Toluene	0.46	ug/L	0.22	0.25	0.50	0.50	1.00	J		5/9/17 11:02	AGK	EPA 8260C ^
trans-1,2-Dichloroethene	0.99	ug/L	0.25	0.25	0.50	0.50	1.00			5/9/17 11:02	AGK	EPA 8260C ^
trans-1,3-Dichloropropene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 11:02	AGK	EPA 8260C ^
Trichloroethene	<0.21	ug/L	0.21	0.25	0.50	0.50	1.00	U		5/9/17 11:02	AGK	EPA 8260C ^
Trichlorofluoromethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 11:02	AGK	EPA 8260C ^
Vinyl chloride	<0.18	ug/L	0.18	0.25	0.50	0.50	1.00	U		5/9/17 11:02	AGK	EPA 8260C ^
1,2 Dichloroethane-d4	98	% Recovery	70			120	1.00			5/9/17 11:02	AGK	EPA 8260C
Bromofluorobenzene	100	% Recovery	75			120	1.00			5/9/17 11:02	AGK	EPA 8260C
d8-Toluene	100	% Recovery	85			120	1.00			5/9/17 11:02	AGK	EPA 8260C
Dibromofluoromethane	99	% Recovery	85			115	1.00			5/9/17 11:02	AGK	EPA 8260C

CT LAB#: 862358	Sample Description: WPP-GW05-170427	Client Sample #:	Sampled: 04/27/2017 1140
-----------------	-------------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Organic Results</b>												
1,1,1-Trichloroethane	1.2	ug/L	0.21	0.25	0.50	0.50	1.00			5/9/17 11:31	AGK	EPA 8260C ^
1,1,2,2-Tetrachloroethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
1,1,2-Trichloroethane	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^

CT LAB#: 862358

Sample Description: WPP-GW05-170427

Client Sample #:

Sampled: 04/27/2017 1140

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,1-Dichloroethane	0.43	ug/L	0.20	0.25	0.50	0.50	1.00	J		5/9/17 11:31	AGK	EPA 8260C ^
1,1-Dichloroethene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
1,2,3-Trichlorobenzene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
1,2,4-Trichlorobenzene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
1,2-Dibromo-3-chloropropane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
1,2-Dibromoethane	<0.16	ug/L	0.16	0.25	0.50	0.50	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
1,2-Dichlorobenzene	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
1,2-Dichloroethane	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
1,2-Dichloropropane	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
1,4-Dichlorobenzene	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
1,4-Dioxane	<5.0	ug/L	5.0	13	25	25	1.00	U Z,Q		5/9/17 11:31	AGK	EPA 8260C
112Trichloro122trifluoroethane	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 11:31	AGK	EPA 8260C
2-Butanone	<2.4	ug/L	2.4	2.5	5.0	5.0	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
2-Hexanone	<4.0	ug/L	4.0	5.0	10	10	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
4-Methyl-2-pentanone	<3.0	ug/L	3.0	5.0	10	10	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
Acetone	<5.0	ug/L	5.0	5.0	10	10	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
Benzene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
Bromochloromethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
Bromodichloromethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
Bromoform	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
Bromomethane	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
Carbon disulfide	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
Carbon tetrachloride	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
Chlorobenzene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
Chloroethane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
Chloroform	<0.15	ug/L	0.15	0.25	0.50	0.50	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
Chloromethane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 862358

Sample Description: WPP-GW05-170427

Client Sample #:

Sampled: 04/27/2017 1140

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
cis-1,2-Dichloroethene	13	ug/L	0.25	0.25	0.50	0.50	1.00			5/9/17 11:31	AGK	EPA 8260C ^
cis-1,3-Dichloropropene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
Cyclohexane	<0.28	ug/L	0.28	0.50	1.0	1.0	1.00	U		5/9/17 11:31	AGK	EPA 8260C
Dibromochloromethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
Dichlorodifluoromethane	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
Ethylbenzene	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
Isopropylbenzene	<0.18	ug/L	0.18	0.25	0.50	0.50	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
m & p-Xylene	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
Methyl acetate	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 11:31	AGK	EPA 8260C
Methyl tert-butyl ether	<0.29	ug/L	0.29	0.50	1.0	1.0	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
Methylcyclohexane	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 11:31	AGK	EPA 8260C
Methylene chloride	<0.40	ug/L	0.40	0.50	2.0	2.0	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
o-Xylene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
Styrene	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
Tetrachloroethene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
Toluene	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
trans-1,2-Dichloroethene	1.3	ug/L	0.25	0.25	0.50	0.50	1.00			5/9/17 11:31	AGK	EPA 8260C ^
trans-1,3-Dichloropropene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
Trichloroethene	40	ug/L	0.21	0.25	0.50	0.50	1.00			5/9/17 11:31	AGK	EPA 8260C ^
Trichlorofluoromethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
Vinyl chloride	<0.18	ug/L	0.18	0.25	0.50	0.50	1.00	U		5/9/17 11:31	AGK	EPA 8260C ^
1,2 Dichloroethane-d4	98	% Recovery	70			120	1.00			5/9/17 11:31	AGK	EPA 8260C
Bromofluorobenzene	101	% Recovery	75			120	1.00			5/9/17 11:31	AGK	EPA 8260C
d8-Toluene	99	% Recovery	85			120	1.00			5/9/17 11:31	AGK	EPA 8260C
Dibromofluoromethane	100	% Recovery	85			115	1.00			5/9/17 11:31	AGK	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 862359

Sample Description: WPP-GW05-170427-D

Client Sample #:

Sampled: 04/27/2017 1140

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Organic Results</b>												
1,1,1-Trichloroethane	1.1	ug/L	0.21	0.25	0.50	0.50	1.00			5/9/17 12:01	AGK	EPA 8260C ^
1,1,2,2-Tetrachloroethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
1,1,2-Trichloroethane	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
1,1-Dichloroethane	0.38	ug/L	0.20	0.25	0.50	0.50	1.00	J		5/9/17 12:01	AGK	EPA 8260C ^
1,1-Dichloroethene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
1,2,3-Trichlorobenzene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
1,2,4-Trichlorobenzene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
1,2-Dibromo-3-chloropropane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
1,2-Dibromoethane	<0.16	ug/L	0.16	0.25	0.50	0.50	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
1,2-Dichlorobenzene	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
1,2-Dichloroethane	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
1,2-Dichloropropane	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
1,4-Dichlorobenzene	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
1,4-Dioxane	<5.0	ug/L	5.0	13	25	25	1.00	U Z,Q		5/9/17 12:01	AGK	EPA 8260C
112Trichloro122trifluoroethane	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 12:01	AGK	EPA 8260C
2-Butanone	<2.4	ug/L	2.4	2.5	5.0	5.0	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
2-Hexanone	<4.0	ug/L	4.0	5.0	10	10	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
4-Methyl-2-pentanone	<3.0	ug/L	3.0	5.0	10	10	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
Acetone	<5.0	ug/L	5.0	5.0	10	10	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
Benzene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
Bromochloromethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
Bromodichloromethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
Bromoform	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
Bromomethane	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
Carbon disulfide	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
Carbon tetrachloride	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 862359

Sample Description: WPP-GW05-170427-D

Client Sample #:

Sampled: 04/27/2017 1140

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Chlorobenzene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
Chloroethane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
Chloroform	<0.15	ug/L	0.15	0.25	0.50	0.50	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
Chloromethane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
cis-1,2-Dichloroethene	13	ug/L	0.25	0.25	0.50	0.50	1.00			5/9/17 12:01	AGK	EPA 8260C ^
cis-1,3-Dichloropropene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
Cyclohexane	<0.28	ug/L	0.28	0.50	1.0	1.0	1.00	U		5/9/17 12:01	AGK	EPA 8260C
Dibromochloromethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
Dichlorodifluoromethane	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
Ethylbenzene	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
Isopropylbenzene	<0.18	ug/L	0.18	0.25	0.50	0.50	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
m & p-Xylene	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
Methyl acetate	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 12:01	AGK	EPA 8260C
Methyl tert-butyl ether	<0.29	ug/L	0.29	0.50	1.0	1.0	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
Methylcyclohexane	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 12:01	AGK	EPA 8260C
Methylene chloride	<0.40	ug/L	0.40	0.50	2.0	2.0	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
o-Xylene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
Styrene	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
Tetrachloroethene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
Toluene	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
trans-1,2-Dichloroethene	1.2	ug/L	0.25	0.25	0.50	0.50	1.00			5/9/17 12:01	AGK	EPA 8260C ^
trans-1,3-Dichloropropene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
Trichloroethene	41	ug/L	0.21	0.25	0.50	0.50	1.00			5/9/17 12:01	AGK	EPA 8260C ^
Trichlorofluoromethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
Vinyl chloride	<0.18	ug/L	0.18	0.25	0.50	0.50	1.00	U		5/9/17 12:01	AGK	EPA 8260C ^
1,2 Dichloroethane-d4	96	% Recovery	70			120	1.00			5/9/17 12:01	AGK	EPA 8260C
Bromofluorobenzene	104	% Recovery	75			120	1.00			5/9/17 12:01	AGK	EPA 8260C
d8-Toluene	100	% Recovery	85			120	1.00			5/9/17 12:01	AGK	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 862359	Sample Description: WPP-GW05-170427-D	Client Sample #:	Sampled: 04/27/2017 1140
-----------------	---------------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Dibromofluoromethane	99	% Recovery	85			115	1.00			5/9/17 12:01	AGK	EPA 8260C

CT LAB#: 862360	Sample Description: WPP-GW07-170427	Client Sample #:	Sampled: 04/27/2017 1342
-----------------	-------------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
---------	--------	-------	----	------------	------------	----	----	-----------	-------------------	-----------------------	---------	--------

#### Organic Results

1,1,1-Trichloroethane	10	ug/L	0.21	0.25	0.50	0.50	1.00			5/9/17 12:30	AGK	EPA 8260C	^
1,1,2,2-Tetrachloroethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 12:30	AGK	EPA 8260C	^
1,1,2-Trichloroethane	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 12:30	AGK	EPA 8260C	^
1,1-Dichloroethane	0.52	ug/L	0.20	0.25	0.50	0.50	1.00			5/9/17 12:30	AGK	EPA 8260C	^
1,1-Dichloroethene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 12:30	AGK	EPA 8260C	^
1,2,3-Trichlorobenzene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 12:30	AGK	EPA 8260C	^
1,2,4-Trichlorobenzene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 12:30	AGK	EPA 8260C	^
1,2-Dibromo-3-chloropropane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 12:30	AGK	EPA 8260C	^
1,2-Dibromoethane	<0.16	ug/L	0.16	0.25	0.50	0.50	1.00	U		5/9/17 12:30	AGK	EPA 8260C	^
1,2-Dichlorobenzene	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 12:30	AGK	EPA 8260C	^
1,2-Dichloroethane	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 12:30	AGK	EPA 8260C	^
1,2-Dichloropropane	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 12:30	AGK	EPA 8260C	^
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 12:30	AGK	EPA 8260C	^
1,4-Dichlorobenzene	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 12:30	AGK	EPA 8260C	^
1,4-Dioxane	<5.0	ug/L	5.0	13	25	25	1.00	U Z,Q		5/9/17 12:30	AGK	EPA 8260C	
112Trichloro122trifluoroethane	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 12:30	AGK	EPA 8260C	
2-Butanone	<2.4	ug/L	2.4	2.5	5.0	5.0	1.00	U		5/9/17 12:30	AGK	EPA 8260C	^
2-Hexanone	<4.0	ug/L	4.0	5.0	10	10	1.00	U		5/9/17 12:30	AGK	EPA 8260C	^
4-Methyl-2-pentanone	<3.0	ug/L	3.0	5.0	10	10	1.00	U		5/9/17 12:30	AGK	EPA 8260C	^
Acetone	<5.0	ug/L	5.0	5.0	10	10	1.00	U		5/9/17 12:30	AGK	EPA 8260C	^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 862360

Sample Description: WPP-GW07-170427

Client Sample #:

Sampled: 04/27/2017 1342

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Benzene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 12:30	AGK	EPA 8260C ^
Bromochloromethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 12:30	AGK	EPA 8260C ^
Bromodichloromethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 12:30	AGK	EPA 8260C ^
Bromoform	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 12:30	AGK	EPA 8260C ^
Bromomethane	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 12:30	AGK	EPA 8260C ^
Carbon disulfide	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 12:30	AGK	EPA 8260C ^
Carbon tetrachloride	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 12:30	AGK	EPA 8260C ^
Chlorobenzene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 12:30	AGK	EPA 8260C ^
Chloroethane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 12:30	AGK	EPA 8260C ^
Chloroform	<0.15	ug/L	0.15	0.25	0.50	0.50	1.00	U		5/9/17 12:30	AGK	EPA 8260C ^
Chloromethane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 12:30	AGK	EPA 8260C ^
cis-1,2-Dichloroethene	4.7	ug/L	0.25	0.25	0.50	0.50	1.00			5/9/17 12:30	AGK	EPA 8260C ^
cis-1,3-Dichloropropene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 12:30	AGK	EPA 8260C ^
Cyclohexane	<0.28	ug/L	0.28	0.50	1.0	1.0	1.00	U		5/9/17 12:30	AGK	EPA 8260C
Dibromochloromethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 12:30	AGK	EPA 8260C ^
Dichlorodifluoromethane	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 12:30	AGK	EPA 8260C ^
Ethylbenzene	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 12:30	AGK	EPA 8260C ^
Isopropylbenzene	<0.18	ug/L	0.18	0.25	0.50	0.50	1.00	U		5/9/17 12:30	AGK	EPA 8260C ^
m & p-Xylene	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 12:30	AGK	EPA 8260C ^
Methyl acetate	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 12:30	AGK	EPA 8260C
Methyl tert-butyl ether	<0.29	ug/L	0.29	0.50	1.0	1.0	1.00	U		5/9/17 12:30	AGK	EPA 8260C ^
Methylcyclohexane	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 12:30	AGK	EPA 8260C
Methylene chloride	<0.40	ug/L	0.40	0.50	2.0	2.0	1.00	U		5/9/17 12:30	AGK	EPA 8260C ^
o-Xylene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 12:30	AGK	EPA 8260C ^
Styrene	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 12:30	AGK	EPA 8260C ^
Tetrachloroethene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 12:30	AGK	EPA 8260C ^
Toluene	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 12:30	AGK	EPA 8260C ^
trans-1,2-Dichloroethene	1.0	ug/L	0.25	0.25	0.50	0.50	1.00			5/9/17 12:30	AGK	EPA 8260C ^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 862360	Sample Description: WPP-GW07-170427	Client Sample #:	Sampled: 04/27/2017 1342
-----------------	-------------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
trans-1,3-Dichloropropene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 12:30	AGK	EPA 8260C ^
Trichloroethene	25	ug/L	0.21	0.25	0.50	0.50	1.00			5/9/17 12:30	AGK	EPA 8260C ^
Trichlorofluoromethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 12:30	AGK	EPA 8260C ^
Vinyl chloride	<0.18	ug/L	0.18	0.25	0.50	0.50	1.00	U		5/9/17 12:30	AGK	EPA 8260C ^
1,2 Dichloroethane-d4	95	% Recovery	70			120	1.00			5/9/17 12:30	AGK	EPA 8260C
Bromofluorobenzene	101	% Recovery	75			120	1.00			5/9/17 12:30	AGK	EPA 8260C
d8-Toluene	98	% Recovery	85			120	1.00			5/9/17 12:30	AGK	EPA 8260C
Dibromofluoromethane	101	% Recovery	85			115	1.00			5/9/17 12:30	AGK	EPA 8260C

CT LAB#: 862361	Sample Description: WPP-GW09-170427	Client Sample #:	Sampled: 04/27/2017 1427
-----------------	-------------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Organic Results</b>												
1,1,1-Trichloroethane	0.64	ug/L	0.21	0.25	0.50	0.50	1.00			5/9/17 13:00	AGK	EPA 8260C ^
1,1,2,2-Tetrachloroethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
1,1,2-Trichloroethane	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
1,1-Dichloroethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
1,1-Dichloroethene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
1,2,3-Trichlorobenzene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
1,2,4-Trichlorobenzene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
1,2-Dibromo-3-chloropropane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
1,2-Dibromoethane	<0.16	ug/L	0.16	0.25	0.50	0.50	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
1,2-Dichlorobenzene	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
1,2-Dichloroethane	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
1,2-Dichloropropane	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 862361

Sample Description: WPP-GW09-170427

Client Sample #:

Sampled: 04/27/2017 1427

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,4-Dichlorobenzene	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
1,4-Dioxane	<5.0	ug/L	5.0	13	25	25	1.00	U Z,Q		5/9/17 13:00	AGK	EPA 8260C
112Trichloro122trifluoroethane	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 13:00	AGK	EPA 8260C
2-Butanone	<2.4	ug/L	2.4	2.5	5.0	5.0	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
2-Hexanone	<4.0	ug/L	4.0	5.0	10	10	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
4-Methyl-2-pentanone	<3.0	ug/L	3.0	5.0	10	10	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
Acetone	<5.0	ug/L	5.0	5.0	10	10	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
Benzene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
Bromochloromethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
Bromodichloromethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
Bromoform	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
Bromomethane	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
Carbon disulfide	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
Carbon tetrachloride	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
Chlorobenzene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
Chloroethane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
Chloroform	<0.15	ug/L	0.15	0.25	0.50	0.50	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
Chloromethane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
cis-1,2-Dichloroethene	13	ug/L	0.25	0.25	0.50	0.50	1.00			5/9/17 13:00	AGK	EPA 8260C ^
cis-1,3-Dichloropropene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
Cyclohexane	<0.28	ug/L	0.28	0.50	1.0	1.0	1.00	U		5/9/17 13:00	AGK	EPA 8260C
Dibromochloromethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
Dichlorodifluoromethane	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
Ethylbenzene	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
Isopropylbenzene	<0.18	ug/L	0.18	0.25	0.50	0.50	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
m & p-Xylene	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
Methyl acetate	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 13:00	AGK	EPA 8260C
Methyl tert-butyl ether	<0.29	ug/L	0.29	0.50	1.0	1.0	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 862361	Sample Description: WPP-GW09-170427	Client Sample #:	Sampled: 04/27/2017 1427
-----------------	-------------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Methylcyclohexane	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 13:00	AGK	EPA 8260C
Methylene chloride	<0.40	ug/L	0.40	0.50	2.0	2.0	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
o-Xylene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
Styrene	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
Tetrachloroethene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
Toluene	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
trans-1,2-Dichloroethene	2.1	ug/L	0.25	0.25	0.50	0.50	1.00			5/9/17 13:00	AGK	EPA 8260C ^
trans-1,3-Dichloropropene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
Trichloroethene	<0.21	ug/L	0.21	0.25	0.50	0.50	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
Trichlorofluoromethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
Vinyl chloride	<0.18	ug/L	0.18	0.25	0.50	0.50	1.00	U		5/9/17 13:00	AGK	EPA 8260C ^
1,2 Dichloroethane-d4	95	% Recovery	70			120	1.00			5/9/17 13:00	AGK	EPA 8260C
Bromofluorobenzene	104	% Recovery	75			120	1.00			5/9/17 13:00	AGK	EPA 8260C
d8-Toluene	99	% Recovery	85			120	1.00			5/9/17 13:00	AGK	EPA 8260C
Dibromofluoromethane	100	% Recovery	85			115	1.00			5/9/17 13:00	AGK	EPA 8260C

CT LAB#: 862362	Sample Description: WPP-GW02-170427	Client Sample #:	Sampled: 04/27/2017 1507
-----------------	-------------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Organic Results</b>												
1,1,1-Trichloroethane	<0.21	ug/L	0.21	0.25	0.50	0.50	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
1,1,2,2-Tetrachloroethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
1,1,2-Trichloroethane	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
1,1-Dichloroethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
1,1-Dichloroethene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
1,2,3-Trichlorobenzene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 862362

Sample Description: WPP-GW02-170427

Client Sample #:

Sampled: 04/27/2017 1507

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,2,4-Trichlorobenzene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
1,2-Dibromo-3-chloropropane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
1,2-Dibromoethane	<0.16	ug/L	0.16	0.25	0.50	0.50	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
1,2-Dichlorobenzene	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
1,2-Dichloroethane	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
1,2-Dichloropropane	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
1,4-Dichlorobenzene	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
1,4-Dioxane	<5.0	ug/L	5.0	13	25	25	1.00	U Z,Q		5/9/17 13:29	AGK	EPA 8260C
112Trichloro122trifluoroethane	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 13:29	AGK	EPA 8260C
2-Butanone	<2.4	ug/L	2.4	2.5	5.0	5.0	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
2-Hexanone	<4.0	ug/L	4.0	5.0	10	10	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
4-Methyl-2-pentanone	<3.0	ug/L	3.0	5.0	10	10	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
Acetone	<5.0	ug/L	5.0	5.0	10	10	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
Benzene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
Bromochloromethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
Bromodichloromethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
Bromoform	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
Bromomethane	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
Carbon disulfide	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
Carbon tetrachloride	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
Chlorobenzene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
Chloroethane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
Chloroform	<0.15	ug/L	0.15	0.25	0.50	0.50	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
Chloromethane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
cis-1,2-Dichloroethene	<0.25	ug/L	0.25	0.25	0.50	0.50	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
cis-1,3-Dichloropropene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
Cyclohexane	<0.28	ug/L	0.28	0.50	1.0	1.0	1.00	U		5/9/17 13:29	AGK	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 862362	Sample Description: WPP-GW02-170427	Client Sample #:	Sampled: 04/27/2017 1507
-----------------	-------------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Dibromochloromethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
Dichlorodifluoromethane	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
Ethylbenzene	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
Isopropylbenzene	<0.18	ug/L	0.18	0.25	0.50	0.50	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
m & p-Xylene	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
Methyl acetate	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 13:29	AGK	EPA 8260C
Methyl tert-butyl ether	<0.29	ug/L	0.29	0.50	1.0	1.0	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
Methylcyclohexane	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 13:29	AGK	EPA 8260C
Methylene chloride	<0.40	ug/L	0.40	0.50	2.0	2.0	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
o-Xylene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
Styrene	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
Tetrachloroethene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
Toluene	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
trans-1,2-Dichloroethene	<0.25	ug/L	0.25	0.25	0.50	0.50	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
trans-1,3-Dichloropropene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
Trichloroethene	<0.21	ug/L	0.21	0.25	0.50	0.50	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
Trichlorofluoromethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
Vinyl chloride	<0.18	ug/L	0.18	0.25	0.50	0.50	1.00	U		5/9/17 13:29	AGK	EPA 8260C ^
1,2 Dichloroethane-d4	101	% Recovery	70			120	1.00			5/9/17 13:29	AGK	EPA 8260C
Bromofluorobenzene	103	% Recovery	75			120	1.00			5/9/17 13:29	AGK	EPA 8260C
d8-Toluene	100	% Recovery	85			120	1.00			5/9/17 13:29	AGK	EPA 8260C
Dibromofluoromethane	100	% Recovery	85			115	1.00			5/9/17 13:29	AGK	EPA 8260C

CT LAB#: 862363	Sample Description: WPP-GW04-170427	Client Sample #:	Sampled: 04/27/2017 1546
-----------------	-------------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
---------	--------	-------	----	------------	------------	----	----	-----------	-------------------	-----------------------	---------	--------

CT LAB#: 862363

Sample Description: WPP-GW04-170427

Client Sample #:

Sampled: 04/27/2017 1546

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Organic Results</b>												
1,1,1-Trichloroethane	<0.21	ug/L	0.21	0.25	0.50	0.50	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
1,1,2,2-Tetrachloroethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
1,1,2-Trichloroethane	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
1,1-Dichloroethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
1,1-Dichloroethene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
1,2,3-Trichlorobenzene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
1,2,4-Trichlorobenzene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
1,2-Dibromo-3-chloropropane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
1,2-Dibromoethane	<0.16	ug/L	0.16	0.25	0.50	0.50	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
1,2-Dichlorobenzene	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
1,2-Dichloroethane	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
1,2-Dichloropropane	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
1,4-Dichlorobenzene	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
1,4-Dioxane	<5.0	ug/L	5.0	13	25	25	1.00	U Z,Q		5/9/17 13:59	AGK	EPA 8260C
112Trichloro122trifluoroethane	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 13:59	AGK	EPA 8260C
2-Butanone	<2.4	ug/L	2.4	2.5	5.0	5.0	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
2-Hexanone	<4.0	ug/L	4.0	5.0	10	10	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
4-Methyl-2-pentanone	<3.0	ug/L	3.0	5.0	10	10	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
Acetone	<5.0	ug/L	5.0	5.0	10	10	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
Benzene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
Bromochloromethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
Bromodichloromethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
Bromoform	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
Bromomethane	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
Carbon disulfide	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
Carbon tetrachloride	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 862363

Sample Description: WPP-GW04-170427

Client Sample #:

Sampled: 04/27/2017 1546

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Chlorobenzene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
Chloroethane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
Chloroform	<0.15	ug/L	0.15	0.25	0.50	0.50	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
Chloromethane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
cis-1,2-Dichloroethene	<0.25	ug/L	0.25	0.25	0.50	0.50	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
cis-1,3-Dichloropropene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
Cyclohexane	<0.28	ug/L	0.28	0.50	1.0	1.0	1.00	U		5/9/17 13:59	AGK	EPA 8260C
Dibromochloromethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
Dichlorodifluoromethane	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
Ethylbenzene	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
Isopropylbenzene	<0.18	ug/L	0.18	0.25	0.50	0.50	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
m & p-Xylene	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
Methyl acetate	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 13:59	AGK	EPA 8260C
Methyl tert-butyl ether	<0.29	ug/L	0.29	0.50	1.0	1.0	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
Methylcyclohexane	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 13:59	AGK	EPA 8260C
Methylene chloride	<0.40	ug/L	0.40	0.50	2.0	2.0	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
o-Xylene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
Styrene	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
Tetrachloroethene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
Toluene	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
trans-1,2-Dichloroethene	<0.25	ug/L	0.25	0.25	0.50	0.50	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
trans-1,3-Dichloropropene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
Trichloroethene	<0.21	ug/L	0.21	0.25	0.50	0.50	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
Trichlorofluoromethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
Vinyl chloride	<0.18	ug/L	0.18	0.25	0.50	0.50	1.00	U		5/9/17 13:59	AGK	EPA 8260C ^
1,2 Dichloroethane-d4	99	% Recovery	70			120	1.00			5/9/17 13:59	AGK	EPA 8260C
Bromofluorobenzene	102	% Recovery	75			120	1.00			5/9/17 13:59	AGK	EPA 8260C
d8-Toluene	98	% Recovery	85			120	1.00			5/9/17 13:59	AGK	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 862363	Sample Description: WPP-GW04-170427	Client Sample #:	Sampled: 04/27/2017 1546
-----------------	-------------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Dibromofluoromethane	100	% Recovery	85			115	1.00			5/9/17 13:59	AGK	EPA 8260C

CT LAB#: 862364	Sample Description: WPP-GW06-170428	Client Sample #:	Sampled: 04/28/2017 0900
-----------------	-------------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
---------	--------	-------	----	------------	------------	----	----	-----------	-------------------	-----------------------	---------	--------

#### Organic Results

1,1,1-Trichloroethane	<0.21	ug/L	0.21	0.25	0.50	0.50	1.00	U		5/9/17 14:29	AGK	EPA 8260C	^
1,1,2,2-Tetrachloroethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 14:29	AGK	EPA 8260C	^
1,1,2-Trichloroethane	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 14:29	AGK	EPA 8260C	^
1,1-Dichloroethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 14:29	AGK	EPA 8260C	^
1,1-Dichloroethene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 14:29	AGK	EPA 8260C	^
1,2,3-Trichlorobenzene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 14:29	AGK	EPA 8260C	^
1,2,4-Trichlorobenzene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 14:29	AGK	EPA 8260C	^
1,2-Dibromo-3-chloropropane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 14:29	AGK	EPA 8260C	^
1,2-Dibromoethane	<0.16	ug/L	0.16	0.25	0.50	0.50	1.00	U		5/9/17 14:29	AGK	EPA 8260C	^
1,2-Dichlorobenzene	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 14:29	AGK	EPA 8260C	^
1,2-Dichloroethane	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 14:29	AGK	EPA 8260C	^
1,2-Dichloropropane	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 14:29	AGK	EPA 8260C	^
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 14:29	AGK	EPA 8260C	^
1,4-Dichlorobenzene	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 14:29	AGK	EPA 8260C	^
1,4-Dioxane	<5.0	ug/L	5.0	13	25	25	1.00	U Z,Q		5/9/17 14:29	AGK	EPA 8260C	
112Trichloro122trifluoroethane	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 14:29	AGK	EPA 8260C	
2-Butanone	<2.4	ug/L	2.4	2.5	5.0	5.0	1.00	U		5/9/17 14:29	AGK	EPA 8260C	^
2-Hexanone	<4.0	ug/L	4.0	5.0	10	10	1.00	U		5/9/17 14:29	AGK	EPA 8260C	^
4-Methyl-2-pentanone	<3.0	ug/L	3.0	5.0	10	10	1.00	U		5/9/17 14:29	AGK	EPA 8260C	^
Acetone	<5.0	ug/L	5.0	5.0	10	10	1.00	U		5/9/17 14:29	AGK	EPA 8260C	^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 862364

Sample Description: WPP-GW06-170428

Client Sample #:

Sampled: 04/28/2017 0900

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Benzene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 14:29	AGK	EPA 8260C ^
Bromochloromethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 14:29	AGK	EPA 8260C ^
Bromodichloromethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 14:29	AGK	EPA 8260C ^
Bromoform	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 14:29	AGK	EPA 8260C ^
Bromomethane	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 14:29	AGK	EPA 8260C ^
Carbon disulfide	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 14:29	AGK	EPA 8260C ^
Carbon tetrachloride	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 14:29	AGK	EPA 8260C ^
Chlorobenzene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 14:29	AGK	EPA 8260C ^
Chloroethane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 14:29	AGK	EPA 8260C ^
Chloroform	0.25	ug/L	0.15	0.25	0.50	0.50	1.00	J		5/9/17 14:29	AGK	EPA 8260C ^
Chloromethane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 14:29	AGK	EPA 8260C ^
cis-1,2-Dichloroethene	<0.25	ug/L	0.25	0.25	0.50	0.50	1.00	U		5/9/17 14:29	AGK	EPA 8260C ^
cis-1,3-Dichloropropene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 14:29	AGK	EPA 8260C ^
Cyclohexane	<0.28	ug/L	0.28	0.50	1.0	1.0	1.00	U		5/9/17 14:29	AGK	EPA 8260C
Dibromochloromethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 14:29	AGK	EPA 8260C ^
Dichlorodifluoromethane	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 14:29	AGK	EPA 8260C ^
Ethylbenzene	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 14:29	AGK	EPA 8260C ^
Isopropylbenzene	<0.18	ug/L	0.18	0.25	0.50	0.50	1.00	U		5/9/17 14:29	AGK	EPA 8260C ^
m & p-Xylene	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 14:29	AGK	EPA 8260C ^
Methyl acetate	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 14:29	AGK	EPA 8260C
Methyl tert-butyl ether	<0.29	ug/L	0.29	0.50	1.0	1.0	1.00	U		5/9/17 14:29	AGK	EPA 8260C ^
Methylcyclohexane	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 14:29	AGK	EPA 8260C
Methylene chloride	<0.40	ug/L	0.40	0.50	2.0	2.0	1.00	U		5/9/17 14:29	AGK	EPA 8260C ^
o-Xylene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 14:29	AGK	EPA 8260C ^
Styrene	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 14:29	AGK	EPA 8260C ^
Tetrachloroethene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 14:29	AGK	EPA 8260C ^
Toluene	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 14:29	AGK	EPA 8260C ^
trans-1,2-Dichloroethene	<0.25	ug/L	0.25	0.25	0.50	0.50	1.00	U		5/9/17 14:29	AGK	EPA 8260C ^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 862364	Sample Description: WPP-GW06-170428	Client Sample #:	Sampled: 04/28/2017 0900
-----------------	-------------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
trans-1,3-Dichloropropene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 14:29	AGK	EPA 8260C ^
Trichloroethene	<0.21	ug/L	0.21	0.25	0.50	0.50	1.00	U		5/9/17 14:29	AGK	EPA 8260C ^
Trichlorofluoromethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 14:29	AGK	EPA 8260C ^
Vinyl chloride	<0.18	ug/L	0.18	0.25	0.50	0.50	1.00	U		5/9/17 14:29	AGK	EPA 8260C ^
1,2 Dichloroethane-d4	103	% Recovery	70			120	1.00			5/9/17 14:29	AGK	EPA 8260C
Bromofluorobenzene	102	% Recovery	75			120	1.00			5/9/17 14:29	AGK	EPA 8260C
d8-Toluene	100	% Recovery	85			120	1.00			5/9/17 14:29	AGK	EPA 8260C
Dibromofluoromethane	100	% Recovery	85			115	1.00			5/9/17 14:29	AGK	EPA 8260C

CT LAB#: 862365	Sample Description: WPP-GW06-170428-D	Client Sample #:	Sampled: 04/28/2017 0900
-----------------	---------------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Organic Results</b>												
1,1,1-Trichloroethane	<0.21	ug/L	0.21	0.25	0.50	0.50	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
1,1,2,2-Tetrachloroethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
1,1,2-Trichloroethane	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
1,1-Dichloroethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
1,1-Dichloroethene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
1,2,3-Trichlorobenzene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
1,2,4-Trichlorobenzene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
1,2-Dibromo-3-chloropropane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
1,2-Dibromoethane	<0.16	ug/L	0.16	0.25	0.50	0.50	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
1,2-Dichlorobenzene	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
1,2-Dichloroethane	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
1,2-Dichloropropane	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 862365

Sample Description: WPP-GW06-170428-D

Client Sample #:

Sampled: 04/28/2017 0900

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,4-Dichlorobenzene	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
1,4-Dioxane	<5.0	ug/L	5.0	13	25	25	1.00	U Z,Q		5/9/17 14:59	AGK	EPA 8260C
112Trichloro122trifluoroethane	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 14:59	AGK	EPA 8260C
2-Butanone	<2.4	ug/L	2.4	2.5	5.0	5.0	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
2-Hexanone	<4.0	ug/L	4.0	5.0	10	10	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
4-Methyl-2-pentanone	<3.0	ug/L	3.0	5.0	10	10	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
Acetone	<5.0	ug/L	5.0	5.0	10	10	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
Benzene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
Bromochloromethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
Bromodichloromethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
Bromoform	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
Bromomethane	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
Carbon disulfide	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
Carbon tetrachloride	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
Chlorobenzene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
Chloroethane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
Chloroform	0.29	ug/L	0.15	0.25	0.50	0.50	1.00	J		5/9/17 14:59	AGK	EPA 8260C ^
Chloromethane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
cis-1,2-Dichloroethene	<0.25	ug/L	0.25	0.25	0.50	0.50	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
cis-1,3-Dichloropropene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
Cyclohexane	<0.28	ug/L	0.28	0.50	1.0	1.0	1.00	U		5/9/17 14:59	AGK	EPA 8260C
Dibromochloromethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
Dichlorodifluoromethane	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
Ethylbenzene	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
Isopropylbenzene	<0.18	ug/L	0.18	0.25	0.50	0.50	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
m & p-Xylene	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
Methyl acetate	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 14:59	AGK	EPA 8260C
Methyl tert-butyl ether	<0.29	ug/L	0.29	0.50	1.0	1.0	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 862365	Sample Description: WPP-GW06-170428-D	Client Sample #:	Sampled: 04/28/2017 0900
-----------------	---------------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Methylcyclohexane	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 14:59	AGK	EPA 8260C
Methylene chloride	<0.40	ug/L	0.40	0.50	2.0	2.0	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
o-Xylene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
Styrene	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
Tetrachloroethene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
Toluene	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
trans-1,2-Dichloroethene	<0.25	ug/L	0.25	0.25	0.50	0.50	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
trans-1,3-Dichloropropene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
Trichloroethene	<0.21	ug/L	0.21	0.25	0.50	0.50	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
Trichlorofluoromethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
Vinyl chloride	<0.18	ug/L	0.18	0.25	0.50	0.50	1.00	U		5/9/17 14:59	AGK	EPA 8260C ^
1,2 Dichloroethane-d4	100	% Recovery	70			120	1.00			5/9/17 14:59	AGK	EPA 8260C
Bromofluorobenzene	103	% Recovery	75			120	1.00			5/9/17 14:59	AGK	EPA 8260C
d8-Toluene	100	% Recovery	85			120	1.00			5/9/17 14:59	AGK	EPA 8260C
Dibromofluoromethane	99	% Recovery	85			115	1.00			5/9/17 14:59	AGK	EPA 8260C

CT LAB#: 862366	Sample Description: WPP-GW11-170428	Client Sample #:	Sampled: 04/28/2017 0943
-----------------	-------------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Organic Results</b>												
1,1,1-Trichloroethane	0.55	ug/L	0.21	0.25	0.50	0.50	1.00			5/9/17 15:30	AGK	EPA 8260C ^
1,1,2,2-Tetrachloroethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
1,1,2-Trichloroethane	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
1,1-Dichloroethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
1,1-Dichloroethene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
1,2,3-Trichlorobenzene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 862366

Sample Description: WPP-GW11-170428

Client Sample #:

Sampled: 04/28/2017 0943

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,2,4-Trichlorobenzene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
1,2-Dibromo-3-chloropropane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
1,2-Dibromoethane	<0.16	ug/L	0.16	0.25	0.50	0.50	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
1,2-Dichlorobenzene	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
1,2-Dichloroethane	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
1,2-Dichloropropane	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
1,4-Dichlorobenzene	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
1,4-Dioxane	<5.0	ug/L	5.0	13	25	25	1.00	U Z,Q		5/9/17 15:30	AGK	EPA 8260C
112Trichloro122trifluoroethane	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 15:30	AGK	EPA 8260C
2-Butanone	<2.4	ug/L	2.4	2.5	5.0	5.0	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
2-Hexanone	<4.0	ug/L	4.0	5.0	10	10	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
4-Methyl-2-pentanone	<3.0	ug/L	3.0	5.0	10	10	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
Acetone	<5.0	ug/L	5.0	5.0	10	10	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
Benzene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
Bromochloromethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
Bromodichloromethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
Bromoform	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
Bromomethane	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
Carbon disulfide	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
Carbon tetrachloride	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
Chlorobenzene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
Chloroethane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
Chloroform	2.1	ug/L	0.15	0.25	0.50	0.50	1.00			5/9/17 15:30	AGK	EPA 8260C ^
Chloromethane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
cis-1,2-Dichloroethene	0.70	ug/L	0.25	0.25	0.50	0.50	1.00			5/9/17 15:30	AGK	EPA 8260C ^
cis-1,3-Dichloropropene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
Cyclohexane	<0.28	ug/L	0.28	0.50	1.0	1.0	1.00	U		5/9/17 15:30	AGK	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 862366	Sample Description: WPP-GW11-170428	Client Sample #:	Sampled: 04/28/2017 0943
-----------------	-------------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Dibromochloromethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
Dichlorodifluoromethane	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
Ethylbenzene	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
Isopropylbenzene	<0.18	ug/L	0.18	0.25	0.50	0.50	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
m & p-Xylene	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
Methyl acetate	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 15:30	AGK	EPA 8260C
Methyl tert-butyl ether	<0.29	ug/L	0.29	0.50	1.0	1.0	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
Methylcyclohexane	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 15:30	AGK	EPA 8260C
Methylene chloride	<0.40	ug/L	0.40	0.50	2.0	2.0	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
o-Xylene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
Styrene	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
Tetrachloroethene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
Toluene	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
trans-1,2-Dichloroethene	3.5	ug/L	0.25	0.25	0.50	0.50	1.00			5/9/17 15:30	AGK	EPA 8260C ^
trans-1,3-Dichloropropene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
Trichloroethene	39	ug/L	0.21	0.25	0.50	0.50	1.00			5/9/17 15:30	AGK	EPA 8260C ^
Trichlorofluoromethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
Vinyl chloride	<0.18	ug/L	0.18	0.25	0.50	0.50	1.00	U		5/9/17 15:30	AGK	EPA 8260C ^
1,2 Dichloroethane-d4	99	% Recovery	70			120	1.00			5/9/17 15:30	AGK	EPA 8260C
Bromofluorobenzene	103	% Recovery	75			120	1.00			5/9/17 15:30	AGK	EPA 8260C
d8-Toluene	101	% Recovery	85			120	1.00			5/9/17 15:30	AGK	EPA 8260C
Dibromofluoromethane	100	% Recovery	85			115	1.00			5/9/17 15:30	AGK	EPA 8260C

CT LAB#: 862367	Sample Description: WPP-GW10-170428	Client Sample #:	Sampled: 04/28/2017 1022
-----------------	-------------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
---------	--------	-------	----	------------	------------	----	----	-----------	-------------------	-----------------------	---------	--------

CT LAB#: 862367

Sample Description: WPP-GW10-170428

Client Sample #:

Sampled: 04/28/2017 1022

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Organic Results</b>												
1,1,1-Trichloroethane	<0.21	ug/L	0.21	0.25	0.50	0.50	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
1,1,2,2-Tetrachloroethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
1,1,2-Trichloroethane	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
1,1-Dichloroethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
1,1-Dichloroethene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
1,2,3-Trichlorobenzene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
1,2,4-Trichlorobenzene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
1,2-Dibromo-3-chloropropane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
1,2-Dibromoethane	<0.16	ug/L	0.16	0.25	0.50	0.50	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
1,2-Dichlorobenzene	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
1,2-Dichloroethane	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
1,2-Dichloropropane	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
1,4-Dichlorobenzene	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
1,4-Dioxane	<5.0	ug/L	5.0	13	25	25	1.00	U Z,Q		5/9/17 15:59	AGK	EPA 8260C
112Trichloro122trifluoroethane	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 15:59	AGK	EPA 8260C
2-Butanone	<2.4	ug/L	2.4	2.5	5.0	5.0	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
2-Hexanone	<4.0	ug/L	4.0	5.0	10	10	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
4-Methyl-2-pentanone	<3.0	ug/L	3.0	5.0	10	10	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
Acetone	<5.0	ug/L	5.0	5.0	10	10	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
Benzene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
Bromochloromethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
Bromodichloromethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
Bromoform	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
Bromomethane	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
Carbon disulfide	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
Carbon tetrachloride	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 862367

Sample Description: WPP-GW10-170428

Client Sample #:

Sampled: 04/28/2017 1022

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Chlorobenzene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
Chloroethane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
Chloroform	<0.15	ug/L	0.15	0.25	0.50	0.50	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
Chloromethane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
cis-1,2-Dichloroethene	2.1	ug/L	0.25	0.25	0.50	0.50	1.00			5/9/17 15:59	AGK	EPA 8260C ^
cis-1,3-Dichloropropene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
Cyclohexane	<0.28	ug/L	0.28	0.50	1.0	1.0	1.00	U		5/9/17 15:59	AGK	EPA 8260C
Dibromochloromethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
Dichlorodifluoromethane	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
Ethylbenzene	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
Isopropylbenzene	<0.18	ug/L	0.18	0.25	0.50	0.50	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
m & p-Xylene	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
Methyl acetate	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 15:59	AGK	EPA 8260C
Methyl tert-butyl ether	<0.29	ug/L	0.29	0.50	1.0	1.0	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
Methylcyclohexane	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 15:59	AGK	EPA 8260C
Methylene chloride	<0.40	ug/L	0.40	0.50	2.0	2.0	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
o-Xylene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
Styrene	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
Tetrachloroethene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
Toluene	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
trans-1,2-Dichloroethene	1.4	ug/L	0.25	0.25	0.50	0.50	1.00			5/9/17 15:59	AGK	EPA 8260C ^
trans-1,3-Dichloropropene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
Trichloroethene	<0.21	ug/L	0.21	0.25	0.50	0.50	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
Trichlorofluoromethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
Vinyl chloride	<0.18	ug/L	0.18	0.25	0.50	0.50	1.00	U		5/9/17 15:59	AGK	EPA 8260C ^
1,2 Dichloroethane-d4	97	% Recovery	70			120	1.00			5/9/17 15:59	AGK	EPA 8260C
Bromofluorobenzene	101	% Recovery	75			120	1.00			5/9/17 15:59	AGK	EPA 8260C
d8-Toluene	99	% Recovery	85			120	1.00			5/9/17 15:59	AGK	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 862367	Sample Description: WPP-GW10-170428	Client Sample #:	Sampled: 04/28/2017 1022
-----------------	-------------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Dibromofluoromethane	101	% Recovery	85			115	1.00			5/9/17 15:59	AGK	EPA 8260C

CT LAB#: 862368	Sample Description: WPP-GW03-170428	Client Sample #:	Sampled: 04/28/2017 1100
-----------------	-------------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
---------	--------	-------	----	------------	------------	----	----	-----------	-------------------	-----------------------	---------	--------

#### Organic Results

1,1,1-Trichloroethane	<0.21	ug/L	0.21	0.25	0.50	0.50	1.00	U		5/9/17 16:29	AGK	EPA 8260C	^
1,1,2,2-Tetrachloroethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 16:29	AGK	EPA 8260C	^
1,1,2-Trichloroethane	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 16:29	AGK	EPA 8260C	^
1,1-Dichloroethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 16:29	AGK	EPA 8260C	^
1,1-Dichloroethene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 16:29	AGK	EPA 8260C	^
1,2,3-Trichlorobenzene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 16:29	AGK	EPA 8260C	^
1,2,4-Trichlorobenzene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 16:29	AGK	EPA 8260C	^
1,2-Dibromo-3-chloropropane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 16:29	AGK	EPA 8260C	^
1,2-Dibromoethane	<0.16	ug/L	0.16	0.25	0.50	0.50	1.00	U		5/9/17 16:29	AGK	EPA 8260C	^
1,2-Dichlorobenzene	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 16:29	AGK	EPA 8260C	^
1,2-Dichloroethane	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 16:29	AGK	EPA 8260C	^
1,2-Dichloropropane	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 16:29	AGK	EPA 8260C	^
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 16:29	AGK	EPA 8260C	^
1,4-Dichlorobenzene	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 16:29	AGK	EPA 8260C	^
1,4-Dioxane	<5.0	ug/L	5.0	13	25	25	1.00	U Z,Q		5/9/17 16:29	AGK	EPA 8260C	
112Trichloro122trifluoroethane	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 16:29	AGK	EPA 8260C	
2-Butanone	<2.4	ug/L	2.4	2.5	5.0	5.0	1.00	U		5/9/17 16:29	AGK	EPA 8260C	^
2-Hexanone	<4.0	ug/L	4.0	5.0	10	10	1.00	U		5/9/17 16:29	AGK	EPA 8260C	^
4-Methyl-2-pentanone	<3.0	ug/L	3.0	5.0	10	10	1.00	U		5/9/17 16:29	AGK	EPA 8260C	^
Acetone	<5.0	ug/L	5.0	5.0	10	10	1.00	U		5/9/17 16:29	AGK	EPA 8260C	^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 862368

Sample Description: WPP-GW03-170428

Client Sample #:

Sampled: 04/28/2017 1100

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Benzene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 16:29	AGK	EPA 8260C ^
Bromochloromethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 16:29	AGK	EPA 8260C ^
Bromodichloromethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 16:29	AGK	EPA 8260C ^
Bromoform	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 16:29	AGK	EPA 8260C ^
Bromomethane	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 16:29	AGK	EPA 8260C ^
Carbon disulfide	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 16:29	AGK	EPA 8260C ^
Carbon tetrachloride	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 16:29	AGK	EPA 8260C ^
Chlorobenzene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 16:29	AGK	EPA 8260C ^
Chloroethane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 16:29	AGK	EPA 8260C ^
Chloroform	<0.15	ug/L	0.15	0.25	0.50	0.50	1.00	U		5/9/17 16:29	AGK	EPA 8260C ^
Chloromethane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 16:29	AGK	EPA 8260C ^
cis-1,2-Dichloroethene	<0.25	ug/L	0.25	0.25	0.50	0.50	1.00	U		5/9/17 16:29	AGK	EPA 8260C ^
cis-1,3-Dichloropropene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 16:29	AGK	EPA 8260C ^
Cyclohexane	<0.28	ug/L	0.28	0.50	1.0	1.0	1.00	U		5/9/17 16:29	AGK	EPA 8260C
Dibromochloromethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 16:29	AGK	EPA 8260C ^
Dichlorodifluoromethane	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 16:29	AGK	EPA 8260C ^
Ethylbenzene	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 16:29	AGK	EPA 8260C ^
Isopropylbenzene	<0.18	ug/L	0.18	0.25	0.50	0.50	1.00	U		5/9/17 16:29	AGK	EPA 8260C ^
m & p-Xylene	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 16:29	AGK	EPA 8260C ^
Methyl acetate	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 16:29	AGK	EPA 8260C
Methyl tert-butyl ether	<0.29	ug/L	0.29	0.50	1.0	1.0	1.00	U		5/9/17 16:29	AGK	EPA 8260C ^
Methylcyclohexane	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 16:29	AGK	EPA 8260C
Methylene chloride	<0.40	ug/L	0.40	0.50	2.0	2.0	1.00	U		5/9/17 16:29	AGK	EPA 8260C ^
o-Xylene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 16:29	AGK	EPA 8260C ^
Styrene	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 16:29	AGK	EPA 8260C ^
Tetrachloroethene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 16:29	AGK	EPA 8260C ^
Toluene	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 16:29	AGK	EPA 8260C ^
trans-1,2-Dichloroethene	<0.25	ug/L	0.25	0.25	0.50	0.50	1.00	U		5/9/17 16:29	AGK	EPA 8260C ^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 862368	Sample Description: WPP-GW03-170428	Client Sample #:	Sampled: 04/28/2017 1100
-----------------	-------------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
trans-1,3-Dichloropropene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 16:29	AGK	EPA 8260C ^
Trichloroethene	<0.21	ug/L	0.21	0.25	0.50	0.50	1.00	U		5/9/17 16:29	AGK	EPA 8260C ^
Trichlorofluoromethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 16:29	AGK	EPA 8260C ^
Vinyl chloride	<0.18	ug/L	0.18	0.25	0.50	0.50	1.00	U		5/9/17 16:29	AGK	EPA 8260C ^
1,2 Dichloroethane-d4	98	% Recovery	70			120	1.00			5/9/17 16:29	AGK	EPA 8260C
Bromofluorobenzene	99	% Recovery	75			120	1.00			5/9/17 16:29	AGK	EPA 8260C
d8-Toluene	99	% Recovery	85			120	1.00			5/9/17 16:29	AGK	EPA 8260C
Dibromofluoromethane	98	% Recovery	85			115	1.00			5/9/17 16:29	AGK	EPA 8260C

CT LAB#: 862369	Sample Description: WPP-GW08-170428	Client Sample #:	Sampled: 04/28/2017 1142
-----------------	-------------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Organic Results</b>												
1,1,1-Trichloroethane	<0.21	ug/L	0.21	0.25	0.50	0.50	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
1,1,2,2-Tetrachloroethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
1,1,2-Trichloroethane	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
1,1-Dichloroethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
1,1-Dichloroethene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
1,2,3-Trichlorobenzene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
1,2,4-Trichlorobenzene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
1,2-Dibromo-3-chloropropane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
1,2-Dibromoethane	<0.16	ug/L	0.16	0.25	0.50	0.50	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
1,2-Dichlorobenzene	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
1,2-Dichloroethane	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
1,2-Dichloropropane	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 862369

Sample Description: WPP-GW08-170428

Client Sample #:

Sampled: 04/28/2017 1142

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,4-Dichlorobenzene	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
1,4-Dioxane	<5.0	ug/L	5.0	13	25	25	1.00	U		5/9/17 16:59	AGK	EPA 8260C
112Trichloro122trifluoroethane	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 16:59	AGK	EPA 8260C
2-Butanone	<2.4	ug/L	2.4	2.5	5.0	5.0	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
2-Hexanone	<4.0	ug/L	4.0	5.0	10	10	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
4-Methyl-2-pentanone	<3.0	ug/L	3.0	5.0	10	10	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
Acetone	<5.0	ug/L	5.0	5.0	10	10	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
Benzene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
Bromochloromethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
Bromodichloromethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
Bromoform	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
Bromomethane	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
Carbon disulfide	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
Carbon tetrachloride	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
Chlorobenzene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
Chloroethane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
Chloroform	<0.15	ug/L	0.15	0.25	0.50	0.50	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
Chloromethane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
cis-1,2-Dichloroethene	<0.25	ug/L	0.25	0.25	0.50	0.50	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
cis-1,3-Dichloropropene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
Cyclohexane	<0.28	ug/L	0.28	0.50	1.0	1.0	1.00	U		5/9/17 16:59	AGK	EPA 8260C
Dibromochloromethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
Dichlorodifluoromethane	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
Ethylbenzene	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
Isopropylbenzene	<0.18	ug/L	0.18	0.25	0.50	0.50	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
m & p-Xylene	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
Methyl acetate	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 16:59	AGK	EPA 8260C
Methyl tert-butyl ether	<0.29	ug/L	0.29	0.50	1.0	1.0	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 862369	Sample Description: WPP-GW08-170428	Client Sample #:	Sampled: 04/28/2017 1142
-----------------	-------------------------------------	------------------	--------------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Methylcyclohexane	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 16:59	AGK	EPA 8260C
Methylene chloride	<0.40	ug/L	0.40	0.50	2.0	2.0	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
o-Xylene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
Styrene	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
Tetrachloroethene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
Toluene	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
trans-1,2-Dichloroethene	<0.25	ug/L	0.25	0.25	0.50	0.50	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
trans-1,3-Dichloropropene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
Trichloroethene	<0.21	ug/L	0.21	0.25	0.50	0.50	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
Trichlorofluoromethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
Vinyl chloride	<0.18	ug/L	0.18	0.25	0.50	0.50	1.00	U		5/9/17 16:59	AGK	EPA 8260C ^
1,2 Dichloroethane-d4	97	% Recovery	70			120	1.00			5/9/17 16:59	AGK	EPA 8260C
Bromofluorobenzene	100	% Recovery	75			120	1.00			5/9/17 16:59	AGK	EPA 8260C
d8-Toluene	101	% Recovery	85			120	1.00			5/9/17 16:59	AGK	EPA 8260C
Dibromofluoromethane	103	% Recovery	85			115	1.00			5/9/17 16:59	AGK	EPA 8260C

CT LAB#: 862370	Sample Description: TRIP BLANK	Client Sample #:	Sampled: 04/27/2017
-----------------	--------------------------------	------------------	---------------------

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
<b>Organic Results</b>												
1,1,1-Trichloroethane	<0.21	ug/L	0.21	0.25	0.50	0.50	1.00	U		5/9/17 10:03	AGK	EPA 8260C ^
1,1,2,2-Tetrachloroethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 10:03	AGK	EPA 8260C ^
1,1,2-Trichloroethane	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 10:03	AGK	EPA 8260C ^
1,1-Dichloroethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 10:03	AGK	EPA 8260C ^
1,1-Dichloroethene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 10:03	AGK	EPA 8260C ^
1,2,3-Trichlorobenzene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 10:03	AGK	EPA 8260C ^

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 862370

Sample Description: TRIP BLANK

Client Sample #:

Sampled: 04/27/2017

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,2,4-Trichlorobenzene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 10:03	AGK	EPA 8260C ^
1,2-Dibromo-3-chloropropane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 10:03	AGK	EPA 8260C ^
1,2-Dibromoethane	<0.16	ug/L	0.16	0.25	0.50	0.50	1.00	U		5/9/17 10:03	AGK	EPA 8260C ^
1,2-Dichlorobenzene	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 10:03	AGK	EPA 8260C ^
1,2-Dichloroethane	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 10:03	AGK	EPA 8260C ^
1,2-Dichloropropane	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 10:03	AGK	EPA 8260C ^
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 10:03	AGK	EPA 8260C ^
1,4-Dichlorobenzene	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 10:03	AGK	EPA 8260C ^
1,4-Dioxane	<5.0	ug/L	5.0	13	25	25	1.00	U Z,Q		5/9/17 10:03	AGK	EPA 8260C
112Trichloro122trifluoroethane	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 10:03	AGK	EPA 8260C
2-Butanone	<2.4	ug/L	2.4	2.5	5.0	5.0	1.00	U		5/9/17 10:03	AGK	EPA 8260C ^
2-Hexanone	<4.0	ug/L	4.0	5.0	10	10	1.00	U		5/9/17 10:03	AGK	EPA 8260C ^
4-Methyl-2-pentanone	<3.0	ug/L	3.0	5.0	10	10	1.00	U		5/9/17 10:03	AGK	EPA 8260C ^
Acetone	<5.0	ug/L	5.0	5.0	10	10	1.00	U		5/9/17 10:03	AGK	EPA 8260C ^
Benzene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 10:03	AGK	EPA 8260C ^
Bromochloromethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 10:03	AGK	EPA 8260C ^
Bromodichloromethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 10:03	AGK	EPA 8260C ^
Bromoform	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 10:03	AGK	EPA 8260C ^
Bromomethane	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 10:03	AGK	EPA 8260C ^
Carbon disulfide	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 10:03	AGK	EPA 8260C ^
Carbon tetrachloride	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 10:03	AGK	EPA 8260C ^
Chlorobenzene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 10:03	AGK	EPA 8260C ^
Chloroethane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 10:03	AGK	EPA 8260C ^
Chloroform	<0.15	ug/L	0.15	0.25	0.50	0.50	1.00	U		5/9/17 10:03	AGK	EPA 8260C ^
Chloromethane	<0.40	ug/L	0.40	0.50	1.0	1.0	1.00	U		5/9/17 10:03	AGK	EPA 8260C ^
cis-1,2-Dichloroethene	<0.25	ug/L	0.25	0.25	0.50	0.50	1.00	U		5/9/17 10:03	AGK	EPA 8260C ^
cis-1,3-Dichloropropene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 10:03	AGK	EPA 8260C ^
Cyclohexane	<0.28	ug/L	0.28	0.50	1.0	1.0	1.00	U		5/9/17 10:03	AGK	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results reported on a Dry Weight Basis

CT LAB#: 862370

Sample Description: TRIP BLANK

Client Sample #:

Sampled: 04/27/2017

Analyte	Result	Units	DL	DOD LOD	DOD LOQ	RL	DF	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Dibromochloromethane	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 10:03 AGK	EPA 8260C	^
Dichlorodifluoromethane	<0.26	ug/L	0.26	0.50	1.0	1.0	1.00	U		5/9/17 10:03 AGK	EPA 8260C	^
Ethylbenzene	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 10:03 AGK	EPA 8260C	^
Isopropylbenzene	<0.18	ug/L	0.18	0.25	0.50	0.50	1.00	U		5/9/17 10:03 AGK	EPA 8260C	^
m & p-Xylene	<0.50	ug/L	0.50	0.50	1.0	1.0	1.00	U		5/9/17 10:03 AGK	EPA 8260C	^
Methyl acetate	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 10:03 AGK	EPA 8260C	
Methyl tert-butyl ether	<0.29	ug/L	0.29	0.50	1.0	1.0	1.00	U		5/9/17 10:03 AGK	EPA 8260C	^
Methylcyclohexane	<0.23	ug/L	0.23	0.25	0.50	0.50	1.00	U		5/9/17 10:03 AGK	EPA 8260C	
Methylene chloride	<0.40	ug/L	0.40	0.50	2.0	2.0	1.00	U		5/9/17 10:03 AGK	EPA 8260C	^
o-Xylene	<0.24	ug/L	0.24	0.25	0.50	0.50	1.00	U		5/9/17 10:03 AGK	EPA 8260C	^
Styrene	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 10:03 AGK	EPA 8260C	^
Tetrachloroethene	<0.30	ug/L	0.30	0.50	1.0	1.0	1.00	U		5/9/17 10:03 AGK	EPA 8260C	^
Toluene	<0.22	ug/L	0.22	0.25	0.50	0.50	1.00	U		5/9/17 10:03 AGK	EPA 8260C	^
trans-1,2-Dichloroethene	<0.25	ug/L	0.25	0.25	0.50	0.50	1.00	U		5/9/17 10:03 AGK	EPA 8260C	^
trans-1,3-Dichloropropene	<0.19	ug/L	0.19	0.25	0.50	0.50	1.00	U		5/9/17 10:03 AGK	EPA 8260C	^
Trichloroethene	<0.21	ug/L	0.21	0.25	0.50	0.50	1.00	U		5/9/17 10:03 AGK	EPA 8260C	^
Trichlorofluoromethane	<0.20	ug/L	0.20	0.25	0.50	0.50	1.00	U		5/9/17 10:03 AGK	EPA 8260C	^
Vinyl chloride	<0.18	ug/L	0.18	0.25	0.50	0.50	1.00	U		5/9/17 10:03 AGK	EPA 8260C	^
1,2 Dichloroethane-d4	98	% Recovery	70			120	1.00			5/9/17 10:03 AGK	EPA 8260C	
Bromofluorobenzene	104	% Recovery	75			120	1.00			5/9/17 10:03 AGK	EPA 8260C	
d8-Toluene	98	% Recovery	85			120	1.00			5/9/17 10:03 AGK	EPA 8260C	
Dibromofluoromethane	98	% Recovery	85			115	1.00			5/9/17 10:03 AGK	EPA 8260C	

Notes:

^ Indicates the laboratory is NELAP accredited for this analyte by the indicated matrix and method. DL (detection limit), LOD (limit of detection), loq (limit of quantitation) as defined by most recent DOD QSM version.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

**This report has been specifically prepared to satisfy project or program requirements.** These results are in compliance with NELAC requirements for the parameters where accreditation is required or available, unless noted in the case narrative.

Submitted by: Brett M. Szymanski  
Project Manager  
608-356-2760

QC Qualifiers		Current CT Laboratories Certifications
Code	Description	
B	Analyte detected in the associated Method Blank.	<p>Wisconsin (WDNR) Chemistry ID# 157066030  Wisconsin (DATCP) Bacteriology ID# 105-289  Louisiana NELAP (primary) ID# ACC20160002  Illinois NELAP Lab ID# 200073  Kansas NELAP Lab ID# E-10368  Virginia NELAP Lab ID# 460203  Maryland Lab ID# WI00061  ISO/IEC 17025-2005 A2LA Cert # 3806.01  DoD-ELAP A2LA 3806.01  GA EPD Stipulation ID ACC20160002  Pennsylvania NELAP Lab ID# 68-04201, # 008</p>
C	Toxicity present in BOD sample.	
D	Diluted Out.	
E	Safe, No Total Coliform detected.	
F	Unsafe, Total Coliform detected, no E. Coli detected.	
G	Unsafe, Total Coliform detected and E. Coli detected.	
H	Holding time exceeded.	
I	BOD incubator temperature was outside acceptance limits during test period.	
J	Estimated value.	
L	Significant peaks were detected outside the chromatographic window.	
M	Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits.	
N	Insufficient BOD oxygen depletion.	
O	Complete BOD oxygen depletion.	
P	Concentration of analyte differs more than 40% between primary and confirmation analysis.	
Q	Laboratory Control Sample outside acceptance limits.	
R	See Narrative at end of report.	
S	Surrogate standard recovery outside acceptance limits due to apparent matrix effects.	
T	Sample received with improper preservation or temperature.	
U	Analyte concentration was below detection limit.	
V	Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.	
W	Sample amount received was below program minimum.	
X	Analyte exceeded calibration range.	
Y	Replicate/Duplicate precision outside acceptance limits.	
Z	Specified calibration criteria was not met.	

## QC SUMMARY REPORT

**TETRA TECH**

**SDG #: 0**

**Folder #: 127039**

**Project Name: WILLIAMSON POLISHING & PLATING**

**Project Number: S05-0001-1610-011**

### Lab Control Spike Water

Analytical Run #:	137526	Analysis Date:	05/09/2017	Prep Batch #:	Matrix:	LIQUID
CTLab #:	865026	Analysis Time:	08:32	Prep Date/Time:	Method:	SW8260C
Parent Sample #:		Analyst:	AGK	Prep Analyst:		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
1,1,1-Trichloroethane	9.86	ug/L			10.0	99	65 --- 130		30
1,1,2,2-Tetrachloroethane	10.2	ug/L			10.0	102	65 --- 130		30
1,1,2-Trichloroethane	9.04	ug/L			10.0	90	75 --- 125		30
1,1-Dichloroethane	9.63	ug/L			10.0	96	70 --- 135		30
1,1-Dichloroethene	10.0	ug/L			10.0	100	70 --- 130		30
1,2,3-Trichlorobenzene	9.54	ug/L			10.0	95	55 --- 140		30
1,2,4-Trichlorobenzene	9.60	ug/L			10.0	96	65 --- 135		30
1,2-Dibromo-3-chloropropane	8.99	ug/L			10.0	90	50 --- 130		30
1,2-Dibromoethane	10.1	ug/L			10.0	101	80 --- 120		30
1,2-Dichlorobenzene	9.60	ug/L			10.0	96	70 --- 120		30
1,2-Dichloroethane	8.90	ug/L			10.0	89	70 --- 130		30
1,2-Dichloropropane	9.99	ug/L			10.0	100	75 --- 125		30
1,3-Dichlorobenzene	10.1	ug/L			10.0	101	75 --- 125		30
1,4-Dichlorobenzene	9.45	ug/L			10.0	94	75 --- 125		30
1,4-Dioxane	311	ug/L			500	62	70 --- 130		30
112Trichloro122trifluoroethane	19.8	ug/L			20.0	99	70 --- 130		30
2-Butanone	91.2	ug/L			100	91	30 --- 150		30
2-Hexanone	91.3	ug/L			100	91	55 --- 130		30
4-Methyl-2-pentanone	88.0	ug/L			100	88	60 --- 135		30
Acetone	88.7	ug/L			100	89	40 --- 140		30
Benzene	10.1	ug/L			10.0	101	80 --- 120		30
Bromochloromethane	9.20	ug/L			10.0	92	65 --- 130		30
Bromodichloromethane	9.55	ug/L			10.0	96	75 --- 120		30
Bromoform	9.93	ug/L			10.0	99	70 --- 130		30
Bromomethane	10.7	ug/L			10.0	107	30 --- 145		30
Carbon disulfide	21.2	ug/L			20.0	106	35 --- 160		30
Carbon tetrachloride	9.18	ug/L			10.0	92	65 --- 140		30
Chlorobenzene	9.70	ug/L			10.0	97	80 --- 120		30
Chloroethane	10.7	ug/L			10.0	107	60 --- 135		30
Chloroform	9.72	ug/L			10.0	97	65 --- 135		30
Chloromethane	10.5	ug/L			10.0	105	40 --- 125		30
cis-1,2-Dichloroethene	9.55	ug/L			10.0	96	70 --- 125		30
cis-1,3-Dichloropropene	9.68	ug/L			10.0	97	70 --- 130		30
Cyclohexane	9.75	ug/L			10.0	98	70 --- 130		30
Dibromochloromethane	9.52	ug/L			10.0	95	60 --- 135		30

TETRA TECH

SDG #: 0

Folder #: 127039

Project Name: WILLIAMSON POLISHING &  
PLATING

Project Number: S05-0001-1610-011

**Lab Control Spike Water**

Analytical Run #:	137526	Analysis Date:	05/09/2017	Prep Batch #:	Matrix:	LIQUID
CTLab #:	865026	Analysis Time:	08:32	Prep Date/Time:	Method:	SW8260C
Parent Sample #:		Analyst:	AGK	Prep Analyst:		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Dichlorodifluoromethane	9.22	ug/L			10.0	92	30 --- 155		30
Ethylbenzene	10.4	ug/L			10.0	104	75 --- 125		30
Isopropylbenzene	10.4	ug/L			10.0	104	75 --- 125		30
m & p-Xylene	20.1	ug/L			20.0	100	75 --- 130		30
Methyl acetate	9.37	ug/L			10.0	94	70 --- 130		30
Methyl tert-butyl ether	9.92	ug/L			10.0	99	65 --- 125		30
Methylcyclohexane	9.77	ug/L			10.0	98	70 --- 130		30
Methylene chloride	11.6	ug/L			10.0	116	55 --- 140		30
o-Xylene	9.72	ug/L			10.0	97	80 --- 120		30
Styrene	10.3	ug/L			10.0	103	65 --- 135		30
Tetrachloroethene	9.19	ug/L			10.0	92	45 --- 150		30
Toluene	9.32	ug/L			10.0	93	75 --- 120		30
trans-1,2-Dichloroethene	9.70	ug/L			10.0	97	60 --- 140		30
trans-1,3-Dichloropropene	9.97	ug/L			10.0	100	55 --- 140		30
Trichloroethene	9.14	ug/L			10.0	91	70 --- 125		30
Trichlorofluoromethane	9.90	ug/L			10.0	99	60 --- 145		30
Vinyl chloride	10.5	ug/L			10.0	105	50 --- 145		30

TETRA TECH

SDG #: 0

Folder #: 127039

Project Name: WILLIAMSON POLISHING &  
PLATING

Project Number: S05-0001-1610-011

**Method Blank Water**

Analytical Run #:	137526	Analysis Date:	05/09/2017	Prep Batch #:	Matrix:	LIQUID
CTLab #:	865104	Analysis Time:	09:33	Prep Date/Time:	Method:	SW8260C
Parent Sample #:		Analyst:	AGK	Prep Analyst:		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.21	ug/L		U	0		0.25		
1,1,2,2-Tetrachloroethane	0.19	ug/L		U	0		0.25		
1,1,2-Trichloroethane	0.26	ug/L		U	0		0.50		
1,1-Dichloroethane	0.20	ug/L		U	0		0.25		
1,1-Dichloroethene	0.24	ug/L		U	0		0.25		
1,2,3-Trichlorobenzene	0.3	ug/L		U	0		0.5		
1,2,4-Trichlorobenzene	0.3	ug/L		U	0		0.5		
1,2-Dibromo-3-chloropropane	0.4	ug/L		U	0		0.5		
1,2-Dibromoethane	0.16	ug/L		U	0		0.25		
1,2-Dichlorobenzene	0.23	ug/L		U	0		0.25		
1,2-Dichloroethane	0.3	ug/L		U	0		0.5		
1,2-Dichloropropane	0.22	ug/L		U	0		0.25		
1,3-Dichlorobenzene	0.26	ug/L		U	0		0.50		
1,4-Dichlorobenzene	0.23	ug/L		U	0		0.25		
1,4-Dioxane	5	ug/L		U	0		12.5		
112Trichloro122trifluoroethane	0.5	ug/L		U	0		0.5		
2-Butanone	2.4	ug/L		U	0		2.5		
2-Hexanone	4	ug/L		U	0		5		
4-Methyl-2-pentanone	3	ug/L		U	0		5		
Acetone	5	ug/L		U	0		5		
Benzene	0.19	ug/L		U	0		0.25		
Bromochloromethane	0.19	ug/L		U	0		0.25		
Bromodichloromethane	0.20	ug/L		U	0		0.25		
Bromoform	0.22	ug/L		U	0		0.25		
Bromomethane	0.5	ug/L		U	0		0.5		
Carbon disulfide	0.5	ug/L		U	0		0.5		
Carbon tetrachloride	0.23	ug/L		U	0		0.25		
Chlorobenzene	0.24	ug/L		U	0		0.25		
Chloroethane	0.4	ug/L		U	0		0.5		
Chloroform	0.15	ug/L		U	0		0.25		
Chloromethane	0.405	ug/L			0		0.5		
cis-1,2-Dichloroethene	0.25	ug/L		U	0		0.25		
cis-1,3-Dichloropropene	0.19	ug/L		U	0		0.25		
Cyclohexane	0.28	ug/L		U	0		0.50		
Dibromochloromethane	0.19	ug/L		U	0		0.25		
Dichlorodifluoromethane	0.26	ug/L		U	0		0.50		
Ethylbenzene	0.22	ug/L		U	0		0.25		
Isopropylbenzene	0.18	ug/L		U	0		0.25		
m & p-Xylene	0.5	ug/L		U	0		0.5		
Methyl acetate	0.3	ug/L		U	0		0.5		
Methyl tert-butyl ether	0.29	ug/L		U	0		0.50		
Methylcyclohexane	0.23	ug/L		U	0		0.25		
Methylene chloride	0.4	ug/L		U	0		1.0		

TETRA TECH

SDG #: 0

Folder #: 127039

Project Name: WILLIAMSON POLISHING &  
PLATING

Project Number: S05-0001-1610-011

**Method Blank Water**

Analytical Run #:	137526	Analysis Date:	05/09/2017	Prep Batch #:	Matrix:	LIQUID
CTLab #:	865104	Analysis Time:	09:33	Prep Date/Time:	Method:	SW8260C
Parent Sample #:		Analyst:	AGK	Prep Analyst:		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
o-Xylene	0.24	ug/L		U	0		0.25		
Styrene	0.20	ug/L		U	0		0.25		
Tetrachloroethene	0.3	ug/L		U	0		0.5		
Toluene	0.22	ug/L		U	0		0.25		
trans-1,2-Dichloroethene	0.25	ug/L		U	0		0.25		
trans-1,3-Dichloropropene	0.19	ug/L		U	0		0.25		
Trichloroethene	0.21	ug/L		U	0		0.25		
Trichlorofluoromethane	0.20	ug/L		U	0		0.25		
Vinyl chloride	0.18	ug/L		U	0		0.25		

**Matrix Spike Duplicate Water**

Analytical Run #:	137526	Analysis Date:	05/09/2017	Prep Batch #:	Matrix:	GROUND WATER
CTLab #:	865816	Analysis Time:	17:59	Prep Date/Time:	Method:	SW8260C
Parent Sample #:	865815	Analyst:	AGK	Prep Analyst:		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.3	ug/L	10		10.0	103	65 --- 130	2	30
1,1,2,2-Tetrachloroethane	9.70	ug/L	BDL		10.0	97	65 --- 130	4	30
1,1,2-Trichloroethane	8.98	ug/L	BDL		10.0	90	75 --- 125	4	30
1,1-Dichloroethane	10.7	ug/L	0.52		10.0	102	70 --- 135	11	30
1,1-Dichloroethene	11.0	ug/L	BDL		10.0	110	70 --- 130	6	30
1,2 Dichloroethane-d4	102	% Recovery			100	102	70 --- 120		
1,2,3-Trichlorobenzene	9.18	ug/L	BDL		10.0	92	55 --- 140	2	30
1,2,4-Trichlorobenzene	9.69	ug/L	BDL		10.0	97	65 --- 135	4	30
1,2-Dibromo-3-chloropropane	8.88	ug/L	BDL		10.0	89	50 --- 130	0	30
1,2-Dibromoethane	9.49	ug/L	BDL		10.0	95	80 --- 120	2	30
1,2-Dichlorobenzene	9.75	ug/L	BDL		10.0	98	70 --- 120	5	30
1,2-Dichloroethane	9.59	ug/L	BDL		10.0	96	70 --- 130	0	30
1,2-Dichloropropane	10.3	ug/L	BDL		10.0	103	75 --- 125	0	30
1,3-Dichlorobenzene	9.97	ug/L	BDL		10.0	100	75 --- 125	3	30
1,4-Dichlorobenzene	9.31	ug/L	BDL		10.0	93	75 --- 125	1	30
1,4-Dioxane	351	ug/L	BDL		500	70	50 --- 143	4	30
112Trichloro122trifluoroethane	21.6	ug/L	BDL		20.0	108	70 --- 130	3	30
2-Butanone	94.7	ug/L	BDL		100	95	30 --- 150	1	30
2-Hexanone	91.1	ug/L	BDL		100	91	55 --- 130	5	30
4-Methyl-2-pentanone	89.2	ug/L	BDL		100	89	60 --- 135	6	30
Acetone	91.2	ug/L	BDL		100	91	40 --- 140	8	30
Benzene	10.0	ug/L	BDL		10.0	100	80 --- 120	1	30
Bromochloromethane	9.13	ug/L	BDL		10.0	91	65 --- 130	0	30
Bromodichloromethane	9.68	ug/L	BDL		10.0	97	75 --- 120	5	30
Bromofluorobenzene	98.0	% Recovery			100	98.0	75 --- 120		
Bromoform	8.81	ug/L	BDL		10.0	88	70 --- 130	1	30
Bromomethane	11.4	ug/L	BDL		10.0	114	30 --- 145	12	30
Carbon disulfide	22.2	ug/L	BDL		20.0	111	35 --- 160	4	30
Carbon tetrachloride	9.68	ug/L	BDL		10.0	97	65 --- 140	3	30
Chlorobenzene	10.0	ug/L	BDL		10.0	100	80 --- 120	2	30
Chloroethane	11.7	ug/L	BDL		10.0	117	60 --- 135	4	30
Chloroform	9.91	ug/L	BDL		10.0	99	65 --- 135	3	30
Chloromethane	11.0	ug/L	BDL		10.0	110	40 --- 125	1	30
cis-1,2-Dichloroethene	14.6	ug/L	4.7		10.0	99	70 --- 125	2	30
cis-1,3-Dichloropropene	9.62	ug/L	BDL		10.0	96	70 --- 130	3	30
Cyclohexane	10.9	ug/L	BDL		10.0	109	77 --- 129	2	30
d8-Toluene	97.0	% Recovery			100	97.0	85 --- 120		
Dibromochloromethane	9.22	ug/L	BDL		10.0	92	60 --- 135	1	30
Dibromofluoromethane	101	% Recovery			100	101	85 --- 115		
Dichlorodifluoromethane	10.9	ug/L	BDL		10.0	109	30 --- 155	5	30
Ethylbenzene	10.5	ug/L	BDL		10.0	105	75 --- 125	1	30
Isopropylbenzene	10.6	ug/L	BDL		10.0	106	75 --- 125	2	30
m & p-Xylene	20.5	ug/L	BDL		20.0	102	75 --- 130	3	30

TETRA TECH

SDG #: 0

Folder #: 127039

Project Name: WILLIAMSON POLISHING &  
PLATING

Project Number: S05-0001-1610-011

**Matrix Spike Duplicate Water**

Analytical Run #:	137526	Analysis Date:	05/09/2017	Prep Batch #:	Matrix:	GROUND WATER
CTLab #:	865816	Analysis Time:	17:59	Prep Date/Time:	Method:	SW8260C
Parent Sample #:	865815	Analyst:	AGK	Prep Analyst:		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Methyl acetate	9.29	ug/L	BDL		10.0	93	24 --- 174	16	30
Methyl tert-butyl ether	10.0	ug/L	BDL		10.0	100	65 --- 125	2	30
Methylcyclohexane	10.3	ug/L	BDL		10.0	103	76 --- 133	6	30
Methylene chloride	9.65	ug/L	BDL		10.0	96	55 --- 140	13	30
o-Xylene	9.89	ug/L	BDL		10.0	99	80 --- 120	1	30
Styrene	10.1	ug/L	BDL		10.0	101	65 --- 135	0	30
Tetrachloroethene	9.74	ug/L	BDL		10.0	97	45 --- 150	2	30
Toluene	9.50	ug/L	BDL		10.0	95	75 --- 120	0	30
trans-1,2-Dichloroethene	10.8	ug/L	1.0		10.0	98	60 --- 140	5	30
trans-1,3-Dichloropropene	9.55	ug/L	BDL		10.0	96	55 --- 140	8	30
Trichloroethene	35.1	ug/L	25		10.0	101	70 --- 125	1	30
Trichlorofluoromethane	10.8	ug/L	BDL		10.0	108	60 --- 145	7	30
Vinyl chloride	11.4	ug/L	BDL		10.0	114	50 --- 145	1	30

**Matrix Spike Water**

Analytical Run #:	137526	Analysis Date:	05/09/2017	Prep Batch #:	Matrix:	GROUND WATER
CTLab #:	865815	Analysis Time:	17:28	Prep Date/Time:	Method:	SW8260C
Parent Sample #:	862360	Analyst:	AGK	Prep Analyst:		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
1,1,1-Trichloroethane	19.9	ug/L	10		10.0	99	65 --- 130		30
1,1,2,2-Tetrachloroethane	9.35	ug/L	BDL		10.0	94	65 --- 130		30
1,1,2-Trichloroethane	8.62	ug/L	BDL		10.0	86	75 --- 125		30
1,1-Dichloroethane	9.59	ug/L	0.52		10.0	91	70 --- 135		30
1,1-Dichloroethene	10.3	ug/L	BDL		10.0	103	70 --- 130		30
1,2 Dichloroethane-d4	102	% Recovery			100	102	70 --- 120		
1,2,3-Trichlorobenzene	9.01	ug/L	BDL		10.0	90	55 --- 140		30
1,2,4-Trichlorobenzene	9.33	ug/L	BDL		10.0	93	65 --- 135		30
1,2-Dibromo-3-chloropropane	8.84	ug/L	BDL		10.0	88	50 --- 130		30
1,2-Dibromoethane	9.67	ug/L	BDL		10.0	97	80 --- 120		30
1,2-Dichlorobenzene	9.24	ug/L	BDL		10.0	92	70 --- 120		30
1,2-Dichloroethane	9.60	ug/L	BDL		10.0	96	70 --- 130		30
1,2-Dichloropropane	10.3	ug/L	BDL		10.0	103	75 --- 125		30
1,3-Dichlorobenzene	9.70	ug/L	BDL		10.0	97	75 --- 125		30
1,4-Dichlorobenzene	9.26	ug/L	BDL		10.0	93	75 --- 125		30
1,4-Dioxane	364	ug/L	BDL		500	73	50 --- 143		30
112Trichloro122trifluoroethane	21.0	ug/L	BDL		20.0	105	70 --- 130		30
2-Butanone	96.1	ug/L	BDL		100	96	30 --- 150		30
2-Hexanone	96.2	ug/L	BDL		100	96	55 --- 130		30
4-Methyl-2-pentanone	94.8	ug/L	BDL		100	95	60 --- 135		30
Acetone	98.9	ug/L	BDL		100	99	40 --- 140		30
Benzene	9.89	ug/L	BDL		10.0	99	80 --- 120		30
Bromochloromethane	9.17	ug/L	BDL		10.0	92	65 --- 130		30
Bromodichloromethane	9.20	ug/L	BDL		10.0	92	75 --- 120		30
Bromofluorobenzene	97.0	% Recovery			100	97.0	75 --- 120		
Bromoform	8.87	ug/L	BDL		10.0	89	70 --- 130		30
Bromomethane	10.2	ug/L	BDL		10.0	102	30 --- 145		30
Carbon disulfide	21.3	ug/L	BDL		20.0	106	35 --- 160		30
Carbon tetrachloride	9.41	ug/L	BDL		10.0	94	65 --- 140		30
Chlorobenzene	9.88	ug/L	BDL		10.0	99	80 --- 120		30
Chloroethane	11.2	ug/L	BDL		10.0	112	60 --- 135		30
Chloroform	9.66	ug/L	BDL		10.0	97	65 --- 135		30
Chloromethane	11.1	ug/L	BDL		10.0	111	40 --- 125		30
cis-1,2-Dichloroethene	14.9	ug/L	4.7		10.0	102	70 --- 125		30
cis-1,3-Dichloropropene	9.90	ug/L	BDL		10.0	99	70 --- 130		30
Cyclohexane	10.6	ug/L	BDL		10.0	106	77 --- 129		30
d8-Toluene	102	% Recovery			100	102	85 --- 120		
Dibromochloromethane	9.09	ug/L	BDL		10.0	91	60 --- 135		30
Dibromofluoromethane	101	% Recovery			100	101	85 --- 115		
Dichlorodifluoromethane	11.4	ug/L	BDL		10.0	114	30 --- 155		30
Ethylbenzene	10.4	ug/L	BDL		10.0	104	75 --- 125		30
Isopropylbenzene	10.4	ug/L	BDL		10.0	104	75 --- 125		30
m & p-Xylene	19.9	ug/L	BDL		20.0	100	75 --- 130		30

TETRA TECH

SDG #: 0

Folder #: 127039

Project Name: WILLIAMSON POLISHING &  
PLATING

Project Number: S05-0001-1610-011

**Matrix Spike Water**

Analytical Run #:	137526	Analysis Date:	05/09/2017	Prep Batch #:	Matrix:	GROUND WATER
CTLab #:	865815	Analysis Time:	17:28	Prep Date/Time:	Method:	SW8260C
Parent Sample #:	862360	Analyst:	AGK	Prep Analyst:		

Analyte	QC sample result	Units	Parent sample result	Qualifier(s)	Spike Amount Added	% Recovery	Control Limits	RPD	RPD Limit
Methyl acetate	10.9	ug/L	BDL		10.0	109	24 --- 174		30
Methyl tert-butyl ether	9.86	ug/L	BDL		10.0	99	65 --- 125		30
Methylcyclohexane	9.73	ug/L	BDL		10.0	97	76 --- 133		30
Methylene chloride	8.51	ug/L	BDL		10.0	85	55 --- 140		30
o-Xylene	9.76	ug/L	BDL		10.0	98	80 --- 120		30
Styrene	10.2	ug/L	BDL		10.0	102	65 --- 135		30
Tetrachloroethene	9.53	ug/L	BDL		10.0	95	45 --- 150		30
Toluene	9.48	ug/L	BDL		10.0	95	75 --- 120		30
trans-1,2-Dichloroethene	10.3	ug/L	1.0		10.0	93	60 --- 140		30
trans-1,3-Dichloropropene	10.3	ug/L	BDL		10.0	103	55 --- 140		30
Trichloroethene	35.5	ug/L	25		10.0	105	70 --- 125		30
Trichlorofluoromethane	11.6	ug/L	BDL		10.0	116	60 --- 145		30
Vinyl chloride	11.3	ug/L	BDL		10.0	113	50 --- 145		30

## Sample Condition Report

Folder #: 127039  
Client: TETRA TECH

Print Date / Time: 05/02/2017 14:12  
Received Date / Time / By: 05/02/2017 13:05 JLS

Project Name: WILLIAMSON POLISHING & PLATING  
Project Phase: INDIANAPOLIS, IN

Log-In Date / Time / By: 05/02/2017 14:11 JLS  
Project #: S05-0001-1610-011 PM: BMS

Coolers: 5520  
Custody Seals Present : Y

Temperature: 0.9C  
COC Present?: Y Complete? Y On Ice: Y

Seal Intact? Y  
Ship Method: FEDEX EXPRESS  
Adequate Packaging: Y

Numbers: DATED AND SIGNED  
Tracking Number: 7864208585745  
Temp Blank Enclosed? Y

Notes: THE SAMPLES WERE RECEIVED IN GOOD CONDITION ON ICE.

TWO CUSTODY SEALS WERE PRESENT AND INTACT UPON RECEIPT - BOTH WERE DATED 5/1/17 AND SIGNED.

TRIP BLANKS INCLUDED IN COOLER BUT NOT LISTED ON COC. ADDED TO COC AND LOGGED BY JLS.

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
862356 WPP-GW13-170427	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	Total # of Containers of Type ( VOA HCL ) = 3			

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
862357 WPP-GW12-170427	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	Total # of Containers of Type ( VOA HCL ) = 3			

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
862358 WPP-GW05-170427	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	Total # of Containers of Type ( VOA HCL ) = 3			

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
862359 WPP-GW05-170427-D	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	Total # of Containers of Type ( VOA HCL ) = 3			

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
862360 WPP-GW07-170427	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	Total # of Containers of Type ( VOA HCL ) = 6			
Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
862361 WPP-GW09-170427	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	Total # of Containers of Type ( VOA HCL ) = 3			
Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
862362 WPP-GW02-170427	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	Total # of Containers of Type ( VOA HCL ) = 3			
Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
862363 WPP-GW04-170427	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	Total # of Containers of Type ( VOA HCL ) = 3			
Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
862364 WPP-GW06-170428	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	Total # of Containers of Type ( VOA HCL ) = 3			
Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
862365 WPP-GW06-170428-D	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	VOA HCL	1	/	VOC
	Total # of Containers of Type ( VOA HCL ) = 3			
Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests

862366 WPP-GW11-170428

VOA HCL	1	/	VOC
VOA HCL	1	/	VOC
VOA HCL	1	/	VOC
<b>Total # of Containers of Type ( VOA HCL ) = 3</b>			

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
-------------------------	----------------	------------	------------------	-------

862367 WPP-GW10-170428

VOA HCL	1	/	VOC
VOA HCL	1	/	VOC
VOA HCL	1	/	VOC
<b>Total # of Containers of Type ( VOA HCL ) = 3</b>			

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
-------------------------	----------------	------------	------------------	-------

862368 WPP-GW03-170428

VOA HCL	1	/	VOC
VOA HCL	1	/	VOC
VOA HCL	1	/	VOC
<b>Total # of Containers of Type ( VOA HCL ) = 3</b>			

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
-------------------------	----------------	------------	------------------	-------

862369 WPP-GW08-170428

VOA HCL	1	/	VOC
VOA HCL	1	/	VOC
VOA HCL	1	/	VOC
<b>Total # of Containers of Type ( VOA HCL ) = 3</b>			

Sample ID / Description	Container Type	Cond. Code	pH OK?/Filtered?	Tests
-------------------------	----------------	------------	------------------	-------

862370 TRIP BLANK

VOA HCL	1	/	VOC
VOA HCL	1	/	VOC
<b>Total # of Containers of Type ( VOA HCL ) = 2</b>			

<u>Condition Code</u>	<u>Condition Description</u>
1	Sample Received OK

Company: GEPI

Project Contact: Lucas Stamps

Telephone: 317-797-2420

Project Name: Williamson Polishing  
and Plating

Project #: 505-0001-1610-011

Location: Indianapolis, IN

Sampled By: Lucas Stamps

CT LABORATORIES

1230 Lange Court, Baraboo, WI 53913

608-356-2760 Fax 608-356-2766

www.ctlaboratories.com

Folder #: 127039

Company: TETRA TECH

Project: WILLIAMSON POLISH

Logged By: JLS PM BM

am:

RCRA SDWA NPDES

Waste Other

Report To: Lucas Stamps

EMAIL: lstamps@gepi.com

Company: GEPI

Address:

Invoice To: Chris Burns

EMAIL:

Company: Tetra Tech

Address:

\*Party listed is responsible for payment of invoice as per CT Laboratories' terms and conditions

## Client Special Instructions

Scribe EDD

Level IV

## ANALYSES REQUESTED

## Turnaround Time

Normal RUSH\*

Date Needed:

Rush analysis requires prior  
CT Laboratories' approval

Surcharges:

24 hr 200%

2-3 days 100%

4-9 days 50%

## Matrix:

GW - groundwater SW - surface water WW - wastewater DW - drinking water  
S - soil/sediment SL - sludge A - air M - misc/waste

Filtered? Y/N

VOLS

Total # Containers

Designated MS/MSD

## CT Lab ID #

Lab use only

Collection		Matrix	Grab/Comp	Sample ID Description	Filtered? Y/N	Fill in Spaces with Bottles per Test												Total # Containers	Designated MS/MSD	CT Lab ID # Lab use only
Date	Time																			
4/27/17	0930	GV	C	WPP-GW13-170427	N	3												3		862356
	1030			WPP-GW12-170427		3												3		862357
	1140			WPP-GW05-170427	NA	3												3		862358
	1140			WPP-GW05-170427-D	WV	3												3		862359
	1342			WPP-GW07-170427		6												6	X	862360
	1427			WPP-GW09-170427		3												3		862361
	1507			WPP-GW02-170427		3												3		862362
✓	1546			WPP-GW04-170427		3												3		862363
4/28/17	0900			WPP-GW06-170428		3												3		862364
	0900			WPP-GW06-170428-D		3												3		862365
	0943			WPP-GW11-170428		3												3		862366
✓	1022	✓	✓	WPP-GW10-170428	✓	3												3		862367

Relinquished By:

Date/Time

5/1/17 1430

Received By:

Date/Time

5/2/17 1305

Received by:

Date/Time

Received for Laboratory by:

Date/Time

5/1/17 1411

Lab Use Only

Ice Present (Yes) No

Temperature 0.9

Cooler # 5520

## CT Laboratories Terms and Conditions

Where a purchaser (Client) places an order for laboratory, consulting or sampling services from CT Laboratories (CTL), CTL shall provide the ordered services pursuant to these Terms and Conditions, and the related Quotation, or as agreed in a negotiated contract. In the absence of a written agreement to the contrary, the Order constitutes an acceptance by the Client of CTL's offer to do business under these Terms and Conditions, and an agreement to be bound by these Terms and Conditions. No contrary or additional terms and conditions expressed in a Client's document shall be deemed to become a part of the contract created upon acceptance of these Terms and Conditions, unless accepted by CTL in advance of the start of the project and in writing.

### 1. ORDERS AND RECEIPT OF SAMPLES (Sample Acceptance Policy)

1.1 The Client may place the Order (i.e., specify a Scope of Work) either by submitting a purchase order to CTL in writing, by telephone (confirmed in writing) or by negotiated contract. Whichever option the Client selects for placing the Order, the Order shall not be valid unless it contains sufficient specification to enable CTL to carry out the Client's requirements. It is the policy of CT Laboratories that samples not meeting the acceptance criteria, outlined in the NELAC standards and Section 5.8.3.2 of the DOD QSM, will not be accepted by the laboratory or will be qualified on the final report. All samples submitted to the laboratory must: (1) be accompanied by proper, full and complete documentation, including sample identification, location, date and time of collection, the collector's name, type of preservation (if any), type of sample, any special comments concerning the sample and any additional pertinent fields on the chain-of-custody. In the absence of any of the required information, the laboratory will attempt to contact the client to obtain the information; if unable to obtain the necessary information, the final report will be qualified. (2) be labeled appropriately with a unique sample identification written with indelible ink on water resistant labels. If the laboratory cannot determine the identity of a sample, it will be rejected and the client will be contacted for further instructions or resampling. (3) be in an appropriate sample container. If the container is inappropriate, the client will be contacted for further instructions or resampling. If analysis is possible, the final report will be qualified. CT Laboratories can provide a sampling guide containing approved containers and preservations for analytical methods requested. (4) adhere to specified holding times. If samples are received with less than 1/2 the holding time remaining for the requested test, CT Laboratories will make its best effort to analyze the samples and notify the client. If holding times are exceeded, the final report will be qualified. (5) contain adequate sample volume to perform the necessary testing. If sufficient volume is not present, the sample will be rejected and the client will be contacted for further instructions or resampling. If samples show signs of damage, contamination or inadequate preservation, the client will be notified. If analysis can be performed, the final report will be qualified. If not, the samples will be rejected and the client notified for further instructions or resampling. 1.2 CT Laboratories must be supplied with complete written disclosure of the known or suspected presence of any hazardous substances, as defined by applicable federal or state law. Where any samples which were not accompanied by the required disclosure, cause interruptions in the lab's ability to process work due to contamination of instruments or work areas, the Client will be responsible for the costs of clean up and recovery. 1.3 Prior to Sample Acceptance, the entire risk of loss or damage to samples remains with the Client. In no event will CTL have any responsibility or liability for the action or inaction of any carrier shipping or delivering any sample to or from CTL's premises. Client is responsible to assure that any sample containing any hazardous substance which is to be delivered to CTL's premises will be packaged, labeled, transported and delivered properly and in accordance with applicable laws.

### 2. PAYMENT TERMS

2.1 Services performed by CTL will be in accordance with prices quoted and later confirmed in writing or as stated in the Price Schedule. Invoices may be submitted to Client upon completion of any sample delivery group. Payment in advance is required for all Clients except those whose credit has been established with CTL. For Clients with approved credit, payment terms are net 30 days from the date of invoice by CTL. All overdue payments are subject to an additional interest and service charge of one and one-half percent (1.5%) (or the maximum rate permissible by law, whichever is lesser) per month or portion thereof from the due date until the date of payment. All fees are charged or billed directly to the Client. The billing of a third party will not be accepted without a statement, signed by the third party that acknowledges and accepts payment responsibility. CTL may suspend work and withhold delivery of data under any time in the event Client fails to make timely payment of its invoices. Client shall be responsible for all costs and expenses of collection including reasonable attorney's fees. CTL reserves the right to refuse to proceed with work at any time based upon an unfavorable Client credit report.

### 3. CHANGE ORDERS, TERMINATION

3.1 Changes to the Scope of Work, price, or result delivery date may be initiated by CTL after Sample Acceptance due to any condition which conflicts with analytical, QA or other protocols warranted in these Terms and Conditions. CTL will not proceed with such changes until an agreement with the Client is reached on the amount of any cost, schedule change or technical change to the Scope of Work, and such agreement is documented in writing. 3.2 Changes to the Scope of Work, including but not limited to increasing or decreasing the work, changing test and analysis specification or acceleration in the performance of the work may be initiated by the Client after sample acceptance. Such a change will be documented in writing and may result in a change in cost and turnaround time commitment. CTL's acceptance of such changes is contingent upon technical feasibility and operational capacity. 3.3 Suspension or termination of all or any part of the work may be initiated by the Client. CTL will be compensated consistent with Section 2 of these Terms and Conditions. CTL will complete all work in progress and be paid in full for all work completed.

### 4. WARRANTIES AND LIABILITY

4.1 Where applicable, CTL will use analytical methodologies which are in substantial conformity with published test methods. CTL has implemented these methods in its Laboratory Quality Manuals and referenced Standard Operating Procedures and where the nature or composition of the sample requires it, CTL reserves the right to deviate from these methodologies as necessary or appropriate, based on the reasonable judgment of CTL, which deviations, if any, will be made on a basis consistent with recognized standards of the industry and/or CTL's Laboratory Quality Manuals. Client may request that CTL perform according to a mutually agreed Quality Assurance Project Plan (QAPP). In the event that samples arrive prior to agreement on a QAPP, CTL will proceed with analyses under its standard Quality Manuals then in effect, and CTL will not be responsible for any resampling or other charges if work must be repeated to comply with a subsequently finalized QAPP. 4.2 CTL shall start preparation and/or analysis within holding times provided that Sample Acceptance occurs within 48 hours of sampling or 1/2 of the holding time for the test, whichever is less. Where resolution of inconsistencies leading to Sample Acceptance does not occur within this period, CTL will use its best efforts to meet holding times and will proceed with the work provided that, in CTL's judgment, the chain-of-custody or definition of the Scope of Work provide sufficient guidance. Reanalysis of samples to comply with CTL's Quality Manuals will be deemed to have met holding times provided the initial analysis was performed within the applicable holding time. Where reanalysis demonstrates that sample matrix interference is the cause of failure to meet any Quality Manual requirements, the warranty will be deemed to have been met. 4.3 CTL warrants that it possesses and maintains all licenses and certifications which are required to perform services under these Terms and Conditions provided that such requirements are specified in writing to CTL prior to Sample Acceptance. CTL will notify the Client in writing of any decertification or revocation of any license, or notice of either, which affects work in progress. 4.4 The warranty obligations set forth in Sections 4.1, 4.2 and 4.3 are the sole and exclusive warranties given by CTL in connection with any services performed by CTL or any Results generated from such services, and CTL gives and makes NO OTHER REPRESENTATION OR WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. No representative of CTL is authorized to give or make any other representation or warranty or modify this warranty in any way. 4.5 Client's sole and exclusive remedy for the breach of warranty in connection with any services performed by CTL, will be limited to repeating any services performed, contingent on the Client's providing, at the request of CTL and at the Client's expense, additional sample(s) if necessary. Any reanalysis requested by the Client generating Results consistent with the original Results will be at the Client's expense. If resampling is necessary, CTL's liability for resampling costs will be limited to actual cost or one hundred or one hundred fifty dollars (\$150) per sample, whichever is less. 4.6 CTL's liability for any and all causes of action arising hereunder, whether based in contract, tort, warranty, negligence or otherwise, shall be limited to the lesser amount of compensation for the services performed or \$100,000. All claims, including those for negligence, shall be deemed waived unless suit thereon is filed within one year after CTL's completion of the services. Under no circumstances, whether arising in contract, tort (including negligence), or otherwise, shall CTL be responsible for loss of use, loss of profits, or for any special, indirect, incidental or consequential damages occasioned by the services performed or by application or use of the reports prepared. 4.7 In no event shall CTL have any responsibility or liability to the Client for any failure or delay in performance by CTL which results, directly or indirectly, in whole or in part, from any cause or circumstance beyond the reasonable control of CTL. Such causes and circumstances shall include, but not be limited to, acts of God, acts of Client, acts or orders of any governmental authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, equipment breakdown, matrix interference or unknown highly contaminated samples that impact instrument operation, unavailability of supplies from usual suppliers, difficulties or delays in transportation, mail or delivery services, or any other cause beyond CTL's reasonable control.

### 5. RESULTS, WORK PRODUCT

5.1 Data or information provided to CTL or generated by services performed under this agreement shall only become the property of the Client upon receipt in full by CTL of payment for the whole Order. Ownership of any analytical method, QA/QC protocols, software programs or equipment developed by CTL for performance of work will be retained by CTL, and Client shall not disclose such information to any third party. 5.2 Data and sample materials provided by Client or at Client's request, and the result obtained by CTL shall be held in confidence (unless such information is generally available to the public or is in the public domain or Client has failed to pay CTL for all services rendered or is otherwise in breach of these Terms and Conditions), subject to any disclosure required by law or legal process. 5.3 Should the Results delivered by CTL be used by the Client or Client's client, even though subsequently determined not to meet the warranties described in these Terms and Conditions, then the compensation will be adjusted based upon mutual agreement. In no case shall the Client unreasonably withhold CTL's right to independently defend its data. 5.4 CTL reserves the right to subcontract services ordered by the Client to another laboratory or laboratories, if, in CTL's sole judgment, it is reasonably necessary, appropriate or advisable to do so, and with the Client's permission. CTL will in no way be liable for any subcontracted services and all applicable warranties, guarantees and insurance are those of the subcontracted laboratory. 5.5 CTL shall dispose of the Client's samples 30 days after the analytical report is issued, unless instructed to store them for an alternate period of time or to return such samples to the Client, in a manner consistent with U.S. Environmental Protection Agency regulations or other applicable Federal, state or local requirements. Any samples for projects that are canceled or not accepted, or for which return was requested, will be returned to the Client at their own expense. CTL reserves the right to return to the Client any sample or unused portion of a sample that is not within CTL's permitted capability or the capabilities of CTL's designated waste disposal vendor(s). 5.6 Unless a different time period is agreed to in any order under these Terms and Conditions, CTL agrees to retain all records for five (5) years. 5.7 In the event that CTL is required to respond to legal process related to services for Client, Client agrees to reimburse CTL for hourly charges for personnel involved in the response and attorney fees reasonably incurred in obtaining advice concerning the response, preparation to testify, and appearances related to the legal process, travel and all reasonable expenses associated with the litigation.

### 6. INSURANCE

6.1 CTL shall maintain in force during the performance of services under these Terms and Conditions, Workers' Compensation and Employer's Liability Insurance in accordance with the laws of the states having jurisdiction over CTL's employees who are engaged in the performance of the work. CTL shall also maintain during such period, Comprehensive General and Contractual Liability (limit of \$2,000,000 per occurrence/aggregate), Comprehensive Automobile Liability, owned and hired, (\$1,000,000 combined single limit), and Professional/Pollution Liability Insurance (limit of \$5,000,000 per occurrence/aggregate). Any Client required changes to these limits or conditions may result in a change in cost to the Client.

### 7. AUDIT

7.1 Upon prior notice to CTL, the Client may audit and inspect CTL's records and accounts covering reimbursable costs related to work done for the Client, for a period of one (1) year after completion of the work. The purpose of any such audit shall be only for verification of such costs, and CTL shall not be required to provide access to cost records where prices are expressed as fixed fees or published unit prices.

Company:

Project Contact:

Telephone:

Project Name:

Project #:

Location:

Sampled By:

CT LABORATORIES

1230 Lange Court, Baraboo, WI 53913  
608-356-2760 Fax 608-356-2766  
www.ctlaboratories.com

Report To:

EMAIL:

Company:

Address:

Invoice To:\*

EMAIL:

Company:

Address:

Lab Use Only  
Place Header Sticker Here

Program:

QSM RCRA SDWA NPDES  
Solid Waste Other \_\_\_\_\_

PO #

\*Party listed is responsible for payment of invoice as per CT Laboratories' terms and conditions

## Client Special Instructions

\* Added by job per samples  
rec'd

## ANALYSES REQUESTED

## Matrix:

GW - groundwater SW - surface water WW - wastewater DW - drinking water  
S - soil/sediment SL - sludge A - air M - misc/waste

Filtered? Y/N

VOCs

Total # Containers

Designated MS/MSD

## Turnaround Time

Normal RUSH\*

Date Needed:

Rush analysis requires prior  
CT Laboratories' approval

Surcharges:

24 hr 200%

2-3 days 100%

4-9 days 50%

## Collection

Date Time

Matrix

Grab/  
Comp

## Sample ID Description

Fill in Spaces with Bottles per Test

## CT Lab ID #

Lab use only

4/25/17 1100

GW

C

WPP-GW03-170428

2

3

3

862368

" 1142

"

"

WPP-GW08-170428

"

3

3

862369

4/27

TRIP Blank \*

2

862370

Relinquished By:

Date/Time

5/1/17 1430

Received By:

Date/Time

5/2/17 1305

Lab Use Only

Ice Present ☒ Yes ☐ No

Received by:

Date/Time

Received for Laboratory by:

Date/Time

5/2/17 1411

Temperature 0.9Cooler # 5520

## CT Laboratories Terms and Conditions

Where a purchaser (Client) places an order for laboratory, consulting or sampling services from CT Laboratories (CTL), CTL shall provide the ordered services pursuant to these Terms and Conditions, and the related Quotation, or as agreed in a negotiated contract. In the absence of a written agreement to the contrary, the Order constitutes an acceptance by the Client of CTL's offer to do business under these Terms and Conditions, and an agreement to be bound by these Terms and Conditions. No contrary or additional terms and conditions expressed in a Client's document shall be deemed to become a part of the contract created upon acceptance of these Terms and Conditions, unless accepted by CTL in advance of the start of the project and in writing.

### 1. ORDERS AND RECEIPT OF SAMPLES (Sample Acceptance Policy)

1.1 The Client may place the Order (i.e., specify a Scope of Work) either by submitting a purchase order to CTL in writing, by telephone (confirmed in writing) or by negotiated contract. Whichever option the Client selects for placing the Order, the Order shall not be valid unless it contains sufficient specification to enable CTL to carry out the Client's requirements. It is the policy of CT Laboratories that samples not meeting the acceptance criteria, outlined in the NELAP standards and Section 5.8.3.2 of the DOD QSM, will not be accepted by the laboratory or will be qualified on the final report. All samples submitted to the laboratory must: (1) be accompanied by proper, full and complete documentation, including sample identification, location, date and time of collection, the collector's name, type of preservation (if any), type of sample, any special comments concerning the sample and any additional pertinent fields on the chain-of-custody. In the absence of any of the required information, the laboratory will attempt to contact the client to obtain the information; if unable to obtain the necessary information, the final report will be qualified. (2) be labeled appropriately with a unique sample identification written with indelible ink on water resistant labels. If the laboratory cannot determine the identity of a sample, it will be rejected and the client will be contacted for further instructions or resampling. (3) be in an appropriate sample container. If the container is inappropriate, the client will be contacted for further instructions or resampling. If analysis is possible, the final report will be qualified. CT Laboratories can provide a sampling guide containing approved containers and preservations for analytical methods requested. (4) adhere to specified holding times. If samples are received with less than 1/2 the holding time remaining for the requested test, CT Laboratories will make its best effort to analyze the samples and notify the client. If holding times are exceeded, the final report will be qualified. (5) contain adequate sample volume to perform the necessary testing. If sufficient volume is not present, the sample will be rejected and the client will be contacted for further instructions or resampling. If samples show signs of damage, contamination or inadequate preservation, the client will be notified. If analysis can be performed, the final report will be qualified. If not, the samples will be rejected and the client notified for further instructions or resampling.

1.2 CT Laboratories must be supplied with complete written disclosure of the known or suspected presence of any hazardous substances, as defined by applicable federal or state law. Where any samples which were not accompanied by the required disclosure, cause interruptions in the lab's ability to process work due to contamination of instruments or work areas, the Client will be responsible for the costs of clean up and recovery.

1.3 Prior to Sample Acceptance, the entire risk of loss or damage to samples remains with the Client. In no event will CTL have any responsibility or liability for the action or inaction of any carrier shipping or delivering any sample to or from CTL's premises. Client is responsible to assure that any sample containing any hazardous substance which is to be delivered to CTL's premises will be packaged, labeled, transported and delivered properly and in accordance with applicable laws.

### 2. PAYMENT TERMS

2.1 Services performed by CTL will be in accordance with prices quoted and later confirmed in writing or as stated in the Price Schedule. Invoices may be submitted to Client upon completion of any sample delivery group. Payment in advance is required for all Clients except those whose credit has been established with CTL. For Clients with approved credit, payment terms are net 30 days from the date of invoice by CTL. All overdue payments are subject to an additional interest and service charge of one and one-half percent (1.5%) (or the maximum rate permissible by law, whichever is lesser) per month or portion thereof from the due date until the date of payment. All fees are charged or billed directly to the Client. The billing of a third party will not be accepted without a statement, signed by the third party that acknowledges and accepts payment responsibility. CTL may suspend work and withhold delivery of data under this order at any time in the event Client fails to make timely payment of its invoices. Client shall be responsible for all costs and expenses of collection including reasonable attorney's fees. CTL reserves the right to refuse to proceed with work at any time based upon an unfavorable Client credit report.

### 3. CHANGE ORDERS, TERMINATION

3.1 Changes to the Scope of Work, price, or result delivery date may be initiated by CTL after Sample Acceptance due to any condition which conflicts with analytical, QA or other protocols warranted in these Terms and Conditions. CTL will not proceed with such changes until an agreement with the Client is reached on the amount of any cost, schedule change or technical change to the Scope of Work, and such agreement is documented in writing.

3.2 Changes to the Scope of Work, including but not limited to increasing or decreasing the work, changing test and analysis specification or acceleration in the performance of the work may be initiated by the Client after sample acceptance. Such a change will be documented in writing and may result in a change in cost and turnaround time commitment. CTL's acceptance of such changes is contingent upon technical feasibility and operational capacity.

3.3 Suspension or termination of all or any part of the work may be initiated by the Client. CTL will be compensated consistent with Section 2 of these Terms and Conditions. CTL will complete all work in progress and be paid in full for all work completed.

### 4. WARRANTIES AND LIABILITY

4.1 Where applicable, CTL will use analytical methodologies which are in substantial conformity with published test methods. CTL has implemented these methods in its Laboratory Quality Manuals and referenced Standard Operating Procedures and where the nature or composition of the sample requires it, CTL reserves the right to deviate from these methodologies as necessary or appropriate, based on the reasonable judgment of CTL, which deviations, if any, will be made on a basis consistent with recognized standards of the industry and/or CTL's Laboratory Quality Manuals. Client may request that CTL perform according to a mutually agreed Quality Assurance Project Plan (QAPP). In the event that samples arrive prior to agreement on a QAPP, CTL will proceed with analyses under its standard Quality Manuals then in effect, and CTL will not be responsible for any resampling or other charges if work must be repeated to comply with a subsequently finalized QAPP.

4.2 CTL shall start preparation and/or analysis within holding times provided that Sample Acceptance occurs within 48 hours of sampling or 1/2 of the holding time for the test, whichever is less. Where resolution of inconsistencies leading to Sample Acceptance does not occur within this period, CTL will use its best efforts to meet holding times and will proceed with the work provided that, in CTL's judgment, the chain-of-custody or definition of the Scope of Work provide sufficient guidance. Reanalysis of samples to comply with CTL's Quality Manuals will be deemed to have met holding times provided the initial analysis was performed within the applicable holding time. Where reanalysis demonstrates that sample matrix interference is the cause of failure to meet any Quality Manual requirements, the warranty will be deemed to have been met.

4.3 CTL warrants that it possesses and maintains all licenses and certifications which are required to perform services under these Terms and Conditions provided that such requirements are specified in writing to CTL prior to Sample Acceptance. CTL will notify the Client in writing of any decertification or revocation of any license, or notice of either, which affects work in progress.

4.4 The warranty obligations set forth in Sections 4.1, 4.2 and 4.3 are the sole and exclusive warranties given by CTL in connection with any services performed by CTL or any Results generated from such services, and CTL gives and makes NO OTHER REPRESENTATION OR WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. No representative of CTL is authorized to give or make any other representation or warranty or modify this warranty in any way.

4.5 Client's sole and exclusive remedy for the breach of warranty in connection with any services performed by CTL, will be limited to repeating any services performed, contingent on the Client's providing, at the request of CTL and at the Client's expense, additional sample(s) if necessary. Any reanalysis requested by the Client generating Results consistent with the original Results will be at the Client's expense. If resampling is necessary, CTL's liability for resampling costs will be limited to actual cost or one hundred or one hundred fifty dollars (\$150) per sample, whichever is less.

4.6 CTL's liability for any and all causes of action arising hereunder, whether based in contract, tort, warranty, negligence or otherwise, shall be limited to the lesser amount of compensation for the services performed or \$100,000. All claims, including those for negligence, shall be deemed waived unless suit thereon is filed within one year after CTL's completion of the services. Under no circumstances, whether arising in contract, tort (including negligence), or otherwise, shall CTL be responsible for loss of use, loss of profits, or for any special, indirect, incidental or consequential damages occasioned by the services performed or by application or use of the reports prepared.

4.7 In no event shall CTL have any responsibility or liability to the Client for any failure or delay in performance by CTL which results, directly or indirectly, in whole or in part, from any cause or circumstance beyond the reasonable control of CTL. Such causes and circumstances shall include, but not be limited to, acts of God, acts of Client, acts or orders of any governmental authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, equipment breakdown, matrix interference or unknown highly contaminated samples that impact instrument operation, unavailability of supplies from usual suppliers, difficulties or delays in transportation, mail or delivery services, or any other cause beyond CTL's reasonable control.

### 5. RESULTS, WORK PRODUCT

5.1 Data or information provided to CTL or generated by services performed under this agreement shall only become the property of the Client upon receipt in full by CTL of payment for the whole Order. Ownership of any analytical method, QA/QC protocols, software programs or equipment developed by CTL for performance of work will be retained by CTL, and Client shall not disclose such information to any third party.

5.2 Data and sample materials provided by Client or at Client's request, and the result obtained by CTL shall be held in confidence (unless such information is generally available to the public or is in the public domain or Client has failed to pay CTL for all services rendered or is otherwise in breach of these Terms and Conditions), subject to any disclosure required by law or legal process.

5.3 Should the Results delivered by CTL be used by the Client or Client's client, even though subsequently determined not to meet the warranties described in these Terms and Conditions, then the compensation will be adjusted based upon mutual agreement. In no case shall the Client unreasonably withhold CTL's right to independently defend its data.

5.4 CTL reserves the right to subcontract services ordered by the Client to another laboratory or laboratories, if, in CTL's sole judgment, it is reasonably necessary, appropriate or advisable to do so, and with the Client's permission. CTL will in no way be liable for any subcontracted services and all applicable warranties, guarantees and insurance are those of the subcontracted laboratory.

5.5 CTL shall dispose of the Client's samples 30 days after the analytical report is issued, unless instructed to store them for an alternate period of time or to return such samples to the Client, in a manner consistent with U.S. Environmental Protection Agency regulations or other applicable Federal, state or local requirements. Any samples for projects that are canceled or not accepted, or for which return was requested, will be returned to the Client at their own expense. CTL reserves the right to return to the Client any sample or unused portion of a sample that is not within CTL's permitted capability or the capabilities of CTL's designated waste disposal vendor(s).

5.6 Unless a different time period is agreed to in any order under these Terms and Conditions, CTL agrees to retain all records for five (5) years.

5.7 In the event that CTL is required to respond to legal process related to services for Client, Client agrees to reimburse CTL for hourly charges for personnel involved in the response and attorney fees reasonably incurred in obtaining advice concerning the response, preparation to testify, and appearances related to the legal process, travel and all reasonable expenses associated with the litigation.

### 6. INSURANCE

6.1 CTL shall maintain in force during the performance of services under these Terms and Conditions, Workers' Compensation and Employer's Liability Insurance in accordance with the laws of the states having jurisdiction over CTL's employees who are engaged in the performance of the work. CTL shall also maintain during such period, Comprehensive General and Contractual Liability (limit of \$2,000,000 per occurrence/ aggregate), Comprehensive Automobile Liability, owned and hired, (\$1,000,000 combined single limit), and Professional/Pollution Liability Insurance (limit of \$5,000,000 per occurrence/aggregate). Any Client required changes to these limits or conditions may result in a change in cost to the Client.

### 7. AUDIT

7.1 Upon prior notice to CTL, the Client may audit and inspect CTL's records and accounts covering reimbursable costs related to work done for the Client, for a period of one (1) year after completion of the work. The purpose of any such audit shall be only for verification of such costs, and CTL shall not be required to provide access to cost records where prices are expressed as fixed fees or published unit prices.





---

2655 Park Center Dr., Suite A  
Simi Valley, CA 93065  
T: +1 805 526 7161  
F: +1 805 526 7270  
[www.alsglobal.com](http://www.alsglobal.com)

## LABORATORY REPORT

May 11, 2017

Lucas Stamps  
QEPI  
1611 South Franklin Road  
Indianapolis, IN 46239

### RE: Tetra Tech-Williams Polishing and Plating

Dear Lucas:

Enclosed are the results of the samples submitted to our laboratory on April 27, 2017. For your reference, these analyses have been assigned our service request number P1701990.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at [www.alsglobal.com](http://www.alsglobal.com). Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

**ALS | Environmental**

By Samantha Henningsen at 11:03 am, May 11, 2017

Samantha Henningsen  
Project Manager



2655 Park Center Dr., Suite A  
Simi Valley, CA 93065  
T: +1 805 526 7161  
F: +1 805 526 7270  
[www.alsglobal.com](http://www.alsglobal.com)

Client: QEPI  
Project: Tetra Tech-Williams Polishing and Plating

Service Request No: P1701990

---

## CASE NARRATIVE

The samples were received intact under chain of custody on April 27, 2017 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

### Volatile Organic Compound Analysis

The samples were analyzed for volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is included on the laboratory's NELAP and DoD-ELAP scope of accreditation. Any analytes flagged with an X are not included on the NELAP or DoD-ELAP accreditation.

The spike recoveries of trichlorofluoromethane (CFC 11) and carbon tetrachloride in the Laboratory Control Samples (LCS) were outside the Laboratory generated control criteria. The recovery errors equate to a potential high bias. However, the recoveries in question were within the method criteria, therefore the data quality is not significantly affected. No corrective action was taken.

The containers were cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

---

*The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.*

*Use of ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.*



2655 Park Center Dr., Suite A  
 Simi Valley, CA 93065  
 T: +1 805 526 7161  
 F: +1 805 526 7270  
[www.alsglobal.com](http://www.alsglobal.com)

# ALS Environmental – Simi Valley

## CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
Arizona DHS	<a href="http://www.azdhs.gov/preparedness/state-laboratory/lab-licensure-certification/index.php#laboratory-licensure-home">http://www.azdhs.gov/preparedness/state-laboratory/lab-licensure-certification/index.php#laboratory-licensure-home</a>	AZ0694
Florida DOH (NELAP)	<a href="http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm">http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm</a>	E871020
Louisiana DEQ (NELAP)	<a href="http://www.deq.louisiana.gov/portal/DIVISIONS/PublicParticipationandPermitSupport/LouisianaLaboratoryAccreditationProgram.aspx">http://www.deq.louisiana.gov/portal/DIVISIONS/PublicParticipationandPermitSupport/LouisianaLaboratoryAccreditationProgram.aspx</a>	05071
Maine DHHS	<a href="http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/labcert.htm">http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/labcert.htm</a>	2016036
Minnesota DOH (NELAP)	<a href="http://www.health.state.mn.us/accreditation">http://www.health.state.mn.us/accreditation</a>	1177034
New Jersey DEP (NELAP)	<a href="http://www.nj.gov/dep/oqa/">http://www.nj.gov/dep/oqa/</a>	CA009
New York DOH (NELAP)	<a href="http://www.wadsworth.org/labcert/elap/elap.html">http://www.wadsworth.org/labcert/elap/elap.html</a>	11221
Oregon PHD (NELAP)	<a href="http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx">http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx</a>	4068-004
Pennsylvania DEP	<a href="http://www.depweb.state.pa.us/labs">http://www.depweb.state.pa.us/labs</a>	68-03307 (Registration)
PJLA (DoD ELAP)	<a href="http://www.pjlabs.com/search-accredited-labs">http://www.pjlabs.com/search-accredited-labs</a>	65818 (Testing)
Texas CEQ (NELAP)	<a href="http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html">http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html</a>	T104704413-16-7
Utah DOH (NELAP)	<a href="http://health.utah.gov/lab/environmental-lab-certification/">http://health.utah.gov/lab/environmental-lab-certification/</a>	CA01627201 6-6
Washington DOE	<a href="http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html">http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html</a>	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at [www.alsglobal.com](http://www.alsglobal.com), or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

# ALS ENVIRONMENTAL

## DETAIL SUMMARY REPORT

Client: QEPI  
Project ID: Tetra Tech-Williams Polishing and Plating

Service Request: P1701990

Date Received: 4/27/2017  
Time Received: 10:20

TO-15 - VOC Cans

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	
WPP-SG07-170426	P1701990-001	Air	4/26/2017	08:45	ISC00728	-2.06	6.29	X
WPP-SG05-170426	P1701990-002	Air	4/26/2017	09:17	ISC01212	-2.45	5.25	X
WPP-SG09-170426	P1701990-003	Air	4/26/2017	09:50	ISC00962	-2.01	5.01	X
WPP-SG09-170426-D	P1701990-004	Air	4/26/2017	09:50	ISC00097	-2.60	5.38	X
WPP-SG11-170426	P1701990-005	Air	4/26/2017	10:24	ISS00521	-1.84	5.55	X
WPP-SG10-170426	P1701990-006	Air	4/26/2017	10:51	ISC00779	-3.17	5.50	X
WPP-SG06-170426	P1701990-007	Air	4/26/2017	11:17	ISC00893	-2.46	5.38	X
WPP-SG04-170426	P1701990-008	Air	4/26/2017	11:43	ISC00431	-2.55	5.68	X
WPP-SG02-170426	P1701990-009	Air	4/26/2017	13:45	ISC00037	-3.17	5.01	X
WPP-SG03-170426	P1701990-010	Air	4/26/2017	14:15	ISC00794	-0.43	5.27	X
WPP-AA03-170426	P1701990-011	Air	4/26/2017	14:15	ISC00249	-2.88	5.00	X
WPP-SG08-170426	P1701990-012	Air	4/26/2017	14:45	ISS00004	-2.64	5.12	X
WPP-SG12-170426	P1701990-013	Air	4/26/2017	15:26	ISC00419	-3.13	5.65	X
WPP-SG13-170426	P1701990-014	Air	4/26/2017	15:55	ISC00459	-3.20	5.38	X



# Air - Chain of Custody Record & Analytical Service Request

Page 1 of 2

2655 Park Center Drive, Suite A  
Simi Valley, California 93065  
Phone (805) 526-7161  
Fax (805) 526-7270

Requested Turnaround Time in Business Days (Surcharges) please circle  
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10-Day-Standard

ALS Project No P1701990

Company Name & Address (Reporting Information) CT Laboratories 1230 Lange Ct Baraboo, WI				Project Name Tetra Tech - Williams Polishing and Plating				ALS Contact:		Comments e.g. Actual Preservative or specific instructions
Project Manager Dennis Linley				Project Number				Analysis Method		
Phone 608-356-2760				Fax 608-356-2766						
Email Address for Result Reporting Dlinley@CTLaboratories.com				P.O. # / Billing Information						
Sampler (Print & Sign) Lucas Stamps <i>[Signature]</i>										
Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume		
WPP-SG07-170426	1	4/26/17	0845	1SC00728	0A01131	-29	-3		X	
WPP-SG05-170426	2	4/26/17	0917	1SC01212	0A00854	-30	-7		X	
WPP-SG09-170426	3	4/26/17	0950	1SC00962	0A01178	-28	-5		X	
WPP-SG09-170426-D	4	4/26/17	0950	1SC00097	0A00626	-26	-4		X	
WPP-SG11-170426	5	4/26/17	1024	15500521	0A1475	-28	-3		X	
WPP-SG10-170426	6	4/26/17	1051	1SC00779	0A00285	-29	-5		X	Pressure gauge reads -3 when off.
WPP-SG06-170426	7	4/26/17	1117	1SC00893	0A00818	-28	-5		X	
WPP-SG04-170426	8	4/26/17	1143	1SC00431	0A01623	-28	-4		X	
WPP-SG02-170426	9	4/26/17	1345	1SC0037	0A00348	-30	<del>-7</del> -7		X	
WPP-SG03-170426	10	4/26/17	1415	1SC00794	0A01848	-29	-1		X	
WPP-AA03-170426	11	4/26/17	1415	1SC00249	0A01458	-36	-7		X	
WPP-SG08-170426	12	4/26/17	1445	15500004	0A01129	-24	-5		X	
<del>WPP-SG12-170426</del>	<del>13</del>	<del>4/26/17</del>	<del>1513</del>	<del>1SC00874</del>	<del>0A01615</del>	<del>-26</del>			<del>X</del>	Bad regulator. Pressure to 0 in 5 min
WPP-SG12-170426	13	4/26/17	1526	1SC00419	0A01209	-27	-6		X	
Report Tier Levels - please select										
Tier I - Results (Default in not specified)			Tier III (Results + QC & Calibration Summaries) <u>X</u>			Tier IV (Date Validation Package) 10% Surcharge			EDD required (YES) / No	
Tier II (Results + QC Summaries)						Type: <u>Scribe</u> (EPA) Units: <u>ug/m³ + ppbv</u>			Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT	
Relinquished by: (Signature) <i>[Signature]</i>			Date: <u>4/26/17</u>	Time: <u>1630</u>	Received by: (Signature) <i>[Signature]</i>			Date: <u>4/27/17</u>	Time: <u>1020</u>	Project Requirements (MRLS, QAPP)
Relinquished by: (Signature)			Date:	Time:	Received by: (Signature)			Date:	Time:	Cooler / Blank Temperature ____ °C

Page 2 of 2

2655 Park Center Drive, Suite A  
Simi Valley, California 93065  
Phone (805) 526-7161  
Fax (805) 526-7270

Requested Turnaround Time in Business Days (Surcharges) please circle  
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10-Day-Standard

ALS Project No P1701990

Company Name & Address (Reporting Information)				Project Name					ALS Contact:		Analysis Method	Comments e.g. Actual Preservative or specific instructions		
				Project Number										
Project Manager				P.O. # / Billing Information					TO-15					
Phone		Fax												
Email Address for Result Reporting				Sampler (Print & Sign)										
Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume						
WPP-SG13-170426	19	4/26/17	1555	1SC00459	GA01129	-28	1SC00459		X					
Report Tier Levels - please select												Project Requirements (MRLs, QAPP)		
Tier I - Results (Default in not specified) _____				Tier III (Results + QC & Calibration Summaries) _____				Tier IV (Date Validation Package) 10% Surcharge _____					Chain of Custody Seal: (Circle) INTACT    BROKEN    ABSENT	
Tier II (Results + QC Summaries) _____				Tier III (Results + QC & Calibration Summaries) _____				Tier IV (Date Validation Package) 10% Surcharge _____				Type: _____ Units: _____		
Relinquished by: (Signature) <i>[Signature]</i>				Date: 4/26/17		Time: 1630		Received by: (Signature) <i>[Signature]</i>		Date: 4/29/17			Time: 1700	
Relinquished by: (Signature)				Date:		Time:		Received by: (Signature)		Date:		Time:		

# ALS Environmental Sample Acceptance Check Form

Client: QEPI Work order: P1701990  
 Project: Tetra Tech-Williams Polishing and Plating  
 Sample(s) received on: 4/27/17 Date opened: 4/27/17 by: KKELPE

**Note:** This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

- |   | <b>Yes</b>                          | <b>No</b>                           | <b>N/A</b>                          |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1 Were <b>sample containers</b> properly marked with client sample ID?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 2 Did <b>sample containers</b> arrive in good condition?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 3 Were <b>chain-of-custody</b> papers used and filled out?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 4 Did <b>sample container labels</b> and/or tags agree with custody papers?                                     | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 5 Was <b>sample volume</b> received adequate for analysis?  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 6 Are samples within specified holding times?   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 7 Was proper <b>temperature</b> (thermal preservation) of cooler at receipt adhered to?                         | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 8 Were <b>custody seals</b> on outside of cooler/Box/Container?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Location of seal(s)? _____ Sealing Lid?   | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Were signature and date included?   | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Were seals intact?  | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 9 Do containers have appropriate <b>preservation</b> , according to method/SOP or Client specified information? | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Is there a client indication that the submitted samples are <b>pH</b> preserved?                                | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Were <b>VOA vials</b> checked for presence/absence of air bubbles?  | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Does the client/method/SOP require that the analyst check the sample pH and <u>if necessary</u> alter it?       | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 10 <b>Tubes:</b> Are the tubes capped and intact?   | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 11 <b>Badges:</b> Are the badges properly capped and intact?  | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Are dual bed badges separated and individually capped and intact?   | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1701990-001.01	1.0 L Source Can					
P1701990-002.01	1.0 L Source Can					
P1701990-003.01	1.0 L Source Can					
P1701990-004.01	1.0 L Source Can					
P1701990-005.01	1.0 L Source Silonite Canister					
P1701990-006.01	1.0 L Source Can					
P1701990-007.01	1.0 L Source Can					
P1701990-008.01	1.0 L Source Can					
P1701990-009.01	1.0 L Source Can					
P1701990-010.01	1.0 L Source Can					
P1701990-011.01	1.0 L Source Can					
P1701990-012.01	1.0 L Source Silonite Canister					
P1701990-013.01	1.0 L Source Can					
P1701990-014.01	1.0 L Source Can					
P1701990-015.02	1.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers): \_\_\_\_\_

## Sample Acceptance Check Form

Client: QEPI

Work order: P1701990

Project: Tetra Tech-Williams Polishing and Plating

Sample(s) received on: 4/27/17 Date opened: 4/27/17 by: KKELPE

[illegible]

Explain any discrepancies: (include lab sample ID numbers):

RSK - MEEPP, HCL (pH<2); RSK - CO<sub>2</sub>, (pH 5-8); Sulfur (pH>4)

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG07-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-001

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00728

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/3/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -2.06 Final Pressure (psig): 6.29

Canister Dilution Factor: 1.66

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	16	2.1	9.6	1.2	
75-71-8	Dichlorodifluoromethane (CFC 12)	2.8	2.1	0.57	0.42	
74-87-3	Chloromethane	ND	2.1	ND	1.0	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.1	ND	0.30	
75-01-4	Vinyl Chloride	ND	2.1	ND	0.81	
106-99-0	1,3-Butadiene	ND	2.1	ND	0.94	
74-83-9	Bromomethane	ND	2.1	ND	0.53	
75-00-3	Chloroethane	ND	2.1	ND	0.79	
64-17-5	Ethanol	94	21	50	11	
75-05-8	Acetonitrile	ND	2.1	ND	1.2	
107-02-8	Acrolein	ND	8.3	ND	3.6	
67-64-1	Acetone	580	21	240	8.7	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	2.1	ND	0.37	
67-63-0	2-Propanol (Isopropyl Alcohol)	54	21	22	8.4	
107-13-1	Acrylonitrile	ND	2.1	ND	0.96	
75-35-4	1,1-Dichloroethene	ND	2.1	ND	0.52	
75-09-2	Methylene Chloride	ND	2.1	ND	0.60	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.1	ND	0.66	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	2.1	ND	0.27	
75-15-0	Carbon Disulfide	ND	21	ND	6.7	
156-60-5	trans-1,2-Dichloroethene	ND	2.1	ND	0.52	
75-34-3	1,1-Dichloroethane	ND	2.1	ND	0.51	
1634-04-4	Methyl tert-Butyl Ether	ND	2.1	ND	0.58	
108-05-4	Vinyl Acetate	ND	21	ND	5.9	
78-93-3	2-Butanone (MEK)	29	21	9.8	7.0	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG07-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-001

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00728

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/3/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -2.06      Final Pressure (psig): 6.29

Canister Dilution Factor: 1.66

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.1	ND	0.52	
141-78-6	Ethyl Acetate	6.3	4.2	1.7	1.2	
110-54-3	n-Hexane	3.3	2.1	0.93	0.59	
67-66-3	Chloroform	99	2.1	20	0.43	
109-99-9	Tetrahydrofuran (THF)	ND	2.1	ND	0.70	
107-06-2	1,2-Dichloroethane	ND	2.1	ND	0.51	
71-55-6	1,1,1-Trichloroethane	230	2.1	42	0.38	
71-43-2	Benzene	2.3	2.1	0.71	0.65	
56-23-5	Carbon Tetrachloride	ND	2.1	ND	0.33	
110-82-7	Cyclohexane	ND	4.2	ND	1.2	
78-87-5	1,2-Dichloropropane	ND	2.1	ND	0.45	
75-27-4	Bromodichloromethane	ND	2.1	ND	0.31	
79-01-6	Trichloroethene	45	2.1	8.3	0.39	
123-91-1	1,4-Dioxane	ND	2.1	ND	0.58	
80-62-6	Methyl Methacrylate	ND	4.2	ND	1.0	
142-82-5	n-Heptane	ND	2.1	ND	0.51	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	ND	0.46	
108-10-1	4-Methyl-2-pentanone	ND	2.1	ND	0.51	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	ND	0.46	
79-00-5	1,1,2-Trichloroethane	ND	2.1	ND	0.38	
108-88-3	Toluene	15	2.1	3.9	0.55	
591-78-6	2-Hexanone	4.1	2.1	1.0	0.51	
124-48-1	Dibromochloromethane	ND	2.1	ND	0.24	
106-93-4	1,2-Dibromoethane	ND	2.1	ND	0.27	
123-86-4	n-Butyl Acetate	ND	2.1	ND	0.44	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG07-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-001

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00728

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/3/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -2.06      Final Pressure (psig): 6.29

Canister Dilution Factor: 1.66

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	2.8	2.1	0.59	0.44	
127-18-4	Tetrachloroethene	20	2.1	3.0	0.31	
108-90-7	Chlorobenzene	ND	2.1	ND	0.45	
100-41-4	Ethylbenzene	ND	2.1	ND	0.48	
179601-23-1	m,p-Xylenes	5.3	4.2	1.2	0.96	
75-25-2	Bromoform	ND	2.1	ND	0.20	
100-42-5	Styrene	ND	2.1	ND	0.49	
95-47-6	o-Xylene	2.5	2.1	0.58	0.48	
111-84-2	n-Nonane	3.3	2.1	0.63	0.40	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	ND	0.30	
98-82-8	Cumene	ND	2.1	ND	0.42	
80-56-8	alpha-Pinene	16	2.1	2.9	0.37	
103-65-1	n-Propylbenzene	ND	2.1	ND	0.42	
622-96-8	4-Ethyltoluene	ND	2.1	ND	0.42	
108-67-8	1,3,5-Trimethylbenzene	ND	2.1	ND	0.42	
95-63-6	1,2,4-Trimethylbenzene	3.4	2.1	0.69	0.42	
100-44-7	Benzyl Chloride	ND	2.1	ND	0.40	
541-73-1	1,3-Dichlorobenzene	20	2.1	3.3	0.35	
106-46-7	1,4-Dichlorobenzene	ND	2.1	ND	0.35	
95-50-1	1,2-Dichlorobenzene	ND	2.1	ND	0.35	
5989-27-5	d-Limonene	9.5	2.1	1.7	0.37	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.1	ND	0.21	
120-82-1	1,2,4-Trichlorobenzene	ND	2.1	ND	0.28	
91-20-3	Naphthalene	ND	2.1	ND	0.40	
87-68-3	Hexachlorobutadiene	ND	2.1	ND	0.19	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG05-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-002

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC01212

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/3/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -2.45      Final Pressure (psig): 5.25

Canister Dilution Factor: 1.63

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	10	2.0	5.9	1.2	
75-71-8	Dichlorodifluoromethane (CFC 12)	2.8	2.0	0.57	0.41	
74-87-3	Chloromethane	ND	2.0	ND	0.99	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.0	ND	0.29	
75-01-4	Vinyl Chloride	ND	2.0	ND	0.80	
106-99-0	1,3-Butadiene	ND	2.0	ND	0.92	
74-83-9	Bromomethane	ND	2.0	ND	0.52	
75-00-3	Chloroethane	ND	2.0	ND	0.77	
64-17-5	Ethanol	46	20	24	11	
75-05-8	Acetonitrile	ND	2.0	ND	1.2	
107-02-8	Acrolein	ND	8.2	ND	3.6	
67-64-1	Acetone	160	20	66	8.6	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	2.0	ND	0.36	
67-63-0	2-Propanol (Isopropyl Alcohol)	29	20	12	8.3	
107-13-1	Acrylonitrile	ND	2.0	ND	0.94	
75-35-4	1,1-Dichloroethene	ND	2.0	ND	0.51	
75-09-2	Methylene Chloride	ND	2.0	ND	0.59	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.0	ND	0.65	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	2.0	ND	0.27	
75-15-0	Carbon Disulfide	ND	20	ND	6.5	
156-60-5	trans-1,2-Dichloroethene	ND	2.0	ND	0.51	
75-34-3	1,1-Dichloroethane	ND	2.0	ND	0.50	
1634-04-4	Methyl tert-Butyl Ether	ND	2.0	ND	0.57	
108-05-4	Vinyl Acetate	ND	20	ND	5.8	
78-93-3	2-Butanone (MEK)	ND	20	ND	6.9	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG05-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-002

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC01212

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/3/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -2.45 Final Pressure (psig): 5.25

Canister Dilution Factor: 1.63

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.0	ND	0.51	
141-78-6	Ethyl Acetate	5.0	4.1	1.4	1.1	
110-54-3	n-Hexane	12	2.0	3.3	0.58	
67-66-3	Chloroform	ND	2.0	ND	0.42	
109-99-9	Tetrahydrofuran (THF)	ND	2.0	ND	0.69	
107-06-2	1,2-Dichloroethane	ND	2.0	ND	0.50	
71-55-6	1,1,1-Trichloroethane	10	2.0	1.9	0.37	
71-43-2	Benzene	6.8	2.0	2.1	0.64	
56-23-5	Carbon Tetrachloride	ND	2.0	ND	0.32	
110-82-7	Cyclohexane	5.7	4.1	1.6	1.2	
78-87-5	1,2-Dichloropropane	ND	2.0	ND	0.44	
75-27-4	Bromodichloromethane	ND	2.0	ND	0.30	
79-01-6	Trichloroethene	51	2.0	9.5	0.38	
123-91-1	1,4-Dioxane	ND	2.0	ND	0.57	
80-62-6	Methyl Methacrylate	ND	4.1	ND	1.0	
142-82-5	n-Heptane	7.4	2.0	1.8	0.50	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	ND	0.45	
108-10-1	4-Methyl-2-pentanone	ND	2.0	ND	0.50	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	ND	0.45	
79-00-5	1,1,2-Trichloroethane	ND	2.0	ND	0.37	
108-88-3	Toluene	18	2.0	4.8	0.54	
591-78-6	2-Hexanone	ND	2.0	ND	0.50	
124-48-1	Dibromochloromethane	ND	2.0	ND	0.24	
106-93-4	1,2-Dibromoethane	ND	2.0	ND	0.27	
123-86-4	n-Butyl Acetate	ND	2.0	ND	0.43	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG05-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-002

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC01212

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/3/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -2.45      Final Pressure (psig): 5.25

Canister Dilution Factor: 1.63

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	4.6	2.0	0.99	0.44	
127-18-4	Tetrachloroethene	13	2.0	1.8	0.30	
108-90-7	Chlorobenzene	ND	2.0	ND	0.44	
100-41-4	Ethylbenzene	2.8	2.0	0.64	0.47	
179601-23-1	m,p-Xylenes	5.9	4.1	1.4	0.94	
75-25-2	Bromoform	ND	2.0	ND	0.20	
100-42-5	Styrene	ND	2.0	ND	0.48	
95-47-6	o-Xylene	2.6	2.0	0.59	0.47	
111-84-2	n-Nonane	3.2	2.0	0.62	0.39	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ND	0.30	
98-82-8	Cumene	ND	2.0	ND	0.41	
80-56-8	alpha-Pinene	10	2.0	1.8	0.37	
103-65-1	n-Propylbenzene	ND	2.0	ND	0.41	
622-96-8	4-Ethyltoluene	ND	2.0	ND	0.41	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	ND	0.41	
95-63-6	1,2,4-Trimethylbenzene	2.5	2.0	0.51	0.41	
100-44-7	Benzyl Chloride	ND	2.0	ND	0.39	
541-73-1	1,3-Dichlorobenzene	27	2.0	4.5	0.34	
106-46-7	1,4-Dichlorobenzene	ND	2.0	ND	0.34	
95-50-1	1,2-Dichlorobenzene	ND	2.0	ND	0.34	
5989-27-5	d-Limonene	5.3	2.0	0.95	0.37	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	ND	0.21	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	ND	0.27	
91-20-3	Naphthalene	ND	2.0	ND	0.39	
87-68-3	Hexachlorobutadiene	ND	2.0	ND	0.19	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG09-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-003

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00962

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -2.01 Final Pressure (psig): 5.01

Canister Dilution Factor: 1.55

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	6.2	1.9	3.6	1.1	
75-71-8	Dichlorodifluoromethane (CFC 12)	2.6	1.9	0.52	0.39	
74-87-3	Chloromethane	ND	1.9	ND	0.94	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	1.9	ND	0.28	
75-01-4	Vinyl Chloride	ND	1.9	ND	0.76	
106-99-0	1,3-Butadiene	ND	1.9	ND	0.88	
74-83-9	Bromomethane	ND	1.9	ND	0.50	
75-00-3	Chloroethane	ND	1.9	ND	0.73	
64-17-5	Ethanol	52	19	27	10	
75-05-8	Acetonitrile	ND	1.9	ND	1.2	
107-02-8	Acrolein	ND	7.8	ND	3.4	
67-64-1	Acetone	100	19	43	8.2	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	1.9	ND	0.34	
67-63-0	2-Propanol (Isopropyl Alcohol)	22	19	9.1	7.9	
107-13-1	Acrylonitrile	ND	1.9	ND	0.89	
75-35-4	1,1-Dichloroethene	ND	1.9	ND	0.49	
75-09-2	Methylene Chloride	ND	1.9	ND	0.56	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	1.9	ND	0.62	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	1.9	ND	0.25	
75-15-0	Carbon Disulfide	ND	19	ND	6.2	
156-60-5	trans-1,2-Dichloroethene	ND	1.9	ND	0.49	
75-34-3	1,1-Dichloroethane	ND	1.9	ND	0.48	
1634-04-4	Methyl tert-Butyl Ether	ND	1.9	ND	0.54	
108-05-4	Vinyl Acetate	ND	19	ND	5.5	
78-93-3	2-Butanone (MEK)	ND	19	ND	6.6	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG09-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-003

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00962

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -2.01      Final Pressure (psig): 5.01

Canister Dilution Factor: 1.55

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	1.9	ND	0.49	
141-78-6	Ethyl Acetate	12	3.9	3.4	1.1	
110-54-3	n-Hexane	2.1	1.9	0.61	0.55	
67-66-3	Chloroform	ND	1.9	ND	0.40	
109-99-9	Tetrahydrofuran (THF)	ND	1.9	ND	0.66	
107-06-2	1,2-Dichloroethane	ND	1.9	ND	0.48	
71-55-6	1,1,1-Trichloroethane	42	1.9	7.7	0.36	
71-43-2	Benzene	ND	1.9	ND	0.61	
56-23-5	Carbon Tetrachloride	ND	1.9	ND	0.31	
110-82-7	Cyclohexane	ND	3.9	ND	1.1	
78-87-5	1,2-Dichloropropane	ND	1.9	ND	0.42	
75-27-4	Bromodichloromethane	ND	1.9	ND	0.29	
79-01-6	Trichloroethene	ND	1.9	ND	0.36	
123-91-1	1,4-Dioxane	ND	1.9	ND	0.54	
80-62-6	Methyl Methacrylate	ND	3.9	ND	0.95	
142-82-5	n-Heptane	ND	1.9	ND	0.47	
10061-01-5	cis-1,3-Dichloropropene	ND	1.9	ND	0.43	
108-10-1	4-Methyl-2-pentanone	2.2	1.9	0.55	0.47	
10061-02-6	trans-1,3-Dichloropropene	ND	1.9	ND	0.43	
79-00-5	1,1,2-Trichloroethane	ND	1.9	ND	0.36	
108-88-3	Toluene	9.6	1.9	2.5	0.51	
591-78-6	2-Hexanone	ND	1.9	ND	0.47	
124-48-1	Dibromochloromethane	ND	1.9	ND	0.23	
106-93-4	1,2-Dibromoethane	ND	1.9	ND	0.25	
123-86-4	n-Butyl Acetate	ND	1.9	ND	0.41	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG09-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-003

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00962

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -2.01      Final Pressure (psig): 5.01

Canister Dilution Factor: 1.55

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	1.9	ND	0.41	
127-18-4	Tetrachloroethene	5.4	1.9	0.80	0.29	
108-90-7	Chlorobenzene	ND	1.9	ND	0.42	
100-41-4	Ethylbenzene	ND	1.9	ND	0.45	
179601-23-1	m,p-Xylenes	4.3	3.9	0.99	0.89	
75-25-2	Bromoform	ND	1.9	ND	0.19	
100-42-5	Styrene	ND	1.9	ND	0.46	
95-47-6	o-Xylene	ND	1.9	ND	0.45	
111-84-2	n-Nonane	ND	1.9	ND	0.37	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.9	ND	0.28	
98-82-8	Cumene	ND	1.9	ND	0.39	
80-56-8	alpha-Pinene	7.9	1.9	1.4	0.35	
103-65-1	n-Propylbenzene	ND	1.9	ND	0.39	
622-96-8	4-Ethyltoluene	ND	1.9	ND	0.39	
108-67-8	1,3,5-Trimethylbenzene	ND	1.9	ND	0.39	
95-63-6	1,2,4-Trimethylbenzene	2.6	1.9	0.53	0.39	
100-44-7	Benzyl Chloride	ND	1.9	ND	0.37	
541-73-1	1,3-Dichlorobenzene	23	1.9	3.8	0.32	
106-46-7	1,4-Dichlorobenzene	ND	1.9	ND	0.32	
95-50-1	1,2-Dichlorobenzene	ND	1.9	ND	0.32	
5989-27-5	d-Limonene	6.5	1.9	1.2	0.35	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.9	ND	0.20	
120-82-1	1,2,4-Trichlorobenzene	ND	1.9	ND	0.26	
91-20-3	Naphthalene	ND	1.9	ND	0.37	
87-68-3	Hexachlorobutadiene	ND	1.9	ND	0.18	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG09-170426-D

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-004

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00097

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -2.60 Final Pressure (psig): 5.38

Canister Dilution Factor: 1.66

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	6.4	2.1	3.7	1.2	
75-71-8	Dichlorodifluoromethane (CFC 12)	2.6	2.1	0.53	0.42	
74-87-3	Chloromethane	ND	2.1	ND	1.0	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.1	ND	0.30	
75-01-4	Vinyl Chloride	ND	2.1	ND	0.81	
106-99-0	1,3-Butadiene	ND	2.1	ND	0.94	
74-83-9	Bromomethane	ND	2.1	ND	0.53	
75-00-3	Chloroethane	ND	2.1	ND	0.79	
64-17-5	Ethanol	41	21	22	11	
75-05-8	Acetonitrile	ND	2.1	ND	1.2	
107-02-8	Acrolein	ND	8.3	ND	3.6	
67-64-1	Acetone	120	21	49	8.7	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	2.1	ND	0.37	
67-63-0	2-Propanol (Isopropyl Alcohol)	25	21	10	8.4	
107-13-1	Acrylonitrile	ND	2.1	ND	0.96	
75-35-4	1,1-Dichloroethene	ND	2.1	ND	0.52	
75-09-2	Methylene Chloride	ND	2.1	ND	0.60	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.1	ND	0.66	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	2.1	ND	0.27	
75-15-0	Carbon Disulfide	ND	21	ND	6.7	
156-60-5	trans-1,2-Dichloroethene	ND	2.1	ND	0.52	
75-34-3	1,1-Dichloroethane	ND	2.1	ND	0.51	
1634-04-4	Methyl tert-Butyl Ether	ND	2.1	ND	0.58	
108-05-4	Vinyl Acetate	ND	21	ND	5.9	
78-93-3	2-Butanone (MEK)	ND	21	ND	7.0	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG09-170426-D

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-004

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00097

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -2.60 Final Pressure (psig): 5.38

Canister Dilution Factor: 1.66

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.1	ND	0.52	
141-78-6	Ethyl Acetate	7.4	4.2	2.0	1.2	
110-54-3	n-Hexane	2.2	2.1	0.62	0.59	
67-66-3	Chloroform	ND	2.1	ND	0.43	
109-99-9	Tetrahydrofuran (THF)	ND	2.1	ND	0.70	
107-06-2	1,2-Dichloroethane	ND	2.1	ND	0.51	
71-55-6	1,1,1-Trichloroethane	44	2.1	8.0	0.38	
71-43-2	Benzene	ND	2.1	ND	0.65	
56-23-5	Carbon Tetrachloride	ND	2.1	ND	0.33	
110-82-7	Cyclohexane	ND	4.2	ND	1.2	
78-87-5	1,2-Dichloropropane	ND	2.1	ND	0.45	
75-27-4	Bromodichloromethane	ND	2.1	ND	0.31	
79-01-6	Trichloroethene	ND	2.1	ND	0.39	
123-91-1	1,4-Dioxane	ND	2.1	ND	0.58	
80-62-6	Methyl Methacrylate	ND	4.2	ND	1.0	
142-82-5	n-Heptane	ND	2.1	ND	0.51	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	ND	0.46	
108-10-1	4-Methyl-2-pentanone	ND	2.1	ND	0.51	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	ND	0.46	
79-00-5	1,1,2-Trichloroethane	ND	2.1	ND	0.38	
108-88-3	Toluene	9.3	2.1	2.5	0.55	
591-78-6	2-Hexanone	ND	2.1	ND	0.51	
124-48-1	Dibromochloromethane	ND	2.1	ND	0.24	
106-93-4	1,2-Dibromoethane	ND	2.1	ND	0.27	
123-86-4	n-Butyl Acetate	ND	2.1	ND	0.44	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG09-170426-D

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-004

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00097

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -2.60 Final Pressure (psig): 5.38

Canister Dilution Factor: 1.66

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	2.1	ND	0.44	
127-18-4	Tetrachloroethene	5.6	2.1	0.83	0.31	
108-90-7	Chlorobenzene	ND	2.1	ND	0.45	
100-41-4	Ethylbenzene	ND	2.1	ND	0.48	
179601-23-1	m,p-Xylenes	4.4	4.2	1.0	0.96	
75-25-2	Bromoform	ND	2.1	ND	0.20	
100-42-5	Styrene	ND	2.1	ND	0.49	
95-47-6	o-Xylene	ND	2.1	ND	0.48	
111-84-2	n-Nonane	ND	2.1	ND	0.40	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	ND	0.30	
98-82-8	Cumene	ND	2.1	ND	0.42	
80-56-8	alpha-Pinene	6.6	2.1	1.2	0.37	
103-65-1	n-Propylbenzene	ND	2.1	ND	0.42	
622-96-8	4-Ethyltoluene	ND	2.1	ND	0.42	
108-67-8	1,3,5-Trimethylbenzene	ND	2.1	ND	0.42	
95-63-6	1,2,4-Trimethylbenzene	2.6	2.1	0.52	0.42	
100-44-7	Benzyl Chloride	ND	2.1	ND	0.40	
541-73-1	1,3-Dichlorobenzene	24	2.1	4.0	0.35	
106-46-7	1,4-Dichlorobenzene	ND	2.1	ND	0.35	
95-50-1	1,2-Dichlorobenzene	ND	2.1	ND	0.35	
5989-27-5	d-Limonene	4.6	2.1	0.83	0.37	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.1	ND	0.21	
120-82-1	1,2,4-Trichlorobenzene	ND	2.1	ND	0.28	
91-20-3	Naphthalene	ND	2.1	ND	0.40	
87-68-3	Hexachlorobutadiene	ND	2.1	ND	0.19	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG11-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-005

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Silonite Summa Canister

Test Notes:

Container ID: 1SS00521

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -1.84      Final Pressure (psig): 5.55

Canister Dilution Factor: 1.57

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	15	2.0	8.8	1.1	
75-71-8	Dichlorodifluoromethane (CFC 12)	2.6	2.0	0.53	0.40	
74-87-3	Chloromethane	ND	2.0	ND	0.95	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.0	ND	0.28	
75-01-4	Vinyl Chloride	ND	2.0	ND	0.77	
106-99-0	1,3-Butadiene	ND	2.0	ND	0.89	
74-83-9	Bromomethane	ND	2.0	ND	0.51	
75-00-3	Chloroethane	ND	2.0	ND	0.74	
64-17-5	Ethanol	82	20	44	10	
75-05-8	Acetonitrile	ND	2.0	ND	1.2	
107-02-8	Acrolein	11	7.9	5.0	3.4	
67-64-1	Acetone	420	20	180	8.3	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	2.0	ND	0.35	
67-63-0	2-Propanol (Isopropyl Alcohol)	61	20	25	8.0	
107-13-1	Acrylonitrile	ND	2.0	ND	0.90	
75-35-4	1,1-Dichloroethene	ND	2.0	ND	0.50	
75-09-2	Methylene Chloride	ND	2.0	ND	0.57	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.0	ND	0.63	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	2.0	ND	0.26	
75-15-0	Carbon Disulfide	ND	20	ND	6.3	
156-60-5	trans-1,2-Dichloroethene	ND	2.0	ND	0.50	
75-34-3	1,1-Dichloroethane	ND	2.0	ND	0.49	
1634-04-4	Methyl tert-Butyl Ether	ND	2.0	ND	0.54	
108-05-4	Vinyl Acetate	ND	20	ND	5.6	
78-93-3	2-Butanone (MEK)	21	20	7.0	6.7	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG11-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-005

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Silonite Summa Canister

Test Notes:

Container ID: 1SS00521

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -1.84      Final Pressure (psig): 5.55

Canister Dilution Factor: 1.57

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.0	ND	0.50	
141-78-6	Ethyl Acetate	43	3.9	12	1.1	
110-54-3	n-Hexane	8.5	2.0	2.4	0.56	
67-66-3	Chloroform	ND	2.0	ND	0.40	
109-99-9	Tetrahydrofuran (THF)	ND	2.0	ND	0.67	
107-06-2	1,2-Dichloroethane	ND	2.0	ND	0.49	
71-55-6	1,1,1-Trichloroethane	20	2.0	3.7	0.36	
71-43-2	Benzene	3.2	2.0	1.0	0.61	
56-23-5	Carbon Tetrachloride	2.7	2.0	0.42	0.31	
110-82-7	Cyclohexane	4.8	3.9	1.4	1.1	
78-87-5	1,2-Dichloropropane	ND	2.0	ND	0.42	
75-27-4	Bromodichloromethane	ND	2.0	ND	0.29	
79-01-6	Trichloroethene	61	2.0	11	0.37	
123-91-1	1,4-Dioxane	ND	2.0	ND	0.54	
80-62-6	Methyl Methacrylate	ND	3.9	ND	0.96	
142-82-5	n-Heptane	4.9	2.0	1.2	0.48	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	ND	0.43	
108-10-1	4-Methyl-2-pentanone	ND	2.0	ND	0.48	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	ND	0.43	
79-00-5	1,1,2-Trichloroethane	ND	2.0	ND	0.36	
108-88-3	Toluene	15	2.0	4.1	0.52	
591-78-6	2-Hexanone	3.9	2.0	0.94	0.48	
124-48-1	Dibromochloromethane	ND	2.0	ND	0.23	
106-93-4	1,2-Dibromoethane	ND	2.0	ND	0.26	
123-86-4	n-Butyl Acetate	ND	2.0	ND	0.41	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG11-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-005

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Silonite Summa Canister

Test Notes:

Container ID: 1SS00521

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -1.84      Final Pressure (psig): 5.55

Canister Dilution Factor: 1.57

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	3.3	2.0	0.70	0.42	
127-18-4	Tetrachloroethene	4.7	2.0	0.70	0.29	
108-90-7	Chlorobenzene	ND	2.0	ND	0.43	
100-41-4	Ethylbenzene	ND	2.0	ND	0.45	
179601-23-1	m,p-Xylenes	6.0	3.9	1.4	0.90	
75-25-2	Bromoform	ND	2.0	ND	0.19	
100-42-5	Styrene	ND	2.0	ND	0.46	
95-47-6	o-Xylene	2.6	2.0	0.59	0.45	
111-84-2	n-Nonane	2.1	2.0	0.40	0.37	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ND	0.29	
98-82-8	Cumene	ND	2.0	ND	0.40	
80-56-8	alpha-Pinene	16	2.0	2.9	0.35	
103-65-1	n-Propylbenzene	ND	2.0	ND	0.40	
622-96-8	4-Ethyltoluene	ND	2.0	ND	0.40	
108-67-8	1,3,5-Trimethylbenzene	ND	2.0	ND	0.40	
95-63-6	1,2,4-Trimethylbenzene	3.2	2.0	0.65	0.40	
100-44-7	Benzyl Chloride	ND	2.0	ND	0.38	
541-73-1	1,3-Dichlorobenzene	71	2.0	12	0.33	
106-46-7	1,4-Dichlorobenzene	ND	2.0	ND	0.33	
95-50-1	1,2-Dichlorobenzene	ND	2.0	ND	0.33	
5989-27-5	d-Limonene	5.8	2.0	1.0	0.35	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	ND	0.20	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	ND	0.26	
91-20-3	Naphthalene	ND	2.0	ND	0.37	
87-68-3	Hexachlorobutadiene	ND	2.0	ND	0.18	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG10-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-006

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00779

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -3.17 Final Pressure (psig): 5.50

Canister Dilution Factor: 1.75

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	15	2.2	8.9	1.3	
75-71-8	Dichlorodifluoromethane (CFC 12)	2.5	2.2	0.51	0.44	
74-87-3	Chloromethane	ND	2.2	ND	1.1	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.2	ND	0.31	
75-01-4	Vinyl Chloride	ND	2.2	ND	0.86	
106-99-0	1,3-Butadiene	ND	2.2	ND	0.99	
74-83-9	Bromomethane	ND	2.2	ND	0.56	
75-00-3	Chloroethane	ND	2.2	ND	0.83	
64-17-5	Ethanol	62	22	33	12	
75-05-8	Acetonitrile	ND	2.2	ND	1.3	
107-02-8	Acrolein	9.4	8.8	4.1	3.8	
67-64-1	Acetone	380	22	160	9.2	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	2.2	ND	0.39	
67-63-0	2-Propanol (Isopropyl Alcohol)	55	22	22	8.9	
107-13-1	Acrylonitrile	ND	2.2	ND	1.0	
75-35-4	1,1-Dichloroethene	ND	2.2	ND	0.55	
75-09-2	Methylene Chloride	ND	2.2	ND	0.63	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.2	ND	0.70	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	2.2	ND	0.29	
75-15-0	Carbon Disulfide	ND	22	ND	7.0	
156-60-5	trans-1,2-Dichloroethene	ND	2.2	ND	0.55	
75-34-3	1,1-Dichloroethane	ND	2.2	ND	0.54	
1634-04-4	Methyl tert-Butyl Ether	ND	2.2	ND	0.61	
108-05-4	Vinyl Acetate	ND	22	ND	6.2	
78-93-3	2-Butanone (MEK)	ND	22	ND	7.4	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG10-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-006

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00779

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -3.17 Final Pressure (psig): 5.50

Canister Dilution Factor: 1.75

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.2	ND	0.55	
141-78-6	Ethyl Acetate	17	4.4	4.8	1.2	
110-54-3	n-Hexane	4.5	2.2	1.3	0.62	
67-66-3	Chloroform	ND	2.2	ND	0.45	
109-99-9	Tetrahydrofuran (THF)	ND	2.2	ND	0.74	
107-06-2	1,2-Dichloroethane	ND	2.2	ND	0.54	
71-55-6	1,1,1-Trichloroethane	2.8	2.2	0.52	0.40	
71-43-2	Benzene	ND	2.2	ND	0.69	
56-23-5	Carbon Tetrachloride	ND	2.2	ND	0.35	
110-82-7	Cyclohexane	ND	4.4	ND	1.3	
78-87-5	1,2-Dichloropropane	ND	2.2	ND	0.47	
75-27-4	Bromodichloromethane	ND	2.2	ND	0.33	
79-01-6	Trichloroethene	ND	2.2	ND	0.41	
123-91-1	1,4-Dioxane	ND	2.2	ND	0.61	
80-62-6	Methyl Methacrylate	ND	4.4	ND	1.1	
142-82-5	n-Heptane	3.0	2.2	0.72	0.53	
10061-01-5	cis-1,3-Dichloropropene	ND	2.2	ND	0.48	
108-10-1	4-Methyl-2-pentanone	ND	2.2	ND	0.53	
10061-02-6	trans-1,3-Dichloropropene	ND	2.2	ND	0.48	
79-00-5	1,1,2-Trichloroethane	ND	2.2	ND	0.40	
108-88-3	Toluene	13	2.2	3.3	0.58	
591-78-6	2-Hexanone	3.7	2.2	0.91	0.53	
124-48-1	Dibromochloromethane	ND	2.2	ND	0.26	
106-93-4	1,2-Dibromoethane	ND	2.2	ND	0.28	
123-86-4	n-Butyl Acetate	ND	2.2	ND	0.46	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** **QEPI**

**Client Sample ID:** **WPP-SG10-170426**

**Client Project ID:** **Tetra Tech-Williams Polishing and Plating**

ALS Project ID: P1701990

ALS Sample ID: P1701990-006

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00779

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -3.17      Final Pressure (psig): 5.50

Canister Dilution Factor: 1.75

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	3.4	2.2	0.72	0.47	
127-18-4	Tetrachloroethene	8.5	2.2	1.3	0.32	
108-90-7	Chlorobenzene	ND	2.2	ND	0.48	
100-41-4	Ethylbenzene	ND	2.2	ND	0.50	
179601-23-1	m,p-Xylenes	5.6	4.4	1.3	1.0	
75-25-2	Bromoform	ND	2.2	ND	0.21	
100-42-5	Styrene	ND	2.2	ND	0.51	
95-47-6	o-Xylene	2.6	2.2	0.59	0.50	
111-84-2	n-Nonane	2.9	2.2	0.55	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.2	ND	0.32	
98-82-8	Cumene	ND	2.2	ND	0.45	
80-56-8	alpha-Pinene	16	2.2	2.9	0.39	
103-65-1	n-Propylbenzene	ND	2.2	ND	0.45	
622-96-8	4-Ethyltoluene	ND	2.2	ND	0.45	
108-67-8	1,3,5-Trimethylbenzene	ND	2.2	ND	0.45	
95-63-6	1,2,4-Trimethylbenzene	3.5	2.2	0.70	0.45	
100-44-7	Benzyl Chloride	ND	2.2	ND	0.42	
541-73-1	1,3-Dichlorobenzene	34	2.2	5.6	0.36	
106-46-7	1,4-Dichlorobenzene	ND	2.2	ND	0.36	
95-50-1	1,2-Dichlorobenzene	ND	2.2	ND	0.36	
5989-27-5	d-Limonene	7.7	2.2	1.4	0.39	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.2	ND	0.23	
120-82-1	1,2,4-Trichlorobenzene	ND	2.2	ND	0.29	
91-20-3	Naphthalene	ND	2.2	ND	0.42	
87-68-3	Hexachlorobutadiene	ND	2.2	ND	0.21	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG06-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-007

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00893

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -2.46 Final Pressure (psig): 5.38

Canister Dilution Factor: 1.64

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	15	2.1	8.7	1.2	
75-71-8	Dichlorodifluoromethane (CFC 12)	2.5	2.1	0.50	0.41	
74-87-3	Chloromethane	ND	2.1	ND	0.99	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.1	ND	0.29	
75-01-4	Vinyl Chloride	ND	2.1	ND	0.80	
106-99-0	1,3-Butadiene	ND	2.1	ND	0.93	
74-83-9	Bromomethane	ND	2.1	ND	0.53	
75-00-3	Chloroethane	ND	2.1	ND	0.78	
64-17-5	Ethanol	66	21	35	11	
75-05-8	Acetonitrile	ND	2.1	ND	1.2	
107-02-8	Acrolein	11	8.2	5.0	3.6	
67-64-1	Acetone	460	21	190	8.6	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	2.1	ND	0.36	
67-63-0	2-Propanol (Isopropyl Alcohol)	48	21	20	8.3	
107-13-1	Acrylonitrile	ND	2.1	ND	0.95	
75-35-4	1,1-Dichloroethene	ND	2.1	ND	0.52	
75-09-2	Methylene Chloride	ND	2.1	ND	0.59	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.1	ND	0.66	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	2.1	ND	0.27	
75-15-0	Carbon Disulfide	ND	21	ND	6.6	
156-60-5	trans-1,2-Dichloroethene	ND	2.1	ND	0.52	
75-34-3	1,1-Dichloroethane	ND	2.1	ND	0.51	
1634-04-4	Methyl tert-Butyl Ether	ND	2.1	ND	0.57	
108-05-4	Vinyl Acetate	ND	21	ND	5.8	
78-93-3	2-Butanone (MEK)	24	21	8.3	7.0	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG06-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-007

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00893

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -2.46      Final Pressure (psig): 5.38

Canister Dilution Factor: 1.64

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.1	ND	0.52	
141-78-6	Ethyl Acetate	7.2	4.1	2.0	1.1	
110-54-3	n-Hexane	4.4	2.1	1.2	0.58	
67-66-3	Chloroform	ND	2.1	ND	0.42	
109-99-9	Tetrahydrofuran (THF)	ND	2.1	ND	0.70	
107-06-2	1,2-Dichloroethane	ND	2.1	ND	0.51	
71-55-6	1,1,1-Trichloroethane	ND	2.1	ND	0.38	
71-43-2	Benzene	2.4	2.1	0.74	0.64	
56-23-5	Carbon Tetrachloride	ND	2.1	ND	0.33	
110-82-7	Cyclohexane	ND	4.1	ND	1.2	
78-87-5	1,2-Dichloropropane	ND	2.1	ND	0.44	
75-27-4	Bromodichloromethane	ND	2.1	ND	0.31	
79-01-6	Trichloroethene	ND	2.1	ND	0.38	
123-91-1	1,4-Dioxane	ND	2.1	ND	0.57	
80-62-6	Methyl Methacrylate	ND	4.1	ND	1.0	
142-82-5	n-Heptane	2.5	2.1	0.61	0.50	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	ND	0.45	
108-10-1	4-Methyl-2-pentanone	ND	2.1	ND	0.50	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	ND	0.45	
79-00-5	1,1,2-Trichloroethane	ND	2.1	ND	0.38	
108-88-3	Toluene	15	2.1	4.0	0.54	
591-78-6	2-Hexanone	3.9	2.1	0.95	0.50	
124-48-1	Dibromochloromethane	ND	2.1	ND	0.24	
106-93-4	1,2-Dibromoethane	ND	2.1	ND	0.27	
123-86-4	n-Butyl Acetate	ND	2.1	ND	0.43	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG06-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-007

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00893

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -2.46      Final Pressure (psig): 5.38

Canister Dilution Factor: 1.64

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	3.3	2.1	0.70	0.44	
127-18-4	Tetrachloroethene	3.9	2.1	0.58	0.30	
108-90-7	Chlorobenzene	ND	2.1	ND	0.45	
100-41-4	Ethylbenzene	ND	2.1	ND	0.47	
179601-23-1	m,p-Xylenes	6.8	4.1	1.6	0.94	
75-25-2	Bromoform	ND	2.1	ND	0.20	
100-42-5	Styrene	ND	2.1	ND	0.48	
95-47-6	o-Xylene	3.1	2.1	0.73	0.47	
111-84-2	n-Nonane	4.5	2.1	0.86	0.39	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	ND	0.30	
98-82-8	Cumene	ND	2.1	ND	0.42	
80-56-8	alpha-Pinene	19	2.1	3.3	0.37	
103-65-1	n-Propylbenzene	ND	2.1	ND	0.42	
622-96-8	4-Ethyltoluene	ND	2.1	ND	0.42	
108-67-8	1,3,5-Trimethylbenzene	ND	2.1	ND	0.42	
95-63-6	1,2,4-Trimethylbenzene	4.3	2.1	0.87	0.42	
100-44-7	Benzyl Chloride	ND	2.1	ND	0.40	
541-73-1	1,3-Dichlorobenzene	32	2.1	5.3	0.34	
106-46-7	1,4-Dichlorobenzene	ND	2.1	ND	0.34	
95-50-1	1,2-Dichlorobenzene	ND	2.1	ND	0.34	
5989-27-5	d-Limonene	9.4	2.1	1.7	0.37	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.1	ND	0.21	
120-82-1	1,2,4-Trichlorobenzene	ND	2.1	ND	0.28	
91-20-3	Naphthalene	ND	2.1	ND	0.39	
87-68-3	Hexachlorobutadiene	ND	2.1	ND	0.19	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG04-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-008

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00431

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -2.55 Final Pressure (psig): 5.68

Canister Dilution Factor: 1.68

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	16	2.1	9.5	1.2	
75-71-8	Dichlorodifluoromethane (CFC 12)	2.5	2.1	0.50	0.42	
74-87-3	Chloromethane	ND	2.1	ND	1.0	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.1	ND	0.30	
75-01-4	Vinyl Chloride	ND	2.1	ND	0.82	
106-99-0	1,3-Butadiene	ND	2.1	ND	0.95	
74-83-9	Bromomethane	ND	2.1	ND	0.54	
75-00-3	Chloroethane	ND	2.1	ND	0.80	
64-17-5	Ethanol	50	21	26	11	
75-05-8	Acetonitrile	ND	2.1	ND	1.3	
107-02-8	Acrolein	ND	8.4	ND	3.7	
67-64-1	Acetone	290	21	120	8.8	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	2.1	ND	0.37	
67-63-0	2-Propanol (Isopropyl Alcohol)	60	21	25	8.5	
107-13-1	Acrylonitrile	ND	2.1	ND	0.97	
75-35-4	1,1-Dichloroethene	ND	2.1	ND	0.53	
75-09-2	Methylene Chloride	ND	2.1	ND	0.60	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.1	ND	0.67	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	2.1	ND	0.27	
75-15-0	Carbon Disulfide	ND	21	ND	6.7	
156-60-5	trans-1,2-Dichloroethene	ND	2.1	ND	0.53	
75-34-3	1,1-Dichloroethane	ND	2.1	ND	0.52	
1634-04-4	Methyl tert-Butyl Ether	ND	2.1	ND	0.58	
108-05-4	Vinyl Acetate	ND	21	ND	6.0	
78-93-3	2-Butanone (MEK)	ND	21	ND	7.1	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG04-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-008

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00431

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -2.55      Final Pressure (psig): 5.68

Canister Dilution Factor: 1.68

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.1	ND	0.53	
141-78-6	Ethyl Acetate	26	4.2	7.1	1.2	
110-54-3	n-Hexane	9.1	2.1	2.6	0.60	
67-66-3	Chloroform	ND	2.1	ND	0.43	
109-99-9	Tetrahydrofuran (THF)	ND	2.1	ND	0.71	
107-06-2	1,2-Dichloroethane	ND	2.1	ND	0.52	
71-55-6	1,1,1-Trichloroethane	ND	2.1	ND	0.39	
71-43-2	Benzene	4.8	2.1	1.5	0.66	
56-23-5	Carbon Tetrachloride	ND	2.1	ND	0.33	
110-82-7	Cyclohexane	ND	4.2	ND	1.2	
78-87-5	1,2-Dichloropropane	ND	2.1	ND	0.45	
75-27-4	Bromodichloromethane	ND	2.1	ND	0.31	
79-01-6	Trichloroethene	ND	2.1	ND	0.39	
123-91-1	1,4-Dioxane	ND	2.1	ND	0.58	
80-62-6	Methyl Methacrylate	ND	4.2	ND	1.0	
142-82-5	n-Heptane	5.6	2.1	1.4	0.51	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	ND	0.46	
108-10-1	4-Methyl-2-pentanone	ND	2.1	ND	0.51	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	ND	0.46	
79-00-5	1,1,2-Trichloroethane	ND	2.1	ND	0.39	
108-88-3	Toluene	18	2.1	4.7	0.56	
591-78-6	2-Hexanone	4.5	2.1	1.1	0.51	
124-48-1	Dibromochloromethane	ND	2.1	ND	0.25	
106-93-4	1,2-Dibromoethane	ND	2.1	ND	0.27	
123-86-4	n-Butyl Acetate	ND	2.1	ND	0.44	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG04-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-008

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00431

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -2.55 Final Pressure (psig): 5.68

Canister Dilution Factor: 1.68

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	7.2	2.1	1.6	0.45	
127-18-4	Tetrachloroethene	ND	2.1	ND	0.31	
108-90-7	Chlorobenzene	ND	2.1	ND	0.46	
100-41-4	Ethylbenzene	2.2	2.1	0.51	0.48	
179601-23-1	m,p-Xylenes	6.6	4.2	1.5	0.97	
75-25-2	Bromoform	ND	2.1	ND	0.20	
100-42-5	Styrene	ND	2.1	ND	0.49	
95-47-6	o-Xylene	3.4	2.1	0.78	0.48	
111-84-2	n-Nonane	5.4	2.1	1.0	0.40	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	ND	0.31	
98-82-8	Cumene	ND	2.1	ND	0.43	
80-56-8	alpha-Pinene	23	2.1	4.2	0.38	
103-65-1	n-Propylbenzene	ND	2.1	ND	0.43	
622-96-8	4-Ethyltoluene	ND	2.1	ND	0.43	
108-67-8	1,3,5-Trimethylbenzene	ND	2.1	ND	0.43	
95-63-6	1,2,4-Trimethylbenzene	3.9	2.1	0.80	0.43	
100-44-7	Benzyl Chloride	ND	2.1	ND	0.41	
541-73-1	1,3-Dichlorobenzene	40	2.1	6.7	0.35	
106-46-7	1,4-Dichlorobenzene	ND	2.1	ND	0.35	
95-50-1	1,2-Dichlorobenzene	ND	2.1	ND	0.35	
5989-27-5	d-Limonene	12	2.1	2.2	0.38	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.1	ND	0.22	
120-82-1	1,2,4-Trichlorobenzene	ND	2.1	ND	0.28	
91-20-3	Naphthalene	ND	2.1	ND	0.40	
87-68-3	Hexachlorobutadiene	ND	2.1	ND	0.20	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG02-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-009

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00037

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -3.17      Final Pressure (psig): 5.01

Canister Dilution Factor: 1.71

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	26	2.1	15	1.2	
75-71-8	Dichlorodifluoromethane (CFC 12)	2.3	2.1	0.46	0.43	
74-87-3	Chloromethane	ND	2.1	ND	1.0	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.1	ND	0.31	
75-01-4	Vinyl Chloride	ND	2.1	ND	0.84	
106-99-0	1,3-Butadiene	ND	2.1	ND	0.97	
74-83-9	Bromomethane	ND	2.1	ND	0.55	
75-00-3	Chloroethane	ND	2.1	ND	0.81	
64-17-5	Ethanol	94	21	50	11	
75-05-8	Acetonitrile	ND	2.1	ND	1.3	
107-02-8	Acrolein	15	8.6	6.4	3.7	
67-64-1	Acetone	840	21	350	9.0	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	2.1	ND	0.38	
67-63-0	2-Propanol (Isopropyl Alcohol)	85	21	34	8.7	
107-13-1	Acrylonitrile	ND	2.1	ND	0.99	
75-35-4	1,1-Dichloroethene	ND	2.1	ND	0.54	
75-09-2	Methylene Chloride	ND	2.1	ND	0.62	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.1	ND	0.68	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	2.1	ND	0.28	
75-15-0	Carbon Disulfide	ND	21	ND	6.9	
156-60-5	trans-1,2-Dichloroethene	ND	2.1	ND	0.54	
75-34-3	1,1-Dichloroethane	ND	2.1	ND	0.53	
1634-04-4	Methyl tert-Butyl Ether	ND	2.1	ND	0.59	
108-05-4	Vinyl Acetate	ND	21	ND	6.1	
78-93-3	2-Butanone (MEK)	43	21	14	7.3	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG02-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-009

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00037

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -3.17 Final Pressure (psig): 5.01

Canister Dilution Factor: 1.71

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.1	ND	0.54	
141-78-6	Ethyl Acetate	22	4.3	6.1	1.2	
110-54-3	n-Hexane	22	2.1	6.2	0.61	
67-66-3	Chloroform	ND	2.1	ND	0.44	
109-99-9	Tetrahydrofuran (THF)	ND	2.1	ND	0.73	
107-06-2	1,2-Dichloroethane	ND	2.1	ND	0.53	
71-55-6	1,1,1-Trichloroethane	ND	2.1	ND	0.39	
71-43-2	Benzene	9.8	2.1	3.1	0.67	
56-23-5	Carbon Tetrachloride	ND	2.1	ND	0.34	
110-82-7	Cyclohexane	11	4.3	3.3	1.2	
78-87-5	1,2-Dichloropropane	ND	2.1	ND	0.46	
75-27-4	Bromodichloromethane	ND	2.1	ND	0.32	
79-01-6	Trichloroethene	ND	2.1	ND	0.40	
123-91-1	1,4-Dioxane	ND	2.1	ND	0.59	
80-62-6	Methyl Methacrylate	ND	4.3	ND	1.0	
142-82-5	n-Heptane	11	2.1	2.7	0.52	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	ND	0.47	
108-10-1	4-Methyl-2-pentanone	ND	2.1	ND	0.52	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	ND	0.47	
79-00-5	1,1,2-Trichloroethane	ND	2.1	ND	0.39	
108-88-3	Toluene	26	2.1	7.0	0.57	
591-78-6	2-Hexanone	8.9	2.1	2.2	0.52	
124-48-1	Dibromochloromethane	ND	2.1	ND	0.25	
106-93-4	1,2-Dibromoethane	ND	2.1	ND	0.28	
123-86-4	n-Butyl Acetate	ND	2.1	ND	0.45	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG02-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-009

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00037

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -3.17 Final Pressure (psig): 5.01

Canister Dilution Factor: 1.71

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	9.7	2.1	2.1	0.46	
127-18-4	Tetrachloroethene	ND	2.1	ND	0.32	
108-90-7	Chlorobenzene	ND	2.1	ND	0.46	
100-41-4	Ethylbenzene	3.5	2.1	0.81	0.49	
179601-23-1	m,p-Xylenes	10	4.3	2.3	0.98	
75-25-2	Bromoform	ND	2.1	ND	0.21	
100-42-5	Styrene	2.2	2.1	0.52	0.50	
95-47-6	o-Xylene	4.9	2.1	1.1	0.49	
111-84-2	n-Nonane	7.9	2.1	1.5	0.41	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	ND	0.31	
98-82-8	Cumene	ND	2.1	ND	0.43	
80-56-8	alpha-Pinene	30	2.1	5.5	0.38	
103-65-1	n-Propylbenzene	ND	2.1	ND	0.43	
622-96-8	4-Ethyltoluene	ND	2.1	ND	0.43	
108-67-8	1,3,5-Trimethylbenzene	ND	2.1	ND	0.43	
95-63-6	1,2,4-Trimethylbenzene	6.3	2.1	1.3	0.43	
100-44-7	Benzyl Chloride	ND	2.1	ND	0.41	
541-73-1	1,3-Dichlorobenzene	72	2.1	12	0.36	
106-46-7	1,4-Dichlorobenzene	ND	2.1	ND	0.36	
95-50-1	1,2-Dichlorobenzene	ND	2.1	ND	0.36	
5989-27-5	d-Limonene	15	2.1	2.6	0.38	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.1	ND	0.22	
120-82-1	1,2,4-Trichlorobenzene	ND	2.1	ND	0.29	
91-20-3	Naphthalene	ND	2.1	ND	0.41	
87-68-3	Hexachlorobutadiene	ND	2.1	ND	0.20	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG03-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-010

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00794

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -0.43 Final Pressure (psig): 5.27

Canister Dilution Factor: 1.40

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	11	1.8	6.4	1.0	
75-71-8	Dichlorodifluoromethane (CFC 12)	2.5	1.8	0.50	0.35	
74-87-3	Chloromethane	ND	1.8	ND	0.85	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	1.8	ND	0.25	
75-01-4	Vinyl Chloride	ND	1.8	ND	0.68	
106-99-0	1,3-Butadiene	ND	1.8	ND	0.79	
74-83-9	Bromomethane	ND	1.8	ND	0.45	
75-00-3	Chloroethane	ND	1.8	ND	0.66	
64-17-5	Ethanol	48	18	26	9.3	
75-05-8	Acetonitrile	ND	1.8	ND	1.0	
107-02-8	Acrolein	7.9	7.0	3.5	3.1	
67-64-1	Acetone	200	18	86	7.4	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	1.8	ND	0.31	
67-63-0	2-Propanol (Isopropyl Alcohol)	45	18	18	7.1	
107-13-1	Acrylonitrile	ND	1.8	ND	0.81	
75-35-4	1,1-Dichloroethene	ND	1.8	ND	0.44	
75-09-2	Methylene Chloride	ND	1.8	ND	0.50	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	1.8	ND	0.56	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	1.8	ND	0.23	
75-15-0	Carbon Disulfide	ND	18	ND	5.6	
156-60-5	trans-1,2-Dichloroethene	ND	1.8	ND	0.44	
75-34-3	1,1-Dichloroethane	ND	1.8	ND	0.43	
1634-04-4	Methyl tert-Butyl Ether	ND	1.8	ND	0.49	
108-05-4	Vinyl Acetate	ND	18	ND	5.0	
78-93-3	2-Butanone (MEK)	ND	18	ND	5.9	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG03-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-010

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00794

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -0.43 Final Pressure (psig): 5.27

Canister Dilution Factor: 1.40

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	1.8	ND	0.44	
141-78-6	Ethyl Acetate	25	3.5	7.0	0.97	
110-54-3	n-Hexane	3.5	1.8	0.99	0.50	
67-66-3	Chloroform	ND	1.8	ND	0.36	
109-99-9	Tetrahydrofuran (THF)	ND	1.8	ND	0.59	
107-06-2	1,2-Dichloroethane	ND	1.8	ND	0.43	
71-55-6	1,1,1-Trichloroethane	26	1.8	4.8	0.32	
71-43-2	Benzene	2.6	1.8	0.81	0.55	
56-23-5	Carbon Tetrachloride	ND	1.8	ND	0.28	
110-82-7	Cyclohexane	ND	3.5	ND	1.0	
78-87-5	1,2-Dichloropropane	ND	1.8	ND	0.38	
75-27-4	Bromodichloromethane	ND	1.8	ND	0.26	
79-01-6	Trichloroethene	ND	1.8	ND	0.33	
123-91-1	1,4-Dioxane	ND	1.8	ND	0.49	
80-62-6	Methyl Methacrylate	ND	3.5	ND	0.86	
142-82-5	n-Heptane	ND	1.8	ND	0.43	
10061-01-5	cis-1,3-Dichloropropene	ND	1.8	ND	0.39	
108-10-1	4-Methyl-2-pentanone	ND	1.8	ND	0.43	
10061-02-6	trans-1,3-Dichloropropene	ND	1.8	ND	0.39	
79-00-5	1,1,2-Trichloroethane	ND	1.8	ND	0.32	
108-88-3	Toluene	14	1.8	3.8	0.46	
591-78-6	2-Hexanone	2.2	1.8	0.54	0.43	
124-48-1	Dibromochloromethane	ND	1.8	ND	0.21	
106-93-4	1,2-Dibromoethane	ND	1.8	ND	0.23	
123-86-4	n-Butyl Acetate	ND	1.8	ND	0.37	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG03-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-010

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00794

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -0.43 Final Pressure (psig): 5.27

Canister Dilution Factor: 1.40

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	3.2	1.8	0.69	0.37	
127-18-4	Tetrachloroethene	3.9	1.8	0.57	0.26	
108-90-7	Chlorobenzene	ND	1.8	ND	0.38	
100-41-4	Ethylbenzene	1.9	1.8	0.44	0.40	
179601-23-1	m,p-Xylenes	7.0	3.5	1.6	0.81	
75-25-2	Bromoform	ND	1.8	ND	0.17	
100-42-5	Styrene	1.8	1.8	0.43	0.41	
95-47-6	o-Xylene	3.4	1.8	0.78	0.40	
111-84-2	n-Nonane	4.1	1.8	0.79	0.33	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.8	ND	0.25	
98-82-8	Cumene	ND	1.8	ND	0.36	
80-56-8	alpha-Pinene	21	1.8	3.7	0.31	
103-65-1	n-Propylbenzene	ND	1.8	ND	0.36	
622-96-8	4-Ethyltoluene	ND	1.8	ND	0.36	
108-67-8	1,3,5-Trimethylbenzene	ND	1.8	ND	0.36	
95-63-6	1,2,4-Trimethylbenzene	5.1	1.8	1.0	0.36	
100-44-7	Benzyl Chloride	ND	1.8	ND	0.34	
541-73-1	1,3-Dichlorobenzene	39	1.8	6.5	0.29	
106-46-7	1,4-Dichlorobenzene	ND	1.8	ND	0.29	
95-50-1	1,2-Dichlorobenzene	ND	1.8	ND	0.29	
5989-27-5	d-Limonene	15	1.8	2.6	0.31	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.8	ND	0.18	
120-82-1	1,2,4-Trichlorobenzene	ND	1.8	ND	0.24	
91-20-3	Naphthalene	ND	1.8	ND	0.33	
87-68-3	Hexachlorobutadiene	ND	1.8	ND	0.16	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** QEPI

**Client Sample ID:** WPP-AA03-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-011

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00249

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -2.88 Final Pressure (psig): 5.00

Canister Dilution Factor: 1.67

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	2.1	ND	1.2	
75-71-8	Dichlorodifluoromethane (CFC 12)	2.6	2.1	0.53	0.42	
74-87-3	Chloromethane	ND	2.1	ND	1.0	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.1	ND	0.30	
75-01-4	Vinyl Chloride	ND	2.1	ND	0.82	
106-99-0	1,3-Butadiene	ND	2.1	ND	0.94	
74-83-9	Bromomethane	ND	2.1	ND	0.54	
75-00-3	Chloroethane	ND	2.1	ND	0.79	
64-17-5	Ethanol	ND	21	ND	11	
75-05-8	Acetonitrile	ND	2.1	ND	1.2	
107-02-8	Acrolein	ND	8.4	ND	3.6	
67-64-1	Acetone	ND	21	ND	8.8	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	2.1	ND	0.37	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	21	ND	8.5	
107-13-1	Acrylonitrile	ND	2.1	ND	0.96	
75-35-4	1,1-Dichloroethene	ND	2.1	ND	0.53	
75-09-2	Methylene Chloride	ND	2.1	ND	0.60	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.1	ND	0.67	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	2.1	ND	0.27	
75-15-0	Carbon Disulfide	ND	21	ND	6.7	
156-60-5	trans-1,2-Dichloroethene	ND	2.1	ND	0.53	
75-34-3	1,1-Dichloroethane	ND	2.1	ND	0.52	
1634-04-4	Methyl tert-Butyl Ether	ND	2.1	ND	0.58	
108-05-4	Vinyl Acetate	ND	21	ND	5.9	
78-93-3	2-Butanone (MEK)	ND	21	ND	7.1	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** QEPI

**Client Sample ID:** WPP-AA03-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-011

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00249

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -2.88 Final Pressure (psig): 5.00

Canister Dilution Factor: 1.67

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.1	ND	0.53	
141-78-6	Ethyl Acetate	ND	4.2	ND	1.2	
110-54-3	n-Hexane	ND	2.1	ND	0.59	
67-66-3	Chloroform	ND	2.1	ND	0.43	
109-99-9	Tetrahydrofuran (THF)	ND	2.1	ND	0.71	
107-06-2	1,2-Dichloroethane	ND	2.1	ND	0.52	
71-55-6	1,1,1-Trichloroethane	ND	2.1	ND	0.38	
71-43-2	Benzene	ND	2.1	ND	0.65	
56-23-5	Carbon Tetrachloride	ND	2.1	ND	0.33	
110-82-7	Cyclohexane	ND	4.2	ND	1.2	
78-87-5	1,2-Dichloropropane	ND	2.1	ND	0.45	
75-27-4	Bromodichloromethane	ND	2.1	ND	0.31	
79-01-6	Trichloroethene	ND	2.1	ND	0.39	
123-91-1	1,4-Dioxane	ND	2.1	ND	0.58	
80-62-6	Methyl Methacrylate	ND	4.2	ND	1.0	
142-82-5	n-Heptane	ND	2.1	ND	0.51	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	ND	0.46	
108-10-1	4-Methyl-2-pentanone	ND	2.1	ND	0.51	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	ND	0.46	
79-00-5	1,1,2-Trichloroethane	ND	2.1	ND	0.38	
108-88-3	Toluene	ND	2.1	ND	0.55	
591-78-6	2-Hexanone	ND	2.1	ND	0.51	
124-48-1	Dibromochloromethane	ND	2.1	ND	0.25	
106-93-4	1,2-Dibromoethane	ND	2.1	ND	0.27	
123-86-4	n-Butyl Acetate	ND	2.1	ND	0.44	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** QEPI

**Client Sample ID:** WPP-AA03-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-011

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00249

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -2.88      Final Pressure (psig): 5.00

Canister Dilution Factor: 1.67

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	2.1	ND	0.45	
127-18-4	Tetrachloroethene	ND	2.1	ND	0.31	
108-90-7	Chlorobenzene	ND	2.1	ND	0.45	
100-41-4	Ethylbenzene	ND	2.1	ND	0.48	
179601-23-1	m,p-Xylenes	ND	4.2	ND	0.96	
75-25-2	Bromoform	ND	2.1	ND	0.20	
100-42-5	Styrene	ND	2.1	ND	0.49	
95-47-6	o-Xylene	ND	2.1	ND	0.48	
111-84-2	n-Nonane	ND	2.1	ND	0.40	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	ND	0.30	
98-82-8	Cumene	ND	2.1	ND	0.42	
80-56-8	alpha-Pinene	ND	2.1	ND	0.37	
103-65-1	n-Propylbenzene	ND	2.1	ND	0.42	
622-96-8	4-Ethyltoluene	ND	2.1	ND	0.42	
108-67-8	1,3,5-Trimethylbenzene	ND	2.1	ND	0.42	
95-63-6	1,2,4-Trimethylbenzene	ND	2.1	ND	0.42	
100-44-7	Benzyl Chloride	ND	2.1	ND	0.40	
541-73-1	1,3-Dichlorobenzene	ND	2.1	ND	0.35	
106-46-7	1,4-Dichlorobenzene	ND	2.1	ND	0.35	
95-50-1	1,2-Dichlorobenzene	ND	2.1	ND	0.35	
5989-27-5	d-Limonene	ND	2.1	ND	0.37	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.1	ND	0.22	
120-82-1	1,2,4-Trichlorobenzene	ND	2.1	ND	0.28	
91-20-3	Naphthalene	ND	2.1	ND	0.40	
87-68-3	Hexachlorobutadiene	ND	2.1	ND	0.20	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG08-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-012

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Silonite Summa Canister

Test Notes:

Container ID: 1SS00004

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -2.64      Final Pressure (psig): 5.12

Canister Dilution Factor: 1.64

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	21	2.1	12	1.2	
75-71-8	Dichlorodifluoromethane (CFC 12)	2.4	2.1	0.49	0.41	
74-87-3	Chloromethane	ND	2.1	ND	0.99	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.1	ND	0.29	
75-01-4	Vinyl Chloride	ND	2.1	ND	0.80	
106-99-0	1,3-Butadiene	ND	2.1	ND	0.93	
74-83-9	Bromomethane	ND	2.1	ND	0.53	
75-00-3	Chloroethane	ND	2.1	ND	0.78	
64-17-5	Ethanol	150	21	78	11	
75-05-8	Acetonitrile	ND	2.1	ND	1.2	
107-02-8	Acrolein	14	8.2	5.9	3.6	
67-64-1	Acetone	600	21	250	8.6	
75-69-4	Trichlorofluoromethane (CFC 11)	3.1	2.1	0.55	0.36	
67-63-0	2-Propanol (Isopropyl Alcohol)	78	21	32	8.3	
107-13-1	Acrylonitrile	ND	2.1	ND	0.95	
75-35-4	1,1-Dichloroethene	ND	2.1	ND	0.52	
75-09-2	Methylene Chloride	ND	2.1	ND	0.59	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.1	ND	0.66	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	2.1	ND	0.27	
75-15-0	Carbon Disulfide	ND	21	ND	6.6	
156-60-5	trans-1,2-Dichloroethene	ND	2.1	ND	0.52	
75-34-3	1,1-Dichloroethane	ND	2.1	ND	0.51	
1634-04-4	Methyl tert-Butyl Ether	ND	2.1	ND	0.57	
108-05-4	Vinyl Acetate	ND	21	ND	5.8	
78-93-3	2-Butanone (MEK)	31	21	10	7.0	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG08-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-012

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Silonite Summa Canister

Test Notes:

Container ID: 1SS00004

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -2.64      Final Pressure (psig): 5.12

Canister Dilution Factor: 1.64

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.1	ND	0.52	
141-78-6	Ethyl Acetate	130	4.1	35	1.1	
110-54-3	n-Hexane	10	2.1	2.8	0.58	
67-66-3	Chloroform	ND	2.1	ND	0.42	
109-99-9	Tetrahydrofuran (THF)	ND	2.1	ND	0.70	
107-06-2	1,2-Dichloroethane	ND	2.1	ND	0.51	
71-55-6	1,1,1-Trichloroethane	21	2.1	3.8	0.38	
71-43-2	Benzene	3.2	2.1	0.99	0.64	
56-23-5	Carbon Tetrachloride	ND	2.1	ND	0.33	
110-82-7	Cyclohexane	10	4.1	3.0	1.2	
78-87-5	1,2-Dichloropropane	ND	2.1	ND	0.44	
75-27-4	Bromodichloromethane	ND	2.1	ND	0.31	
79-01-6	Trichloroethene	ND	2.1	ND	0.38	
123-91-1	1,4-Dioxane	ND	2.1	ND	0.57	
80-62-6	Methyl Methacrylate	ND	4.1	ND	1.0	
142-82-5	n-Heptane	5.2	2.1	1.3	0.50	
10061-01-5	cis-1,3-Dichloropropene	ND	2.1	ND	0.45	
108-10-1	4-Methyl-2-pentanone	ND	2.1	ND	0.50	
10061-02-6	trans-1,3-Dichloropropene	ND	2.1	ND	0.45	
79-00-5	1,1,2-Trichloroethane	ND	2.1	ND	0.38	
108-88-3	Toluene	21	2.1	5.7	0.54	
591-78-6	2-Hexanone	5.8	2.1	1.4	0.50	
124-48-1	Dibromochloromethane	ND	2.1	ND	0.24	
106-93-4	1,2-Dibromoethane	ND	2.1	ND	0.27	
123-86-4	n-Butyl Acetate	ND	2.1	ND	0.43	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG08-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-012

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Silonite Summa Canister

Test Notes:

Container ID: 1SS00004

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -2.64 Final Pressure (psig): 5.12

Canister Dilution Factor: 1.64

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	7.7	2.1	1.7	0.44	
127-18-4	Tetrachloroethene	ND	2.1	ND	0.30	
108-90-7	Chlorobenzene	ND	2.1	ND	0.45	
100-41-4	Ethylbenzene	2.5	2.1	0.58	0.47	
179601-23-1	m,p-Xylenes	8.4	4.1	1.9	0.94	
75-25-2	Bromoform	ND	2.1	ND	0.20	
100-42-5	Styrene	ND	2.1	ND	0.48	
95-47-6	o-Xylene	4.1	2.1	0.95	0.47	
111-84-2	n-Nonane	6.2	2.1	1.2	0.39	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.1	ND	0.30	
98-82-8	Cumene	ND	2.1	ND	0.42	
80-56-8	alpha-Pinene	32	2.1	5.7	0.37	
103-65-1	n-Propylbenzene	ND	2.1	ND	0.42	
622-96-8	4-Ethyltoluene	ND	2.1	ND	0.42	
108-67-8	1,3,5-Trimethylbenzene	ND	2.1	ND	0.42	
95-63-6	1,2,4-Trimethylbenzene	5.6	2.1	1.1	0.42	
100-44-7	Benzyl Chloride	ND	2.1	ND	0.40	
541-73-1	1,3-Dichlorobenzene	43	2.1	7.2	0.34	
106-46-7	1,4-Dichlorobenzene	ND	2.1	ND	0.34	
95-50-1	1,2-Dichlorobenzene	ND	2.1	ND	0.34	
5989-27-5	d-Limonene	15	2.1	2.7	0.37	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.1	ND	0.21	
120-82-1	1,2,4-Trichlorobenzene	ND	2.1	ND	0.28	
91-20-3	Naphthalene	ND	2.1	ND	0.39	
87-68-3	Hexachlorobutadiene	ND	2.1	ND	0.19	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG12-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-013

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00419

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -3.13      Final Pressure (psig): 5.65

Canister Dilution Factor: 1.76

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	13	2.2	7.3	1.3	
75-71-8	Dichlorodifluoromethane (CFC 12)	2.2	2.2	0.45	0.45	
74-87-3	Chloromethane	ND	2.2	ND	1.1	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.2	ND	0.31	
75-01-4	Vinyl Chloride	ND	2.2	ND	0.86	
106-99-0	1,3-Butadiene	ND	2.2	ND	0.99	
74-83-9	Bromomethane	ND	2.2	ND	0.57	
75-00-3	Chloroethane	ND	2.2	ND	0.83	
64-17-5	Ethanol	52	22	28	12	
75-05-8	Acetonitrile	ND	2.2	ND	1.3	
107-02-8	Acrolein	10	8.8	4.5	3.8	
67-64-1	Acetone	350	22	150	9.3	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	2.2	ND	0.39	
67-63-0	2-Propanol (Isopropyl Alcohol)	42	22	17	9.0	
107-13-1	Acrylonitrile	ND	2.2	ND	1.0	
75-35-4	1,1-Dichloroethene	ND	2.2	ND	0.56	
75-09-2	Methylene Chloride	ND	2.2	ND	0.63	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.2	ND	0.70	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	2.2	ND	0.29	
75-15-0	Carbon Disulfide	ND	22	ND	7.1	
156-60-5	trans-1,2-Dichloroethene	ND	2.2	ND	0.56	
75-34-3	1,1-Dichloroethane	ND	2.2	ND	0.54	
1634-04-4	Methyl tert-Butyl Ether	ND	2.2	ND	0.61	
108-05-4	Vinyl Acetate	ND	22	ND	6.3	
78-93-3	2-Butanone (MEK)	ND	22	ND	7.5	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG12-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-013

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00419

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -3.13      Final Pressure (psig): 5.65

Canister Dilution Factor: 1.76

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.2	ND	0.56	
141-78-6	Ethyl Acetate	19	4.4	5.3	1.2	
110-54-3	n-Hexane	6.6	2.2	1.9	0.62	
67-66-3	Chloroform	ND	2.2	ND	0.45	
109-99-9	Tetrahydrofuran (THF)	ND	2.2	ND	0.75	
107-06-2	1,2-Dichloroethane	ND	2.2	ND	0.54	
71-55-6	1,1,1-Trichloroethane	30	2.2	5.5	0.40	
71-43-2	Benzene	4.0	2.2	1.2	0.69	
56-23-5	Carbon Tetrachloride	ND	2.2	ND	0.35	
110-82-7	Cyclohexane	5.0	4.4	1.4	1.3	
78-87-5	1,2-Dichloropropane	ND	2.2	ND	0.48	
75-27-4	Bromodichloromethane	ND	2.2	ND	0.33	
79-01-6	Trichloroethene	ND	2.2	ND	0.41	
123-91-1	1,4-Dioxane	ND	2.2	ND	0.61	
80-62-6	Methyl Methacrylate	ND	4.4	ND	1.1	
142-82-5	n-Heptane	5.0	2.2	1.2	0.54	
10061-01-5	cis-1,3-Dichloropropene	ND	2.2	ND	0.48	
108-10-1	4-Methyl-2-pentanone	19	2.2	4.6	0.54	
10061-02-6	trans-1,3-Dichloropropene	ND	2.2	ND	0.48	
79-00-5	1,1,2-Trichloroethane	ND	2.2	ND	0.40	
108-88-3	Toluene	17	2.2	4.6	0.58	
591-78-6	2-Hexanone	5.4	2.2	1.3	0.54	
124-48-1	Dibromochloromethane	ND	2.2	ND	0.26	
106-93-4	1,2-Dibromoethane	ND	2.2	ND	0.29	
123-86-4	n-Butyl Acetate	ND	2.2	ND	0.46	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG12-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-013

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00419

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -3.13 Final Pressure (psig): 5.65

Canister Dilution Factor: 1.76

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	8.0	2.2	1.7	0.47	
127-18-4	Tetrachloroethene	ND	2.2	ND	0.32	
108-90-7	Chlorobenzene	ND	2.2	ND	0.48	
100-41-4	Ethylbenzene	2.8	2.2	0.65	0.51	
179601-23-1	m,p-Xylenes	9.8	4.4	2.3	1.0	
75-25-2	Bromoform	ND	2.2	ND	0.21	
100-42-5	Styrene	2.3	2.2	0.54	0.52	
95-47-6	o-Xylene	4.8	2.2	1.1	0.51	
111-84-2	n-Nonane	7.4	2.2	1.4	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.2	ND	0.32	
98-82-8	Cumene	ND	2.2	ND	0.45	
80-56-8	alpha-Pinene	29	2.2	5.3	0.39	
103-65-1	n-Propylbenzene	ND	2.2	ND	0.45	
622-96-8	4-Ethyltoluene	ND	2.2	ND	0.45	
108-67-8	1,3,5-Trimethylbenzene	2.6	2.2	0.53	0.45	
95-63-6	1,2,4-Trimethylbenzene	8.8	2.2	1.8	0.45	
100-44-7	Benzyl Chloride	ND	2.2	ND	0.43	
541-73-1	1,3-Dichlorobenzene	160	2.2	27	0.37	
106-46-7	1,4-Dichlorobenzene	ND	2.2	ND	0.37	
95-50-1	1,2-Dichlorobenzene	ND	2.2	ND	0.37	
5989-27-5	d-Limonene	23	2.2	4.1	0.39	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.2	ND	0.23	
120-82-1	1,2,4-Trichlorobenzene	ND	2.2	ND	0.30	
91-20-3	Naphthalene	2.3	2.2	0.43	0.42	
87-68-3	Hexachlorobutadiene	ND	2.2	ND	0.21	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG13-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-014

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00459

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -3.20      Final Pressure (psig): 5.38

Canister Dilution Factor: 1.75

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	11	2.2	6.6	1.3	
75-71-8	Dichlorodifluoromethane (CFC 12)	2.4	2.2	0.48	0.44	
74-87-3	Chloromethane	ND	2.2	ND	1.1	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	2.2	ND	0.31	
75-01-4	Vinyl Chloride	ND	2.2	ND	0.86	
106-99-0	1,3-Butadiene	ND	2.2	ND	0.99	
74-83-9	Bromomethane	ND	2.2	ND	0.56	
75-00-3	Chloroethane	ND	2.2	ND	0.83	
64-17-5	Ethanol	44	22	23	12	
75-05-8	Acetonitrile	ND	2.2	ND	1.3	
107-02-8	Acrolein	ND	8.8	ND	3.8	
67-64-1	Acetone	250	22	100	9.2	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	2.2	ND	0.39	
67-63-0	2-Propanol (Isopropyl Alcohol)	36	22	15	8.9	
107-13-1	Acrylonitrile	ND	2.2	ND	1.0	
75-35-4	1,1-Dichloroethene	ND	2.2	ND	0.55	
75-09-2	Methylene Chloride	ND	2.2	ND	0.63	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	2.2	ND	0.70	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	2.2	ND	0.29	
75-15-0	Carbon Disulfide	ND	22	ND	7.0	
156-60-5	trans-1,2-Dichloroethene	ND	2.2	ND	0.55	
75-34-3	1,1-Dichloroethane	ND	2.2	ND	0.54	
1634-04-4	Methyl tert-Butyl Ether	ND	2.2	ND	0.61	
108-05-4	Vinyl Acetate	ND	22	ND	6.2	
78-93-3	2-Butanone (MEK)	ND	22	ND	7.4	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG13-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-014

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00459

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -3.20      Final Pressure (psig): 5.38

Canister Dilution Factor: 1.75

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	2.2	ND	0.55	
141-78-6	Ethyl Acetate	18	4.4	5.0	1.2	
110-54-3	n-Hexane	13	2.2	3.8	0.62	
67-66-3	Chloroform	ND	2.2	ND	0.45	
109-99-9	Tetrahydrofuran (THF)	ND	2.2	ND	0.74	
107-06-2	1,2-Dichloroethane	ND	2.2	ND	0.54	
71-55-6	1,1,1-Trichloroethane	ND	2.2	ND	0.40	
71-43-2	Benzene	5.7	2.2	1.8	0.69	
56-23-5	Carbon Tetrachloride	ND	2.2	ND	0.35	
110-82-7	Cyclohexane	7.6	4.4	2.2	1.3	
78-87-5	1,2-Dichloropropane	ND	2.2	ND	0.47	
75-27-4	Bromodichloromethane	ND	2.2	ND	0.33	
79-01-6	Trichloroethene	ND	2.2	ND	0.41	
123-91-1	1,4-Dioxane	ND	2.2	ND	0.61	
80-62-6	Methyl Methacrylate	ND	4.4	ND	1.1	
142-82-5	n-Heptane	8.7	2.2	2.1	0.53	
10061-01-5	cis-1,3-Dichloropropene	ND	2.2	ND	0.48	
108-10-1	4-Methyl-2-pentanone	ND	2.2	ND	0.53	
10061-02-6	trans-1,3-Dichloropropene	ND	2.2	ND	0.48	
79-00-5	1,1,2-Trichloroethane	ND	2.2	ND	0.40	
108-88-3	Toluene	18	2.2	4.7	0.58	
591-78-6	2-Hexanone	2.4	2.2	0.59	0.53	
124-48-1	Dibromochloromethane	ND	2.2	ND	0.26	
106-93-4	1,2-Dibromoethane	ND	2.2	ND	0.28	
123-86-4	n-Butyl Acetate	ND	2.2	ND	0.46	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** QEPI

**Client Sample ID:** WPP-SG13-170426

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P1701990-014

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Container ID: 1SC00459

Date Collected: 4/26/17

Date Received: 4/27/17

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.40 Liter(s)

Initial Pressure (psig): -3.20 Final Pressure (psig): 5.38

Canister Dilution Factor: 1.75

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	6.8	2.2	1.5	0.47	
127-18-4	Tetrachloroethene	ND	2.2	ND	0.32	
108-90-7	Chlorobenzene	ND	2.2	ND	0.48	
100-41-4	Ethylbenzene	ND	2.2	ND	0.50	
179601-23-1	m,p-Xylenes	6.7	4.4	1.5	1.0	
75-25-2	Bromoform	ND	2.2	ND	0.21	
100-42-5	Styrene	ND	2.2	ND	0.51	
95-47-6	o-Xylene	3.1	2.2	0.72	0.50	
111-84-2	n-Nonane	4.1	2.2	0.79	0.42	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.2	ND	0.32	
98-82-8	Cumene	ND	2.2	ND	0.45	
80-56-8	alpha-Pinene	19	2.2	3.5	0.39	
103-65-1	n-Propylbenzene	ND	2.2	ND	0.45	
622-96-8	4-Ethyltoluene	ND	2.2	ND	0.45	
108-67-8	1,3,5-Trimethylbenzene	ND	2.2	ND	0.45	
95-63-6	1,2,4-Trimethylbenzene	4.9	2.2	0.99	0.45	
100-44-7	Benzyl Chloride	ND	2.2	ND	0.42	
541-73-1	1,3-Dichlorobenzene	52	2.2	8.7	0.36	
106-46-7	1,4-Dichlorobenzene	ND	2.2	ND	0.36	
95-50-1	1,2-Dichlorobenzene	ND	2.2	ND	0.36	
5989-27-5	d-Limonene	12	2.2	2.2	0.39	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.2	ND	0.23	
120-82-1	1,2,4-Trichlorobenzene	ND	2.2	ND	0.29	
91-20-3	Naphthalene	ND	2.2	ND	0.42	
87-68-3	Hexachlorobutadiene	ND	2.2	ND	0.21	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** QEPI

**Client Sample ID:** Method Blank

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P170503-MB

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 5/3/17

Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.50	ND	0.29	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.50	ND	0.10	
74-87-3	Chloromethane	ND	0.50	ND	0.24	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.50	ND	0.072	
75-01-4	Vinyl Chloride	ND	0.50	ND	0.20	
106-99-0	1,3-Butadiene	ND	0.50	ND	0.23	
74-83-9	Bromomethane	ND	0.50	ND	0.13	
75-00-3	Chloroethane	ND	0.50	ND	0.19	
64-17-5	Ethanol	ND	5.0	ND	2.7	
75-05-8	Acetonitrile	ND	0.50	ND	0.30	
107-02-8	Acrolein	ND	2.0	ND	0.87	
67-64-1	Acetone	ND	5.0	ND	2.1	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	0.50	ND	0.089	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	5.0	ND	2.0	
107-13-1	Acrylonitrile	ND	0.50	ND	0.23	
75-35-4	1,1-Dichloroethene	ND	0.50	ND	0.13	
75-09-2	Methylene Chloride	ND	0.50	ND	0.14	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.50	ND	0.16	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	0.50	ND	0.065	
75-15-0	Carbon Disulfide	ND	5.0	ND	1.6	
156-60-5	trans-1,2-Dichloroethene	ND	0.50	ND	0.13	
75-34-3	1,1-Dichloroethane	ND	0.50	ND	0.12	
1634-04-4	Methyl tert-Butyl Ether	ND	0.50	ND	0.14	
108-05-4	Vinyl Acetate	ND	5.0	ND	1.4	
78-93-3	2-Butanone (MEK)	ND	5.0	ND	1.7	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** QEPI

**Client Sample ID:** Method Blank

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P170503-MB

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 5/3/17

Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.50	ND	0.13	
141-78-6	Ethyl Acetate	ND	1.0	ND	0.28	
110-54-3	n-Hexane	ND	0.50	ND	0.14	
67-66-3	Chloroform	ND	0.50	ND	0.10	
109-99-9	Tetrahydrofuran (THF)	ND	0.50	ND	0.17	
107-06-2	1,2-Dichloroethane	ND	0.50	ND	0.12	
71-55-6	1,1,1-Trichloroethane	ND	0.50	ND	0.092	
71-43-2	Benzene	ND	0.50	ND	0.16	
56-23-5	Carbon Tetrachloride	ND	0.50	ND	0.080	
110-82-7	Cyclohexane	ND	1.0	ND	0.29	
78-87-5	1,2-Dichloropropane	ND	0.50	ND	0.11	
75-27-4	Bromodichloromethane	ND	0.50	ND	0.075	
79-01-6	Trichloroethene	ND	0.50	ND	0.093	
123-91-1	1,4-Dioxane	ND	0.50	ND	0.14	
80-62-6	Methyl Methacrylate	ND	1.0	ND	0.24	
142-82-5	n-Heptane	ND	0.50	ND	0.12	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ND	0.11	
108-10-1	4-Methyl-2-pentanone	ND	0.50	ND	0.12	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ND	0.11	
79-00-5	1,1,2-Trichloroethane	ND	0.50	ND	0.092	
108-88-3	Toluene	ND	0.50	ND	0.13	
591-78-6	2-Hexanone	ND	0.50	ND	0.12	
124-48-1	Dibromochloromethane	ND	0.50	ND	0.059	
106-93-4	1,2-Dibromoethane	ND	0.50	ND	0.065	
123-86-4	n-Butyl Acetate	ND	0.50	ND	0.11	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** QEPI

**Client Sample ID:** Method Blank

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P170503-MB

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 5/3/17

Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.50	ND	0.11	
127-18-4	Tetrachloroethene	ND	0.50	ND	0.074	
108-90-7	Chlorobenzene	ND	0.50	ND	0.11	
100-41-4	Ethylbenzene	ND	0.50	ND	0.12	
179601-23-1	m,p-Xylenes	ND	1.0	ND	0.23	
75-25-2	Bromoform	ND	0.50	ND	0.048	
100-42-5	Styrene	ND	0.50	ND	0.12	
95-47-6	o-Xylene	ND	0.50	ND	0.12	
111-84-2	n-Nonane	ND	0.50	ND	0.095	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ND	0.073	
98-82-8	Cumene	ND	0.50	ND	0.10	
80-56-8	alpha-Pinene	ND	0.50	ND	0.090	
103-65-1	n-Propylbenzene	ND	0.50	ND	0.10	
622-96-8	4-Ethyltoluene	ND	0.50	ND	0.10	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	ND	0.10	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	ND	0.10	
100-44-7	Benzyl Chloride	ND	0.50	ND	0.097	
541-73-1	1,3-Dichlorobenzene	ND	0.50	ND	0.083	
106-46-7	1,4-Dichlorobenzene	ND	0.50	ND	0.083	
95-50-1	1,2-Dichlorobenzene	ND	0.50	ND	0.083	
5989-27-5	d-Limonene	ND	0.50	ND	0.090	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.50	ND	0.052	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	ND	0.067	
91-20-3	Naphthalene	ND	0.50	ND	0.095	
87-68-3	Hexachlorobutadiene	ND	0.50	ND	0.047	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 1 of 3

**Client:** QEPI

**Client Sample ID:** Method Blank

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P170504-MB

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 5/4/17

Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
115-07-1	Propene	ND	0.50	ND	0.29	
75-71-8	Dichlorodifluoromethane (CFC 12)	ND	0.50	ND	0.10	
74-87-3	Chloromethane	ND	0.50	ND	0.24	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	ND	0.50	ND	0.072	
75-01-4	Vinyl Chloride	ND	0.50	ND	0.20	
106-99-0	1,3-Butadiene	ND	0.50	ND	0.23	
74-83-9	Bromomethane	ND	0.50	ND	0.13	
75-00-3	Chloroethane	ND	0.50	ND	0.19	
64-17-5	Ethanol	ND	5.0	ND	2.7	
75-05-8	Acetonitrile	ND	0.50	ND	0.30	
107-02-8	Acrolein	ND	2.0	ND	0.87	
67-64-1	Acetone	ND	5.0	ND	2.1	
75-69-4	Trichlorofluoromethane (CFC 11)	ND	0.50	ND	0.089	
67-63-0	2-Propanol (Isopropyl Alcohol)	ND	5.0	ND	2.0	
107-13-1	Acrylonitrile	ND	0.50	ND	0.23	
75-35-4	1,1-Dichloroethene	ND	0.50	ND	0.13	
75-09-2	Methylene Chloride	ND	0.50	ND	0.14	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	ND	0.50	ND	0.16	
76-13-1	Trichlorotrifluoroethane (CFC 113)	ND	0.50	ND	0.065	
75-15-0	Carbon Disulfide	ND	5.0	ND	1.6	
156-60-5	trans-1,2-Dichloroethene	ND	0.50	ND	0.13	
75-34-3	1,1-Dichloroethane	ND	0.50	ND	0.12	
1634-04-4	Methyl tert-Butyl Ether	ND	0.50	ND	0.14	
108-05-4	Vinyl Acetate	ND	5.0	ND	1.4	
78-93-3	2-Butanone (MEK)	ND	5.0	ND	1.7	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 2 of 3

**Client:** QEPI

**Client Sample ID:** Method Blank

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P170504-MB

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 5/4/17

Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	ND	0.50	ND	0.13	
141-78-6	Ethyl Acetate	ND	1.0	ND	0.28	
110-54-3	n-Hexane	ND	0.50	ND	0.14	
67-66-3	Chloroform	ND	0.50	ND	0.10	
109-99-9	Tetrahydrofuran (THF)	ND	0.50	ND	0.17	
107-06-2	1,2-Dichloroethane	ND	0.50	ND	0.12	
71-55-6	1,1,1-Trichloroethane	ND	0.50	ND	0.092	
71-43-2	Benzene	ND	0.50	ND	0.16	
56-23-5	Carbon Tetrachloride	ND	0.50	ND	0.080	
110-82-7	Cyclohexane	ND	1.0	ND	0.29	
78-87-5	1,2-Dichloropropane	ND	0.50	ND	0.11	
75-27-4	Bromodichloromethane	ND	0.50	ND	0.075	
79-01-6	Trichloroethene	ND	0.50	ND	0.093	
123-91-1	1,4-Dioxane	ND	0.50	ND	0.14	
80-62-6	Methyl Methacrylate	ND	1.0	ND	0.24	
142-82-5	n-Heptane	ND	0.50	ND	0.12	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ND	0.11	
108-10-1	4-Methyl-2-pentanone	ND	0.50	ND	0.12	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ND	0.11	
79-00-5	1,1,2-Trichloroethane	ND	0.50	ND	0.092	
108-88-3	Toluene	ND	0.50	ND	0.13	
591-78-6	2-Hexanone	ND	0.50	ND	0.12	
124-48-1	Dibromochloromethane	ND	0.50	ND	0.059	
106-93-4	1,2-Dibromoethane	ND	0.50	ND	0.065	
123-86-4	n-Butyl Acetate	ND	0.50	ND	0.11	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## RESULTS OF ANALYSIS

Page 3 of 3

**Client:** QEPI

**Client Sample ID:** Method Blank

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P170504-MB

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 5/4/17

Volume(s) Analyzed: 1.00 Liter(s)

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m <sup>3</sup>	MRL µg/m <sup>3</sup>	Result ppbV	MRL ppbV	Data Qualifier
111-65-9	n-Octane	ND	0.50	ND	0.11	
127-18-4	Tetrachloroethene	ND	0.50	ND	0.074	
108-90-7	Chlorobenzene	ND	0.50	ND	0.11	
100-41-4	Ethylbenzene	ND	0.50	ND	0.12	
179601-23-1	m,p-Xylenes	ND	1.0	ND	0.23	
75-25-2	Bromoform	ND	0.50	ND	0.048	
100-42-5	Styrene	ND	0.50	ND	0.12	
95-47-6	o-Xylene	ND	0.50	ND	0.12	
111-84-2	n-Nonane	ND	0.50	ND	0.095	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ND	0.073	
98-82-8	Cumene	ND	0.50	ND	0.10	
80-56-8	alpha-Pinene	ND	0.50	ND	0.090	
103-65-1	n-Propylbenzene	ND	0.50	ND	0.10	
622-96-8	4-Ethyltoluene	ND	0.50	ND	0.10	
108-67-8	1,3,5-Trimethylbenzene	ND	0.50	ND	0.10	
95-63-6	1,2,4-Trimethylbenzene	ND	0.50	ND	0.10	
100-44-7	Benzyl Chloride	ND	0.50	ND	0.097	
541-73-1	1,3-Dichlorobenzene	ND	0.50	ND	0.083	
106-46-7	1,4-Dichlorobenzene	ND	0.50	ND	0.083	
95-50-1	1,2-Dichlorobenzene	ND	0.50	ND	0.083	
5989-27-5	d-Limonene	ND	0.50	ND	0.090	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.50	ND	0.052	
120-82-1	1,2,4-Trichlorobenzene	ND	0.50	ND	0.067	
91-20-3	Naphthalene	ND	0.50	ND	0.095	
87-68-3	Hexachlorobutadiene	ND	0.50	ND	0.047	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.

MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

# ALS ENVIRONMENTAL

## SURROGATE SPIKE RECOVERY RESULTS

Page 1 of 1

**Client:** QEPI  
**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

**Test Code:** EPA TO-15  
**Instrument ID:** Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13  
**Analyst:** Lusine Hakobyan  
**Sample Type:** 1.0 L Summa Canister(s) / 1.0 L Silonite Summa Canister(s)  
**Test Notes:**

**Date(s) Collected:** 4/26/17  
**Date(s) Received:** 4/27/17  
**Date(s) Analyzed:** 5/3 - 5/4/17

Client Sample ID	ALS Sample ID	1,2-Dichloroethane-d4	Toluene-d8	Bromofluorobenzene	Acceptance Limits	Data Qualifier
		Percent Recovered	Percent Recovered	Percent Recovered		
Method Blank	P170503-MB	113	99	102	70-130	
Method Blank	P170504-MB	110	101	104	70-130	
Lab Control Sample	P170503-LCS	111	97	102	70-130	
Lab Control Sample	P170504-LCS	109	99	105	70-130	
WPP-SG07-170426	P1701990-001	117	96	103	70-130	
WPP-SG05-170426	P1701990-002	113	98	103	70-130	
WPP-SG09-170426	P1701990-003	108	100	104	70-130	
WPP-SG09-170426-D	P1701990-004	108	99	102	70-130	
WPP-SG11-170426	P1701990-005	109	97	103	70-130	
WPP-SG10-170426	P1701990-006	108	99	103	70-130	
WPP-SG06-170426	P1701990-007	107	99	102	70-130	
WPP-SG04-170426	P1701990-008	110	98	101	70-130	
WPP-SG02-170426	P1701990-009	110	98	102	70-130	
WPP-SG03-170426	P1701990-010	107	99	103	70-130	
WPP-AA03-170426	P1701990-011	107	99	102	70-130	
WPP-SG08-170426	P1701990-012	107	98	102	70-130	
WPP-SG12-170426	P1701990-013	106	99	103	70-130	
WPP-SG13-170426	P1701990-014	106	99	103	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.

Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

# ALS ENVIRONMENTAL

## LABORATORY CONTROL SAMPLE SUMMARY

Page 1 of 3

**Client:** QEPI

**Client Sample ID:** Lab Control Sample

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P170503-LCS

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 5/3/17

Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m <sup>3</sup>	Result µg/m <sup>3</sup>	% Recovery	ALS Acceptance Limits	Data Qualifier
115-07-1	Propene	210	165	79	52-127	
75-71-8	Dichlorodifluoromethane (CFC 12)	210	216	103	68-109	
74-87-3	Chloromethane	210	183	87	51-130	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	211	205	97	66-114	
75-01-4	Vinyl Chloride	210	189	90	61-125	
106-99-0	1,3-Butadiene	210	206	98	62-144	
74-83-9	Bromomethane	210	206	98	73-123	
75-00-3	Chloroethane	210	194	92	69-122	
64-17-5	Ethanol	1,060	963	91	62-124	
75-05-8	Acetonitrile	213	185	87	57-114	
107-02-8	Acrolein	212	176	83	62-116	
67-64-1	Acetone	1,060	879	83	57-117	
75-69-4	Trichlorofluoromethane (CFC 11)	210	224	107	63-98	L
67-63-0	2-Propanol (Isopropyl Alcohol)	424	391	92	66-121	
107-13-1	Acrylonitrile	213	194	91	68-123	
75-35-4	1,1-Dichloroethene	213	199	93	76-118	
75-09-2	Methylene Chloride	212	173	82	60-118	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	212	201	95	65-126	
76-13-1	Trichlorotrifluoroethane (CFC 113)	212	207	98	73-114	
75-15-0	Carbon Disulfide	213	189	89	57-102	
156-60-5	trans-1,2-Dichloroethene	213	208	98	74-123	
75-34-3	1,1-Dichloroethane	212	199	94	69-111	
1634-04-4	Methyl tert-Butyl Ether	213	209	98	69-113	
108-05-4	Vinyl Acetate	1,060	1020	96	76-128	
78-93-3	2-Butanone (MEK)	212	198	93	63-127	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.

Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

L = Laboratory control sample recovery outside the specified limits, results may be biased high.

# ALS ENVIRONMENTAL

## LABORATORY CONTROL SAMPLE SUMMARY

Page 2 of 3

**Client:** QEPI

**Client Sample ID:** Lab Control Sample

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P170503-LCS

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 5/3/17

Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m <sup>3</sup>	Result µg/m <sup>3</sup>	% Recovery	ALS Acceptance Limits	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	212	208	98	72-117	
141-78-6	Ethyl Acetate	426	372	87	68-127	
110-54-3	n-Hexane	213	181	85	55-116	
67-66-3	Chloroform	212	211	100	70-109	
109-99-9	Tetrahydrofuran (THF)	213	178	84	72-113	
107-06-2	1,2-Dichloroethane	212	228	108	69-113	
71-55-6	1,1,1-Trichloroethane	212	231	109	72-115	
71-43-2	Benzene	212	187	88	65-107	
56-23-5	Carbon Tetrachloride	213	246	115	71-113	L
110-82-7	Cyclohexane	425	396	93	71-115	
78-87-5	1,2-Dichloropropane	212	198	93	71-115	
75-27-4	Bromodichloromethane	214	242	113	75-118	
79-01-6	Trichloroethene	212	214	101	68-114	
123-91-1	1,4-Dioxane	213	212	100	81-131	
80-62-6	Methyl Methacrylate	424	418	99	72-130	
142-82-5	n-Heptane	213	188	88	68-116	
10061-01-5	cis-1,3-Dichloropropene	210	217	103	77-126	
108-10-1	4-Methyl-2-pentanone	213	200	94	69-126	
10061-02-6	trans-1,3-Dichloropropene	213	235	110	79-125	
79-00-5	1,1,2-Trichloroethane	212	218	103	75-119	
108-88-3	Toluene	212	191	90	59-118	
591-78-6	2-Hexanone	213	192	90	69-129	
124-48-1	Dibromochloromethane	213	227	107	74-136	
106-93-4	1,2-Dibromoethane	212	212	100	73-131	
123-86-4	n-Butyl Acetate	216	192	89	69-130	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.

Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

L = Laboratory control sample recovery outside the specified limits, results may be biased high.

# ALS ENVIRONMENTAL

## LABORATORY CONTROL SAMPLE SUMMARY

Page 3 of 3

**Client:** QEPI

**Client Sample ID:** Lab Control Sample

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P170503-LCS

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 5/3/17

Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m <sup>3</sup>	Result µg/m <sup>3</sup>	% Recovery	ALS Acceptance Limits	Data Qualifier
111-65-9	n-Octane	212	179	84	66-120	
127-18-4	Tetrachloroethene	213	206	97	65-130	
108-90-7	Chlorobenzene	212	199	94	68-120	
100-41-4	Ethylbenzene	212	202	95	68-122	
179601-23-1	m,p-Xylenes	424	411	97	68-123	
75-25-2	Bromoform	212	228	108	69-130	
100-42-5	Styrene	212	204	96	71-133	
95-47-6	o-Xylene	212	206	97	68-122	
111-84-2	n-Nonane	212	181	85	65-120	
79-34-5	1,1,2,2-Tetrachloroethane	212	191	90	69-130	
98-82-8	Cumene	212	209	99	70-123	
80-56-8	alpha-Pinene	213	200	94	70-128	
103-65-1	n-Propylbenzene	214	210	98	69-125	
622-96-8	4-Ethyltoluene	212	209	99	67-130	
108-67-8	1,3,5-Trimethylbenzene	212	207	98	67-124	
95-63-6	1,2,4-Trimethylbenzene	212	209	99	67-129	
100-44-7	Benzyl Chloride	212	230	108	79-138	
541-73-1	1,3-Dichlorobenzene	212	214	101	65-136	
106-46-7	1,4-Dichlorobenzene	213	212	100	66-141	
95-50-1	1,2-Dichlorobenzene	212	214	101	67-136	
5989-27-5	d-Limonene	212	178	84	71-134	
96-12-8	1,2-Dibromo-3-chloropropane	212	221	104	73-136	
120-82-1	1,2,4-Trichlorobenzene	212	231	109	64-134	
91-20-3	Naphthalene	214	234	109	62-136	
87-68-3	Hexachlorobutadiene	213	234	110	60-133	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.

Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

# ALS ENVIRONMENTAL

## LABORATORY CONTROL SAMPLE SUMMARY

Page 1 of 3

**Client:** QEPI

**Client Sample ID:** Lab Control Sample

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P170504-LCS

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m <sup>3</sup>	Result µg/m <sup>3</sup>	% Recovery	ALS Acceptance Limits	Data Qualifier
115-07-1	Propene	210	166	79	52-127	
75-71-8	Dichlorodifluoromethane (CFC 12)	210	214	102	68-109	
74-87-3	Chloromethane	210	182	87	51-130	
76-14-2	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	211	206	98	66-114	
75-01-4	Vinyl Chloride	210	188	90	61-125	
106-99-0	1,3-Butadiene	210	210	100	62-144	
74-83-9	Bromomethane	210	206	98	73-123	
75-00-3	Chloroethane	210	193	92	69-122	
64-17-5	Ethanol	1,060	952	90	62-124	
75-05-8	Acetonitrile	213	181	85	57-114	
107-02-8	Acrolein	212	174	82	62-116	
67-64-1	Acetone	1,060	872	82	57-117	
75-69-4	Trichlorofluoromethane (CFC 11)	210	217	103	63-98	L
67-63-0	2-Propanol (Isopropyl Alcohol)	424	384	91	66-121	
107-13-1	Acrylonitrile	213	192	90	68-123	
75-35-4	1,1-Dichloroethene	213	198	93	76-118	
75-09-2	Methylene Chloride	212	171	81	60-118	
107-05-1	3-Chloro-1-propene (Allyl Chloride)	212	197	93	65-126	
76-13-1	Trichlorotrifluoroethane (CFC 113)	212	204	96	73-114	
75-15-0	Carbon Disulfide	213	186	87	57-102	
156-60-5	trans-1,2-Dichloroethene	213	204	96	74-123	
75-34-3	1,1-Dichloroethane	212	195	92	69-111	
1634-04-4	Methyl tert-Butyl Ether	213	204	96	69-113	
108-05-4	Vinyl Acetate	1,060	1020	96	76-128	
78-93-3	2-Butanone (MEK)	212	194	92	63-127	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.

Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

L = Laboratory control sample recovery outside the specified limits, results may be biased high.

# ALS ENVIRONMENTAL

## LABORATORY CONTROL SAMPLE SUMMARY

Page 2 of 3

**Client:** QEPI

**Client Sample ID:** Lab Control Sample

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P170504-LCS

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m <sup>3</sup>	Result µg/m <sup>3</sup>	% Recovery	ALS Acceptance Limits	Data Qualifier
156-59-2	cis-1,2-Dichloroethene	212	201	95	72-117	
141-78-6	Ethyl Acetate	426	365	86	68-127	
110-54-3	n-Hexane	213	178	84	55-116	
67-66-3	Chloroform	212	204	96	70-109	
109-99-9	Tetrahydrofuran (THF)	213	177	83	72-113	
107-06-2	1,2-Dichloroethane	212	218	103	69-113	
71-55-6	1,1,1-Trichloroethane	212	221	104	72-115	
71-43-2	Benzene	212	182	86	65-107	
56-23-5	Carbon Tetrachloride	213	237	111	71-113	
110-82-7	Cyclohexane	425	392	92	71-115	
78-87-5	1,2-Dichloropropane	212	193	91	71-115	
75-27-4	Bromodichloromethane	214	232	108	75-118	
79-01-6	Trichloroethene	212	208	98	68-114	
123-91-1	1,4-Dioxane	213	206	97	81-131	
80-62-6	Methyl Methacrylate	424	405	96	72-130	
142-82-5	n-Heptane	213	181	85	68-116	
10061-01-5	cis-1,3-Dichloropropene	210	212	101	77-126	
108-10-1	4-Methyl-2-pentanone	213	197	92	69-126	
10061-02-6	trans-1,3-Dichloropropene	213	228	107	79-125	
79-00-5	1,1,2-Trichloroethane	212	213	100	75-119	
108-88-3	Toluene	212	190	90	59-118	
591-78-6	2-Hexanone	213	192	90	69-129	
124-48-1	Dibromochloromethane	213	227	107	74-136	
106-93-4	1,2-Dibromoethane	212	210	99	73-131	
123-86-4	n-Butyl Acetate	216	192	89	69-130	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.

Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

# ALS ENVIRONMENTAL

## LABORATORY CONTROL SAMPLE SUMMARY

Page 3 of 3

**Client:** QEPI

**Client Sample ID:** Lab Control Sample

**Client Project ID:** Tetra Tech-Williams Polishing and Plating

ALS Project ID: P1701990

ALS Sample ID: P170504-LCS

Test Code: EPA TO-15

Instrument ID: Tekmar AUTOCAN/Agilent 5975Binert/6890N/MS13

Analyst: Lusine Hakobyan

Sample Type: 1.0 L Summa Canister

Test Notes:

Date Collected: NA

Date Received: NA

Date Analyzed: 5/4/17

Volume(s) Analyzed: 0.125 Liter(s)

CAS #	Compound	Spike Amount µg/m <sup>3</sup>	Result µg/m <sup>3</sup>	% Recovery	ALS Acceptance Limits	Data Qualifier
111-65-9	n-Octane	212	178	84	66-120	
127-18-4	Tetrachloroethene	213	207	97	65-130	
108-90-7	Chlorobenzene	212	198	93	68-120	
100-41-4	Ethylbenzene	212	201	95	68-122	
179601-23-1	m,p-Xylenes	424	408	96	68-123	
75-25-2	Bromoform	212	228	108	69-130	
100-42-5	Styrene	212	203	96	71-133	
95-47-6	o-Xylene	212	206	97	68-122	
111-84-2	n-Nonane	212	178	84	65-120	
79-34-5	1,1,2,2-Tetrachloroethane	212	190	90	69-130	
98-82-8	Cumene	212	210	99	70-123	
80-56-8	alpha-Pinene	213	200	94	70-128	
103-65-1	n-Propylbenzene	214	210	98	69-125	
622-96-8	4-Ethyltoluene	212	225	106	67-130	
108-67-8	1,3,5-Trimethylbenzene	212	206	97	67-124	
95-63-6	1,2,4-Trimethylbenzene	212	208	98	67-129	
100-44-7	Benzyl Chloride	212	228	108	79-138	
541-73-1	1,3-Dichlorobenzene	212	216	102	65-136	
106-46-7	1,4-Dichlorobenzene	213	214	100	66-141	
95-50-1	1,2-Dichlorobenzene	212	214	101	67-136	
5989-27-5	d-Limonene	212	178	84	71-134	
96-12-8	1,2-Dibromo-3-chloropropane	212	224	106	73-136	
120-82-1	1,2,4-Trichlorobenzene	212	233	110	64-134	
91-20-3	Naphthalene	214	234	109	62-136	
87-68-3	Hexachlorobutadiene	213	236	111	60-133	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.

Reported results are shown in concentration units and as a result of the calculation, may vary slightly.



April 11, 2017

Shelly Lam, LPG  
Federal On-Scene Coordinator  
U.S. Environmental Protection Agency  
2525 N. Shadeland Avenue, Suite 100  
Indianapolis, IN 46219

**Subject: Data Validation Reports  
Williamson Polishing and Plating RS  
EPA Contract No. EP-S5-13-01  
Technical Direction Document No. S05-0001-1610-011  
Document Tracking No. 1634**

Dear Ms. Lam:

Tetra Tech, Inc. (Tetra Tech) is submitting these Data Validation Reports for 10 soil (including 2 field duplicates), 8 soil gas (including 1 field duplicate), and 7 waste samples collected at the Williamson Polishing and Plating RS site. The samples were collected on October 31, 2016, March 9, 2017, and March 10, 2017. The soil samples were analyzed for Target Analyte List metals, total cyanide, and volatile organic compounds (VOCs) by CT Laboratories, LLC. The soil gas samples were analyzed for VOCs by ALS. The waste samples were analyzed for Toxicity Characteristic Leaching Procedure metals, pH, flashpoint, and total cyanide by Pace Analytical Services, LLC. The final laboratory data package was received on April 4, 2017.

Analytical data were evaluated in general accordance with the U.S. Environmental Protection Agency's *National Functional Guidelines (NFG) for Organic Superfund Methods Data Review* (January 2017) and *NFGs for Inorganic Superfund Methods Data Review* (January 2017).

None of the data required rejection. All results may be used as qualified.

If you have any questions regarding these data validation reports, please call me at (509) 688-5957.

Sincerely,

A handwritten signature in blue ink that reads 'Deb Kutsal'.

Deb Kutsal  
START Chemist

Enclosure

cc: Kevin Scott, Tetra Tech Program Manager  
Lucas Stamps, QEPI Project Manager  
TDD File

**ATTACHMENT 1**

**DATA VALIDATION REPORTS FOR  
SAMPLES COLLECTED ON OCTOBER 31, 2016, MARCH 9, 2017,  
AND MARCH 10, 2017**

**DATA VALIDATION CHECKLIST – STAGE 2A  
EPA REGION 5 START CONTRACT**

<b>Site Name</b>	Williamson Polishing & Plating RS	<b>TDD No.</b>	0001-1610-011
<b>Document Tracking No.</b>	1634A	<b>Technical Reviewer (signature and date)</b>	<i>Jessica A. Vickers</i> April 6, 2017
<b>Data Reviewer (signature and date)</b>	<i>Debbie Kuhl</i> April 4, 2017	<b>Laboratory</b>	CT Laboratories LLC/Baraboo, WI
<b>Laboratory Report No.</b>	125864		
<b>Analyses</b>	Target Analyte List (TAL) metals by EPA SW6010C and SW7471B, total cyanide by EPA SW9012A, and volatile organic compounds (VOCs) by EPA SW8260C		
<b>Samples and Matrix</b>	10 soil samples (including 2 field duplicates)		
<b>Field Duplicate Pairs</b>	WPP-SB1 (0-2) and WPP-SB1 (0-2) D/WPP-SB1 (2-4) and WPP-SB1 (2-4) D		
<b>Field Blanks</b>	None		

**INTRODUCTION**

This checklist summarizes the Stage 2A validation performed on the subject laboratory report, in accordance with the U.S. Environmental Protection Agency (EPA) *Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use* (January 2009). Analytical data were evaluated in general accordance with the EPA *National Functional Guidelines (NFG) for Superfund Organic Methods Data Review* (January 2017) and the EPA *NFG for Inorganic Superfund Methods Data Review* (January 2017).

**OVERALL EVALUATION**

All results are acceptable and usable as qualified in the attached results summary.

**Data completeness:**

Within Criteria	Exceedance/Notes
Y	

**Sample preservation, receipt, and holding times:**

Within Criteria	Exceedance/Notes
Y	



## DATA VALIDATION CHECKLIST – STAGE 2A EPA REGION 5 START CONTRACT

### Method blanks:

Within Criteria	Exceedance/Notes
N	<p><b>Metals.</b> Aluminum, barium, beryllium, calcium, iron, lead, magnesium, manganese, selenium, silver, and zinc were found in the method blank. The following results were qualified as described:</p> <ul style="list-style-type: none"> <li>For samples WPP-SB1 (0-2) D and WPP-SB7 (0-2), the silver result was qualified as estimated and possibly biased high (flagged J+).</li> <li>For sample WPP-SB2 (4-6), the selenium result was raised to the RL and qualified as not detected (flagged U), and the silver result was qualified as estimated and possibly biased high (flagged J+).</li> <li>For sample WPP-SB3 (0-2), the selenium and silver results were raised to the RL and qualified as not detected (flagged U).</li> <li>For samples WPP-SB4 (0-2) and WPP-SB5 (0-2), the selenium results were qualified as estimated and possibly biased high (flagged J+).</li> </ul> <p><b>VOCs.</b> Acetone and bromomethane were found in the method blank. The following results were qualified as described:</p> <ul style="list-style-type: none"> <li>The acetone and bromomethane results for samples WPP-SB1 (2-4), WPP-SB1 (2-4) D, WPP-SB2 (4-6), and WPP-SB3 (0-2) were raised to the RL and qualified as not detected (flagged U).</li> </ul>

### Field blanks:

Within Criteria	Exceedance/Notes
NA	

### System monitoring compounds (surrogates and labeled compounds):

Within Criteria	Exceedance/Notes
Y	

**DATA VALIDATION CHECKLIST – STAGE 2A  
EPA REGION 5 START CONTRACT**

**MS/MSD:**

Within Criteria	Exceedance/Notes
N	<p><b>Parent sample WPP-SB2 (4-6):</b></p> <ul style="list-style-type: none"> <li> <b>Metals.</b> The MS and/or MSD percent recoveries (%Rs) and/or relative percent differences (RPDs) for aluminum, cadmium, calcium, iron, and manganese were outside the control limits. However, the amount of these metals in the parent sample was more than four times the amount spiked, which overwhelmed the spiking solution and invalidated the spike recovery results. No qualifications were applied for these exceedances. The MS and/or MSD %Rs for antimony, beryllium, cobalt, copper, magnesium, nickel, and thallium and were below the lower QAPP control limit. Results for these metals in the parent sample were qualified as estimated and possibly biased low (flagged J-/UJ). <b>Cyanide.</b> The MS and MSD %Rs for cyanide were below the lower control limit; therefore, the result for the parent sample was qualified as estimated and possibly biased low (flagged J-). </li> <li> <b>VOCs.</b> The MS and MSD %Rs for 1,4-dioxane and methyl acetate exceeded the upper control limit. Neither was found in the parent sample; therefore, no data were qualified. </li> </ul>

**Laboratory duplicates:**

Within Criteria	Exceedance/Notes
N	<p><b>Parent sample WPP-SB2 (4-6):</b> RPDs for cadmium, calcium, chromium, lead, magnesium, mercury, nickel, and zinc exceeded the control limit. Results for these metals for the parent sample were qualified as estimated (flagged J), unless overridden by other qualifiers.</p>

**Field duplicates:**

Within Criteria	Exceedance/Notes
N	<p><b>Parent samples WPP-SB1 (0-2)/WP-SB1 (0-1) D:</b> The RPD for silver exceeded the QAPP precision criteria; therefore, the silver results for both samples were qualified as estimated (flagged J), unless overridden by other qualifiers.</p>

**DATA VALIDATION CHECKLIST – STAGE 2A  
EPA REGION 5 START CONTRACT**

**LCSs/LCSDs:**

Within Criteria	Exceedance/Notes
N	VOCs. The %R for 1,4-dioxane exceeded the upper control limit. No 1,4-dioxane was detected in the samples; therefore, no data were qualified.

**Sample dilutions:**

Within Criteria	Exceedance/Notes		
Y	The following samples required dilution because of matrix interference or to bring target analyte concentration(s) into calibration range.		
	<b>Samples</b>	<b>Analyte</b>	<b>Dilution</b>
	WPP-SB5 (0-2)	Barium	10
	WPP-SB1 (0-2), WPP-SB1 (0-2) D, and WPP-SB3 (0-2)	Calcium	10
	WPP-SB2 (4-6) and WPP-SB6 (0-2)	Cadmium	10
	WPP-SB6 (0-2)	Copper, nickel, and silver	10
	WPP-SB3 (0-2), WPP-SB4 (0-2), WPP-SB5 (0-2), and WPP-SB6 (0-2)	Cyanide	5

**Re-extraction and reanalysis:**

Within Criteria	Exceedance/Notes
NA	

**MDLs/RLs:**

Within Criteria	Exceedance/Notes
Y	Detected results below the RL were qualified as estimated (flagged J) by the laboratory.

## DATA VALIDATION CHECKLIST – STAGE 2A EPA REGION 5 START CONTRACT

### Tentatively identified compounds:

Within Criteria	Exceedance/Notes
NA	

### Other [specify]:

Within Criteria	Exceedance/Notes
NA	

### Overall Qualifications:

See results summary pages attached for changes to the laboratory qualifiers based upon this validation. The following is a list of qualifiers and definitions that may be used for the validation of this data package:

J	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.
J-	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.
NJ	The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated value is the approximate concentration of the analyte in the sample.
R	The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.
U	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).
UJ	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.

Williamson Polishing Plating  
Soil Sample Results  
CT Laboratories LLC/125864

Samp_No	Analyte	Method	Result	Lab_Qual	Matrix	MDL	RL	Units	Final Result	Final Qual
WPP-SB1 (0-2)	Aluminum	SW6010	3870		SO	0.043	0.26 mg/kg		3870	
WPP-SB1 (0-2)	Antimony	SW6010	1.7		SO	0.14	0.86 mg/kg		1.7	
WPP-SB1 (0-2)	Arsenic	SW6010	7.7		SO	0.14	0.86 mg/kg		7.7	
WPP-SB1 (0-2)	Barium	SW6010	46.2		SO	0.0097	0.054 mg/kg		46.2	
WPP-SB1 (0-2)	Beryllium	SW6010	0.39 B		SO	0.0043	0.043 mg/kg		0.39	
WPP-SB1 (0-2)	Cadmium	SW6010	1.7		SO	0.0064	0.043 mg/kg		1.7	
WPP-SB1 (0-2)	Calcium	SW6010	57800		SO	2.6	15 mg/kg		57800	
WPP-SB1 (0-2)	Chromium	SW6010	11.6		SO	0.025	0.15 mg/kg		11.6	
WPP-SB1 (0-2)	Cobalt	SW6010	4.3		SO	0.043	0.26 mg/kg		4.3	
WPP-SB1 (0-2)	Copper	SW6010	64.5		SO	0.075	0.43 mg/kg		64.5	
WPP-SB1 (0-2)	Iron	SW6010	14700		SO	0.32	1.9 mg/kg		14700	
WPP-SB1 (0-2)	Lead	SW6010	76.6		SO	0.043	0.27 mg/kg		76.6	
WPP-SB1 (0-2)	Magnesium	SW6010	13400		SO	0.15	0.86 mg/kg		13400	
WPP-SB1 (0-2)	Manganese	SW6010	400		SO	0.027	0.16 mg/kg		400	
WPP-SB1 (0-2)	Nickel	SW6010	34.7		SO	0.023	0.13 mg/kg		34.7	
WPP-SB1 (0-2)	Potassium	SW6010	500		SO	12	71 mg/kg		500	
WPP-SB1 (0-2)	Selenium	SW6010	0.064 U		SO	0.064	0.43 mg/kg		0.43 U	
WPP-SB1 (0-2)	Silver	SW6010	0.34		SO	0.018	0.11 mg/kg		0.34 J	
WPP-SB1 (0-2)	Sodium	SW6010	87.3		SO	4.3	26 mg/kg		87.3	
WPP-SB1 (0-2)	Thallium	SW6010	0.086 U		SO	0.086	0.52 mg/kg		0.52 U	
WPP-SB1 (0-2)	Vanadium	SW6010	12.4		SO	0.013	0.086 mg/kg		12.4	
WPP-SB1 (0-2)	Zinc	SW6010	68.5		SO	0.054	0.32 mg/kg		68.5	
WPP-SB1 (0-2)	Mercury	SW7471B	0.028		SO	0.0026	0.01 mg/kg		0.028	
WPP-SB1 (0-2)	Cyanide	SW9012	0.213 J		SO	0.16	0.67 mg/kg		0.213 J	
WPP-SB1 (0-2) D	Aluminum	SW6010	3440		SO	0.048	0.29 mg/kg		3440	
WPP-SB1 (0-2) D	Antimony	SW6010	1.1		SO	0.15	0.95 mg/kg		1.1	
WPP-SB1 (0-2) D	Arsenic	SW6010	8		SO	0.15	0.95 mg/kg		8	
WPP-SB1 (0-2) D	Barium	SW6010	44		SO	0.011	0.059 mg/kg		44	
WPP-SB1 (0-2) D	Beryllium	SW6010	0.52 B		SO	0.0048	0.048 mg/kg		0.52	
WPP-SB1 (0-2) D	Cadmium	SW6010	1.1		SO	0.0071	0.048 mg/kg		1.1	
WPP-SB1 (0-2) D	Calcium	SW6010	61800		SO	2.9	17 mg/kg		61800	
WPP-SB1 (0-2) D	Chromium	SW6010	7.4		SO	0.027	0.17 mg/kg		7.4	

Williamson Polishing Plating  
Soil Sample Results  
CT Laboratories LLC/125864

Samp_No	Analyte	Method	Result	Lab_Qual	Matrix	MDL	RL	Units	Final Result	Final Qual
WPP-SB1 (0-2) D	Cobalt	SW6010	3.7		SO	0.048		0.29 mg/kg	3.7	
WPP-SB1 (0-2) D	Copper	SW6010	53.2		SO	0.083		0.48 mg/kg	53.2	
WPP-SB1 (0-2) D	Iron	SW6010	17600		SO	0.36		2.1 mg/kg	17600	
WPP-SB1 (0-2) D	Lead	SW6010	52.3		SO	0.048		0.3 mg/kg	52.3	
WPP-SB1 (0-2) D	Magnesium	SW6010	10600		SO	0.17		0.95 mg/kg	10600	
WPP-SB1 (0-2) D	Manganese	SW6010	457		SO	0.03		0.18 mg/kg	457	
WPP-SB1 (0-2) D	Nickel	SW6010	17.3		SO	0.025		0.14 mg/kg	17.3	
WPP-SB1 (0-2) D	Potassium	SW6010	463		SO	13		78 mg/kg	463	
WPP-SB1 (0-2) D	Selenium	SW6010	0.071 U		SO	0.071		0.48 mg/kg	0.48 U	
WPP-SB1 (0-2) D	Silver	SW6010	0.16 B		SO	0.02		0.12 mg/kg	0.16 J+	
WPP-SB1 (0-2) D	Sodium	SW6010	82		SO	4.8		29 mg/kg	82	
WPP-SB1 (0-2) D	Thallium	SW6010	0.095 U		SO	0.095		0.57 mg/kg	0.57 U	
WPP-SB1 (0-2) D	Vanadium	SW6010	12.6		SO	0.014		0.095 mg/kg	12.6	
WPP-SB1 (0-2) D	Zinc	SW6010	57.9		SO	0.059		0.36 mg/kg	57.9	
WPP-SB1 (0-2) D	Mercury	SW7471B	0.025		SO	0.0024		0.0097 mg/kg	0.025	
WPP-SB1 (0-2) D	Cyanide	SW9012	0.27 J		SO	0.17		0.71 mg/kg	0.27 J	
WPP-SB1 (2-4)	1,1,1-Trichloroethane	SW8260C	12 U		SO	12		60 ug/kg	60 U	
WPP-SB1 (2-4)	1,1,2,2-Tetrachloroethane	SW8260C	7.2 U		SO	7.2		60 ug/kg	60 U	
WPP-SB1 (2-4)	1,1,2-Trichloroethane	SW8260C	9.5 U		SO	9.5		60 ug/kg	60 U	
WPP-SB1 (2-4)	1,1-Dichloroethane	SW8260C	13 U		SO	13		60 ug/kg	60 U	
WPP-SB1 (2-4)	1,1-Dichloroethene	SW8260C	19 U		SO	19		60 ug/kg	60 U	
WPP-SB1 (2-4)	1,2,3-Trichlorobenzene	SW8260C	9.5 U		SO	9.5		60 ug/kg	60 U	
WPP-SB1 (2-4)	1,2,4-Trichlorobenzene	SW8260C	11 U		SO	11		60 ug/kg	60 U	
WPP-SB1 (2-4)	1,2-Dibromo-3-chloropropane	SW8260C	14 U		SO	14		60 ug/kg	60 U	
WPP-SB1 (2-4)	1,2-Dibromoethane	SW8260C	12 U		SO	12		60 ug/kg	60 U	
WPP-SB1 (2-4)	1,2-Dichlorobenzene	SW8260C	11 U		SO	11		60 ug/kg	60 U	
WPP-SB1 (2-4)	1,2-Dichloroethane	SW8260C	14 U		SO	14		60 ug/kg	60 U	
WPP-SB1 (2-4)	1,2-Dichloropropane	SW8260C	8.4 U		SO	8.4		60 ug/kg	60 U	
WPP-SB1 (2-4)	1,3-Dichlorobenzene	SW8260C	9.5 U		SO	9.5		60 ug/kg	60 U	
WPP-SB1 (2-4)	1,4-Dichlorobenzene	SW8260C	9.5 U		SO	9.5		60 ug/kg	60 U	
WPP-SB1 (2-4)	1,4-Dioxane	SW8260C	480 UQ,Z		SO	480		6000 ug/kg	6000 U	
WPP-SB1 (2-4)	112Trichloro122trifluoroethane	SW8260C	24 U		SO	24		120 ug/kg	120 U	

Williamson Polishing Plating  
Soil Sample Results  
CT Laboratories LLC/125864

Samp_No	Analyte	Method	Result	Lab_Qual	Matrix	MDL	RL	Units	Final Result	Final Qual
WPP-SB1 (2-4)	2-Butanone	SW8260C	120 U		SO	120		600 ug/kg	600 U	
WPP-SB1 (2-4)	2-Hexanone	SW8260C	81 U		SO	81		600 ug/kg	600 U	
WPP-SB1 (2-4)	4-Methyl-2-pentanone	SW8260C	98 U		SO	98		600 ug/kg	600 U	
WPP-SB1 (2-4)	Acetone	SW8260C	150 JB		SO	75		600 ug/kg	600 U	
WPP-SB1 (2-4)	Benzene	SW8260C	6 U		SO	6		60 ug/kg	60 U	
WPP-SB1 (2-4)	Bromochloromethane	SW8260C	9.5 U		SO	9.5		60 ug/kg	60 U	
WPP-SB1 (2-4)	Bromodichloromethane	SW8260C	11 U		SO	11		60 ug/kg	60 U	
WPP-SB1 (2-4)	Bromoform	SW8260C	7.2 U		SO	7.2		60 ug/kg	60 U	
WPP-SB1 (2-4)	Bromomethane	SW8260C	73.6 JB		SO	36		120 ug/kg	120 U	
WPP-SB1 (2-4)	Carbon disulfide	SW8260C	18 U		SO	18		120 ug/kg	120 U	
WPP-SB1 (2-4)	Carbon tetrachloride	SW8260C	13 U		SO	13		60 ug/kg	60 U	
WPP-SB1 (2-4)	Chlorobenzene	SW8260C	9.5 U		SO	9.5		60 ug/kg	60 U	
WPP-SB1 (2-4)	Chloroethane	SW8260C	23 U		SO	23		60 ug/kg	60 U	
WPP-SB1 (2-4)	Chloroform	SW8260C	11 U		SO	11		60 ug/kg	60 U	
WPP-SB1 (2-4)	Chloromethane	SW8260C	30 U		SO	30		120 ug/kg	120 U	
WPP-SB1 (2-4)	cis-1,2-Dichloroethene	SW8260C	12 U		SO	12		60 ug/kg	60 U	
WPP-SB1 (2-4)	cis-1,3-Dichloropropene	SW8260C	12 U		SO	12		60 ug/kg	60 U	
WPP-SB1 (2-4)	Cyclohexane	SW8260C	14 U		SO	14		60 ug/kg	60 U	
WPP-SB1 (2-4)	Dibromochloromethane	SW8260C	9.5 U		SO	9.5		60 ug/kg	60 U	
WPP-SB1 (2-4)	Dichlorodifluoromethane	SW8260C	16 U		SO	16		60 ug/kg	60 U	
WPP-SB1 (2-4)	Ethylbenzene	SW8260C	9.5 U		SO	9.5		60 ug/kg	60 U	
WPP-SB1 (2-4)	Isopropylbenzene	SW8260C	9.5 U		SO	9.5		60 ug/kg	60 U	
WPP-SB1 (2-4)	m & p-Xylene	SW8260C	21 U		SO	21		120 ug/kg	120 U	
WPP-SB1 (2-4)	Methyl acetate	SW8260C	14 U		SO	14		60 ug/kg	60 U	
WPP-SB1 (2-4)	Methyl tert-butyl ether	SW8260C	33 U		SO	33		120 ug/kg	120 U	
WPP-SB1 (2-4)	Methylcyclohexane	SW8260C	11 U		SO	11		60 ug/kg	60 U	
WPP-SB1 (2-4)	Methylene chloride	SW8260C	48 U		SO	48		120 ug/kg	120 U	
WPP-SB1 (2-4)	o-Xylene	SW8260C	9.5 U		SO	9.5		60 ug/kg	60 U	
WPP-SB1 (2-4)	Styrene	SW8260C	7.2 U		SO	7.2		60 ug/kg	60 U	
WPP-SB1 (2-4)	Tetrachloroethene	SW8260C	9.5 U		SO	9.5		60 ug/kg	60 U	
WPP-SB1 (2-4)	Toluene	SW8260C	8.4 U		SO	8.4		60 ug/kg	60 U	
WPP-SB1 (2-4)	trans-1,2-Dichloroethene	SW8260C	13 U		SO	13		60 ug/kg	60 U	

Williamson Polishing Plating  
Soil Sample Results  
CT Laboratories LLC/125864

Samp_No	Analyte	Method	Result	Lab_Qual	Matrix	MDL	RL	Units	Final Result	Final Qual
WPP-SB1 (2-4)	trans-1,3-Dichloropropene	SW8260C	8.4 U	SO		8.4		60 ug/kg	60 U	
WPP-SB1 (2-4)	Trichloroethene	SW8260C	12 U	SO		12		60 ug/kg	60 U	
WPP-SB1 (2-4)	Trichlorofluoromethane	SW8260C	16 UZ	SO		16		60 ug/kg	60 U	
WPP-SB1 (2-4)	Vinyl chloride	SW8260C	17 U	SO		17		60 ug/kg	60 U	
WPP-SB1 (2-4) D	1,1,1-Trichloroethane	SW8260C	10 U	SO		10		51 ug/kg	51 U	
WPP-SB1 (2-4) D	1,1,2,2-Tetrachloroethane	SW8260C	6.1 U	SO		6.1		51 ug/kg	51 U	
WPP-SB1 (2-4) D	1,1,2-Trichloroethane	SW8260C	8.1 U	SO		8.1		51 ug/kg	51 U	
WPP-SB1 (2-4) D	1,1-Dichloroethane	SW8260C	11 U	SO		11		51 ug/kg	51 U	
WPP-SB1 (2-4) D	1,1-Dichloroethene	SW8260C	16 U	SO		16		51 ug/kg	51 U	
WPP-SB1 (2-4) D	1,2,3-Trichlorobenzene	SW8260C	8.1 U	SO		8.1		51 ug/kg	51 U	
WPP-SB1 (2-4) D	1,2,4-Trichlorobenzene	SW8260C	9.1 U	SO		9.1		51 ug/kg	51 U	
WPP-SB1 (2-4) D	1,2-Dibromo-3-chloropropane	SW8260C	12 U	SO		12		51 ug/kg	51 U	
WPP-SB1 (2-4) D	1,2-Dibromoethane	SW8260C	10 U	SO		10		51 ug/kg	51 U	
WPP-SB1 (2-4) D	1,2-Dichlorobenzene	SW8260C	9.1 U	SO		9.1		51 ug/kg	51 U	
WPP-SB1 (2-4) D	1,2-Dichloroethane	SW8260C	12 U	SO		12		51 ug/kg	51 U	
WPP-SB1 (2-4) D	1,2-Dichloropropane	SW8260C	7.1 U	SO		7.1		51 ug/kg	51 U	
WPP-SB1 (2-4) D	1,3-Dichlorobenzene	SW8260C	8.1 U	SO		8.1		51 ug/kg	51 U	
WPP-SB1 (2-4) D	1,4-Dichlorobenzene	SW8260C	8.1 U	SO		8.1		51 ug/kg	51 U	
WPP-SB1 (2-4) D	1,4-Dioxane	SW8260C	400 UQ,Z	SO		400	5100	ug/kg	5100 U	
WPP-SB1 (2-4) D	112Trichloro122trifluoroethane	SW8260C	20 U	SO		20		100 ug/kg	100 U	
WPP-SB1 (2-4) D	2-Butanone	SW8260C	100 U	SO		100		510 ug/kg	510 U	
WPP-SB1 (2-4) D	2-Hexanone	SW8260C	69 U	SO		69		510 ug/kg	510 U	
WPP-SB1 (2-4) D	4-Methyl-2-pentanone	SW8260C	83 U	SO		83		510 ug/kg	510 U	
WPP-SB1 (2-4) D	Acetone	SW8260C	129 JB	SO		64		510 ug/kg	510 U	
WPP-SB1 (2-4) D	Benzene	SW8260C	5.1 U	SO		5.1		51 ug/kg	51 U	
WPP-SB1 (2-4) D	Bromochloromethane	SW8260C	8.1 U	SO		8.1		51 ug/kg	51 U	
WPP-SB1 (2-4) D	Bromodichloromethane	SW8260C	9.1 U	SO		9.1		51 ug/kg	51 U	
WPP-SB1 (2-4) D	Bromoform	SW8260C	6.1 U	SO		6.1		51 ug/kg	51 U	
WPP-SB1 (2-4) D	Bromomethane	SW8260C	51.8 JB	SO		30		100 ug/kg	100 U	
WPP-SB1 (2-4) D	Carbon disulfide	SW8260C	15 U	SO		15		100 ug/kg	100 U	
WPP-SB1 (2-4) D	Carbon tetrachloride	SW8260C	11 U	SO		11		51 ug/kg	51 U	
WPP-SB1 (2-4) D	Chlorobenzene	SW8260C	8.1 U	SO		8.1		51 ug/kg	51 U	

Williamson Polishing Plating  
Soil Sample Results  
CT Laboratories LLC/125864

Samp_No	Analyte	Method	Result	Lab_Qual	Matrix	MDL	RL	Units	Final Result	Final Qual
WPP-SB1 (2-4) D	Chloroethane	SW8260C	19 U		SO	19		51 ug/kg	51 U	
WPP-SB1 (2-4) D	Chloroform	SW8260C	9.1 U		SO	9.1		51 ug/kg	51 U	
WPP-SB1 (2-4) D	Chloromethane	SW8260C	25 U		SO	25		100 ug/kg	100 U	
WPP-SB1 (2-4) D	cis-1,2-Dichloroethene	SW8260C	10 U		SO	10		51 ug/kg	51 U	
WPP-SB1 (2-4) D	cis-1,3-Dichloropropene	SW8260C	10 U		SO	10		51 ug/kg	51 U	
WPP-SB1 (2-4) D	Cyclohexane	SW8260C	12 U		SO	12		51 ug/kg	51 U	
WPP-SB1 (2-4) D	Dibromochloromethane	SW8260C	8.1 U		SO	8.1		51 ug/kg	51 U	
WPP-SB1 (2-4) D	Dichlorodifluoromethane	SW8260C	13 U		SO	13		51 ug/kg	51 U	
WPP-SB1 (2-4) D	Ethylbenzene	SW8260C	8.1 U		SO	8.1		51 ug/kg	51 U	
WPP-SB1 (2-4) D	Isopropylbenzene	SW8260C	8.1 U		SO	8.1		51 ug/kg	51 U	
WPP-SB1 (2-4) D	m & p-Xylene	SW8260C	18 U		SO	18		100 ug/kg	100 U	
WPP-SB1 (2-4) D	Methyl acetate	SW8260C	12 U		SO	12		51 ug/kg	51 U	
WPP-SB1 (2-4) D	Methyl tert-butyl ether	SW8260C	28 U		SO	28		100 ug/kg	100 U	
WPP-SB1 (2-4) D	Methylcyclohexane	SW8260C	9.1 U		SO	9.1		51 ug/kg	51 U	
WPP-SB1 (2-4) D	Methylene chloride	SW8260C	40 U		SO	40		100 ug/kg	100 U	
WPP-SB1 (2-4) D	o-Xylene	SW8260C	8.1 U		SO	8.1		51 ug/kg	51 U	
WPP-SB1 (2-4) D	Styrene	SW8260C	6.1 U		SO	6.1		51 ug/kg	51 U	
WPP-SB1 (2-4) D	Tetrachloroethene	SW8260C	8.1 U		SO	8.1		51 ug/kg	51 U	
WPP-SB1 (2-4) D	Toluene	SW8260C	7.1 U		SO	7.1		51 ug/kg	51 U	
WPP-SB1 (2-4) D	trans-1,2-Dichloroethene	SW8260C	11 U		SO	11		51 ug/kg	51 U	
WPP-SB1 (2-4) D	trans-1,3-Dichloropropene	SW8260C	7.1 U		SO	7.1		51 ug/kg	51 U	
WPP-SB1 (2-4) D	Trichloroethene	SW8260C	10 U		SO	10		51 ug/kg	51 U	
WPP-SB1 (2-4) D	Trichlorofluoromethane	SW8260C	13 UZ		SO	13		51 ug/kg	51 U	
WPP-SB1 (2-4) D	Vinyl chloride	SW8260C	14 U		SO	14		51 ug/kg	51 U	
WPP-SB2 (4-6)	Aluminum	SW6010	5200 M		SO	0.044		0.26 mg/kg	5200	
WPP-SB2 (4-6)	Antimony	SW6010	0.14 U		SO	0.14		0.88 mg/kg	0.88 UJ	
WPP-SB2 (4-6)	Arsenic	SW6010	5.3		SO	0.14		0.88 mg/kg	5.3	
WPP-SB2 (4-6)	Barium	SW6010	40.2		SO	0.0099		0.055 mg/kg	40.2	
WPP-SB2 (4-6)	Beryllium	SW6010	0.27 B,M		SO	0.0044		0.044 mg/kg	0.27 J-	
WPP-SB2 (4-6)	Cadmium	SW6010	152 Y,M		SO	0.066		0.44 mg/kg	152 J	
WPP-SB2 (4-6)	Calcium	SW6010	26500 M,Y		SO	0.26		1.5 mg/kg	26500 J	
WPP-SB2 (4-6)	Chromium	SW6010	12.4 Y		SO	0.025		0.15 mg/kg	12.4 J	

Williamson Polishing Plating  
Soil Sample Results  
CT Laboratories LLC/125864

Samp_No	Analyte	Method	Result	Lab_Qual	Matrix	MDL	RL	Units	Final Result	Final Qual
WPP-SB2 (4-6)	Cobalt	SW6010	3.4	M	SO	0.044		0.26 mg/kg	3.4	J-
WPP-SB2 (4-6)	Copper	SW6010	10.7		SO	0.077		0.44 mg/kg	10.7	J-
WPP-SB2 (4-6)	Iron	SW6010	7320	M	SO	0.33		2 mg/kg	7320	
WPP-SB2 (4-6)	Lead	SW6010	11.3	Y	SO	0.044		0.28 mg/kg	11.3	J
WPP-SB2 (4-6)	Magnesium	SW6010	10100	Y,M	SO	0.15		0.88 mg/kg	10100	J-
WPP-SB2 (4-6)	Manganese	SW6010	273	M	SO	0.028		0.17 mg/kg	273	
WPP-SB2 (4-6)	Nickel	SW6010	87.8	Y,M	SO	0.023		0.13 mg/kg	87.8	J-
WPP-SB2 (4-6)	Potassium	SW6010	471		SO	12		73 mg/kg	471	
WPP-SB2 (4-6)	Selenium	SW6010	0.41	JB	SO	0.066		0.44 mg/kg	0.44	U
WPP-SB2 (4-6)	Silver	SW6010	0.17	B	SO	0.019		0.11 mg/kg	0.17	J+
WPP-SB2 (4-6)	Sodium	SW6010	110		SO	4.4		26 mg/kg	110	
WPP-SB2 (4-6)	Thallium	SW6010	0.088	UM	SO	0.088		0.53 mg/kg	0.53	UJ
WPP-SB2 (4-6)	Vanadium	SW6010	13.1		SO	0.013		0.088 mg/kg	13.1	
WPP-SB2 (4-6)	Zinc	SW6010	95.8	Y,M	SO	0.055		0.33 mg/kg	95.8	J
WPP-SB2 (4-6)	Mercury	SW7471B	0.034	M	SO	0.0024		0.0097 mg/kg	0.034	J
WPP-SB2 (4-6)	1,1,1-Trichloroethane	SW8260C	10	U	SO	10		51 ug/kg	51	U
WPP-SB2 (4-6)	1,1,2,2-Tetrachloroethane	SW8260C	6.1	U	SO	6.1		51 ug/kg	51	U
WPP-SB2 (4-6)	1,1,2-Trichloroethane	SW8260C	8.1	U	SO	8.1		51 ug/kg	51	U
WPP-SB2 (4-6)	1,1-Dichloroethane	SW8260C	11	U	SO	11		51 ug/kg	51	U
WPP-SB2 (4-6)	1,1-Dichloroethene	SW8260C	16	U	SO	16		51 ug/kg	51	U
WPP-SB2 (4-6)	1,2,3-Trichlorobenzene	SW8260C	8.1	U	SO	8.1		51 ug/kg	51	U
WPP-SB2 (4-6)	1,2,4-Trichlorobenzene	SW8260C	9.1	U	SO	9.1		51 ug/kg	51	U
WPP-SB2 (4-6)	1,2-Dibromo-3-chloropropane	SW8260C	12	U	SO	12		51 ug/kg	51	U
WPP-SB2 (4-6)	1,2-Dibromoethane	SW8260C	10	U	SO	10		51 ug/kg	51	U
WPP-SB2 (4-6)	1,2-Dichlorobenzene	SW8260C	9.1	U	SO	9.1		51 ug/kg	51	U
WPP-SB2 (4-6)	1,2-Dichloroethane	SW8260C	12	U	SO	12		51 ug/kg	51	U
WPP-SB2 (4-6)	1,2-Dichloropropane	SW8260C	7.1	U	SO	7.1		51 ug/kg	51	U
WPP-SB2 (4-6)	1,3-Dichlorobenzene	SW8260C	8.1	U	SO	8.1		51 ug/kg	51	U
WPP-SB2 (4-6)	1,4-Dichlorobenzene	SW8260C	8.1	U	SO	8.1		51 ug/kg	51	U
WPP-SB2 (4-6)	1,4-Dioxane	SW8260C	410	UQ,Z,M	SO	410		5100 ug/kg	5100	U
WPP-SB2 (4-6)	112Trichloro122trifluoroethane	SW8260C	20	U	SO	20		100 ug/kg	100	U
WPP-SB2 (4-6)	2-Butanone	SW8260C	100	U	SO	100		510 ug/kg	510	U

Williamson Polishing Plating  
Soil Sample Results  
CT Laboratories LLC/125864

Samp_No	Analyte	Method	Result	Lab_Qual	Matrix	MDL	RL	Units	Final Result	Final Qual
WPP-SB2 (4-6)	2-Hexanone	SW8260C	69 U		SO	69		510 ug/kg	510 U	
WPP-SB2 (4-6)	4-Methyl-2-pentanone	SW8260C	83 U		SO	83		510 ug/kg	510 U	
WPP-SB2 (4-6)	Acetone	SW8260C	130 JB		SO	64		510 ug/kg	510 U	
WPP-SB2 (4-6)	Benzene	SW8260C	5.1 U		SO	5.1		51 ug/kg	51 U	
WPP-SB2 (4-6)	Bromochloromethane	SW8260C	8.1 U		SO	8.1		51 ug/kg	51 U	
WPP-SB2 (4-6)	Bromodichloromethane	SW8260C	9.1 U		SO	9.1		51 ug/kg	51 U	
WPP-SB2 (4-6)	Bromoform	SW8260C	6.1 U		SO	6.1		51 ug/kg	51 U	
WPP-SB2 (4-6)	Bromomethane	SW8260C	34.7 JB		SO	30		100 ug/kg	100 U	
WPP-SB2 (4-6)	Carbon disulfide	SW8260C	15 U		SO	15		100 ug/kg	100 U	
WPP-SB2 (4-6)	Carbon tetrachloride	SW8260C	11 U		SO	11		51 ug/kg	51 U	
WPP-SB2 (4-6)	Chlorobenzene	SW8260C	8.1 U		SO	8.1		51 ug/kg	51 U	
WPP-SB2 (4-6)	Chloroethane	SW8260C	19 U		SO	19		51 ug/kg	51 U	
WPP-SB2 (4-6)	Chloroform	SW8260C	9.1 U		SO	9.1		51 ug/kg	51 U	
WPP-SB2 (4-6)	Chloromethane	SW8260C	25 U		SO	25		100 ug/kg	100 U	
WPP-SB2 (4-6)	cis-1,2-Dichloroethene	SW8260C	10 U		SO	10		51 ug/kg	51 U	
WPP-SB2 (4-6)	cis-1,3-Dichloropropene	SW8260C	10 U		SO	10		51 ug/kg	51 U	
WPP-SB2 (4-6)	Cyclohexane	SW8260C	12 U		SO	12		51 ug/kg	51 U	
WPP-SB2 (4-6)	Dibromochloromethane	SW8260C	8.1 U		SO	8.1		51 ug/kg	51 U	
WPP-SB2 (4-6)	Dichlorodifluoromethane	SW8260C	13 U		SO	13		51 ug/kg	51 U	
WPP-SB2 (4-6)	Ethylbenzene	SW8260C	8.1 U		SO	8.1		51 ug/kg	51 U	
WPP-SB2 (4-6)	Isopropylbenzene	SW8260C	8.1 U		SO	8.1		51 ug/kg	51 U	
WPP-SB2 (4-6)	m & p-Xylene	SW8260C	18 U		SO	18		100 ug/kg	100 U	
WPP-SB2 (4-6)	Methyl acetate	SW8260C	12 UM		SO	12		51 ug/kg	51 U	
WPP-SB2 (4-6)	Methyl tert-butyl ether	SW8260C	28 U		SO	28		100 ug/kg	100 U	
WPP-SB2 (4-6)	Methylcyclohexane	SW8260C	9.1 U		SO	9.1		51 ug/kg	51 U	
WPP-SB2 (4-6)	Methylene chloride	SW8260C	41 U		SO	41		100 ug/kg	100 U	
WPP-SB2 (4-6)	o-Xylene	SW8260C	8.1 U		SO	8.1		51 ug/kg	51 U	
WPP-SB2 (4-6)	Styrene	SW8260C	6.1 U		SO	6.1		51 ug/kg	51 U	
WPP-SB2 (4-6)	Tetrachloroethene	SW8260C	25.1 J		SO	8.1		51 ug/kg	25.1 J	
WPP-SB2 (4-6)	Toluene	SW8260C	7.1 U		SO	7.1		51 ug/kg	51 U	
WPP-SB2 (4-6)	trans-1,2-Dichloroethene	SW8260C	11 U		SO	11		51 ug/kg	51 U	
WPP-SB2 (4-6)	trans-1,3-Dichloropropene	SW8260C	7.1 U		SO	7.1		51 ug/kg	51 U	

Williamson Polishing Plating  
Soil Sample Results  
CT Laboratories LLC/125864

Samp_No	Analyte	Method	Result	Lab_Qual	Matrix	MDL	RL	Units	Final Result	Final Qual
WPP-SB2 (4-6)	Trichloroethene	SW8260C	10 U		SO	10		51 ug/kg	51 U	
WPP-SB2 (4-6)	Trichlorofluoromethane	SW8260C	13 UZ		SO	13		51 ug/kg	51 U	
WPP-SB2 (4-6)	Vinyl chloride	SW8260C	14 U		SO	14		51 ug/kg	51 U	
WPP-SB2 (4-6)	Cyanide	SW9012	1.01 M		SO	0.16		0.69 mg/kg	1.01 J-	
WPP-SB3 (0-2)	Aluminum	SW6010	4800		SO	0.044		0.27 mg/kg	4800	
WPP-SB3 (0-2)	Antimony	SW6010	0.19 J		SO	0.14		0.88 mg/kg	0.19 J	
WPP-SB3 (0-2)	Arsenic	SW6010	4.6		SO	0.14		0.88 mg/kg	4.6	
WPP-SB3 (0-2)	Barium	SW6010	36.7		SO	0.0099		0.055 mg/kg	36.7	
WPP-SB3 (0-2)	Beryllium	SW6010	0.25 B		SO	0.0044		0.044 mg/kg	0.25	
WPP-SB3 (0-2)	Cadmium	SW6010	0.47		SO	0.0066		0.044 mg/kg	0.47	
WPP-SB3 (0-2)	Calcium	SW6010	45500		SO	2.7		15 mg/kg	45500	
WPP-SB3 (0-2)	Chromium	SW6010	8.3		SO	0.025		0.15 mg/kg	8.3	
WPP-SB3 (0-2)	Cobalt	SW6010	3.1		SO	0.044		0.27 mg/kg	3.1	
WPP-SB3 (0-2)	Copper	SW6010	47.2		SO	0.077		0.44 mg/kg	47.2	
WPP-SB3 (0-2)	Iron	SW6010	9360		SO	0.33		2 mg/kg	9360	
WPP-SB3 (0-2)	Lead	SW6010	11.4 B		SO	0.044		0.28 mg/kg	11.4	
WPP-SB3 (0-2)	Magnesium	SW6010	9770		SO	0.15		0.88 mg/kg	9770	
WPP-SB3 (0-2)	Manganese	SW6010	253		SO	0.028		0.17 mg/kg	253	
WPP-SB3 (0-2)	Nickel	SW6010	112		SO	0.023		0.13 mg/kg	112	
WPP-SB3 (0-2)	Potassium	SW6010	478		SO	12		73 mg/kg	478	
WPP-SB3 (0-2)	Selenium	SW6010	0.39 JB		SO	0.066		0.44 mg/kg	0.44 U	
WPP-SB3 (0-2)	Silver	SW6010	0.069 JB		SO	0.019		0.11 mg/kg	0.11 U	
WPP-SB3 (0-2)	Sodium	SW6010	64.3		SO	4.4		27 mg/kg	64.3	
WPP-SB3 (0-2)	Thallium	SW6010	0.088 U		SO	0.088		0.53 mg/kg	0.53 U	
WPP-SB3 (0-2)	Vanadium	SW6010	12.1		SO	0.013		0.088 mg/kg	12.1	
WPP-SB3 (0-2)	Zinc	SW6010	62.1		SO	0.055		0.33 mg/kg	62.1	
WPP-SB3 (0-2)	Mercury	SW7471B	0.0025 U		SO	0.0025		0.01 mg/kg	0.01 U	
WPP-SB3 (0-2)	1,1,1-Trichloroethane	SW8260C	10 U		SO	10		51 ug/kg	51 U	
WPP-SB3 (0-2)	1,1,2,2-Tetrachloroethane	SW8260C	6.1 U		SO	6.1		51 ug/kg	51 U	
WPP-SB3 (0-2)	1,1,2-Trichloroethane	SW8260C	8.2 U		SO	8.2		51 ug/kg	51 U	
WPP-SB3 (0-2)	1,1-Dichloroethane	SW8260C	11 U		SO	11		51 ug/kg	51 U	
WPP-SB3 (0-2)	1,1-Dichloroethene	SW8260C	16 U		SO	16		51 ug/kg	51 U	

Williamson Polishing Plating  
Soil Sample Results  
CT Laboratories LLC/125864

Samp_No	Analyte	Method	Result	Lab_Qual	Matrix	MDL	RL	Units	Final Result	Final Qual
WPP-SB3 (0-2)	1,2,3-Trichlorobenzene	SW8260C	8.2 U		SO	8.2		51 ug/kg	51 U	
WPP-SB3 (0-2)	1,2,4-Trichlorobenzene	SW8260C	9.2 U		SO	9.2		51 ug/kg	51 U	
WPP-SB3 (0-2)	1,2-Dibromo-3-chloropropane	SW8260C	12 U		SO	12		51 ug/kg	51 U	
WPP-SB3 (0-2)	1,2-Dibromoethane	SW8260C	10 U		SO	10		51 ug/kg	51 U	
WPP-SB3 (0-2)	1,2-Dichlorobenzene	SW8260C	9.2 U		SO	9.2		51 ug/kg	51 U	
WPP-SB3 (0-2)	1,2-Dichloroethane	SW8260C	12 U		SO	12		51 ug/kg	51 U	
WPP-SB3 (0-2)	1,2-Dichloropropane	SW8260C	7.2 U		SO	7.2		51 ug/kg	51 U	
WPP-SB3 (0-2)	1,3-Dichlorobenzene	SW8260C	8.2 U		SO	8.2		51 ug/kg	51 U	
WPP-SB3 (0-2)	1,4-Dichlorobenzene	SW8260C	8.2 U		SO	8.2		51 ug/kg	51 U	
WPP-SB3 (0-2)	1,4-Dioxane	SW8260C	410 UQ,Z		SO	410		5100 ug/kg	5100 U	
WPP-SB3 (0-2)	112Trichloro122trifluoroethane	SW8260C	20 U		SO	20		100 ug/kg	100 U	
WPP-SB3 (0-2)	2-Butanone	SW8260C	100 U		SO	100		510 ug/kg	510 U	
WPP-SB3 (0-2)	2-Hexanone	SW8260C	70 U		SO	70		510 ug/kg	510 U	
WPP-SB3 (0-2)	4-Methyl-2-pentanone	SW8260C	84 U		SO	84		510 ug/kg	510 U	
WPP-SB3 (0-2)	Acetone	SW8260C	156 JB		SO	65		510 ug/kg	510 U	
WPP-SB3 (0-2)	Benzene	SW8260C	5.1 U		SO	5.1		51 ug/kg	51 U	
WPP-SB3 (0-2)	Bromochloromethane	SW8260C	8.2 U		SO	8.2		51 ug/kg	51 U	
WPP-SB3 (0-2)	Bromodichloromethane	SW8260C	9.2 U		SO	9.2		51 ug/kg	51 U	
WPP-SB3 (0-2)	Bromoform	SW8260C	6.1 U		SO	6.1		51 ug/kg	51 U	
WPP-SB3 (0-2)	Bromomethane	SW8260C	63.4 JB		SO	31		100 ug/kg	100 U	
WPP-SB3 (0-2)	Carbon disulfide	SW8260C	15 U		SO	15		100 ug/kg	100 U	
WPP-SB3 (0-2)	Carbon tetrachloride	SW8260C	11 U		SO	11		51 ug/kg	51 U	
WPP-SB3 (0-2)	Chlorobenzene	SW8260C	8.2 U		SO	8.2		51 ug/kg	51 U	
WPP-SB3 (0-2)	Chloroethane	SW8260C	22.3 J		SO	19		51 ug/kg	22.3 J	
WPP-SB3 (0-2)	Chloroform	SW8260C	9.2 U		SO	9.2		51 ug/kg	51 U	
WPP-SB3 (0-2)	Chloromethane	SW8260C	26 U		SO	26		100 ug/kg	100 U	
WPP-SB3 (0-2)	cis-1,2-Dichloroethene	SW8260C	10 U		SO	10		51 ug/kg	51 U	
WPP-SB3 (0-2)	cis-1,3-Dichloropropene	SW8260C	10 U		SO	10		51 ug/kg	51 U	
WPP-SB3 (0-2)	Cyclohexane	SW8260C	12 U		SO	12		51 ug/kg	51 U	
WPP-SB3 (0-2)	Dibromochloromethane	SW8260C	8.2 U		SO	8.2		51 ug/kg	51 U	
WPP-SB3 (0-2)	Dichlorodifluoromethane	SW8260C	13 U		SO	13		51 ug/kg	51 U	
WPP-SB3 (0-2)	Ethylbenzene	SW8260C	23.6 J		SO	8.2		51 ug/kg	23.6 J	

Williamson Polishing Plating  
Soil Sample Results  
CT Laboratories LLC/125864

Samp_No	Analyte	Method	Result	Lab_Qual	Matrix	MDL	RL	Units	Final Result	Final Qual
WPP-SB3 (0-2)	Isopropylbenzene	SW8260C	8.2 U		SO	8.2		51 ug/kg	51 U	
WPP-SB3 (0-2)	m & p-Xylene	SW8260C	116		SO	18		100 ug/kg	116	
WPP-SB3 (0-2)	Methyl acetate	SW8260C	689		SO	12		51 ug/kg	689	
WPP-SB3 (0-2)	Methyl tert-butyl ether	SW8260C	29 U		SO	29		100 ug/kg	100 U	
WPP-SB3 (0-2)	Methylcyclohexane	SW8260C	17.7 J		SO	9.2		51 ug/kg	17.7 J	
WPP-SB3 (0-2)	Methylene chloride	SW8260C	41 U		SO	41		100 ug/kg	100 U	
WPP-SB3 (0-2)	o-Xylene	SW8260C	40.2 J		SO	8.2		51 ug/kg	40.2 J	
WPP-SB3 (0-2)	Styrene	SW8260C	6.1 U		SO	6.1		51 ug/kg	51 U	
WPP-SB3 (0-2)	Tetrachloroethene	SW8260C	8.2 U		SO	8.2		51 ug/kg	51 U	
WPP-SB3 (0-2)	Toluene	SW8260C	7.2 U		SO	7.2		51 ug/kg	51 U	
WPP-SB3 (0-2)	trans-1,2-Dichloroethene	SW8260C	11 U		SO	11		51 ug/kg	51 U	
WPP-SB3 (0-2)	trans-1,3-Dichloropropene	SW8260C	7.2 U		SO	7.2		51 ug/kg	51 U	
WPP-SB3 (0-2)	Trichloroethene	SW8260C	10 U		SO	10		51 ug/kg	51 U	
WPP-SB3 (0-2)	Trichlorofluoromethane	SW8260C	13 UZ		SO	13		51 ug/kg	51 U	
WPP-SB3 (0-2)	Vinyl chloride	SW8260C	14 U		SO	14		51 ug/kg	51 U	
WPP-SB3 (0-2)	Cyanide	SW9012	10.7		SO	0.82		3.5 mg/kg	10.7	
WPP-SB4 (0-2)	Aluminum	SW6010	6890		SO	0.048		0.29 mg/kg	6890	
WPP-SB4 (0-2)	Antimony	SW6010	3.4		SO	0.16		0.96 mg/kg	3.4	
WPP-SB4 (0-2)	Arsenic	SW6010	7		SO	0.16		0.96 mg/kg	7	
WPP-SB4 (0-2)	Barium	SW6010	116		SO	0.011		0.06 mg/kg	116	
WPP-SB4 (0-2)	Beryllium	SW6010	0.47 B		SO	0.0048		0.048 mg/kg	0.47	
WPP-SB4 (0-2)	Cadmium	SW6010	24.2		SO	0.0072		0.048 mg/kg	24.2	
WPP-SB4 (0-2)	Calcium	SW6010	7250		SO	0.29		1.7 mg/kg	7250	
WPP-SB4 (0-2)	Chromium	SW6010	43.3		SO	0.027		0.17 mg/kg	43.3	
WPP-SB4 (0-2)	Cobalt	SW6010	5.6		SO	0.048		0.29 mg/kg	5.6	
WPP-SB4 (0-2)	Copper	SW6010	61.8		SO	0.084		0.48 mg/kg	61.8	
WPP-SB4 (0-2)	Iron	SW6010	12200		SO	0.36		2.1 mg/kg	12200	
WPP-SB4 (0-2)	Lead	SW6010	42.7 B		SO	0.048		0.3 mg/kg	42.7	
WPP-SB4 (0-2)	Magnesium	SW6010	3640		SO	0.17		0.96 mg/kg	3640	
WPP-SB4 (0-2)	Manganese	SW6010	875		SO	0.03		0.18 mg/kg	875	
WPP-SB4 (0-2)	Nickel	SW6010	125		SO	0.025		0.14 mg/kg	125	
WPP-SB4 (0-2)	Potassium	SW6010	695		SO	13		79 mg/kg	695	

Williamson Polishing Plating  
Soil Sample Results  
CT Laboratories LLC/125864

Samp_No	Analyte	Method	Result	Lab_Qual	Matrix	MDL	RL	Units	Final Result	Final Qual
WPP-SB4 (0-2)	Selenium	SW6010	0.58	B	SO	0.072	0.48	mg/kg	0.58	J+
WPP-SB4 (0-2)	Silver	SW6010	0.42		SO	0.02	0.12	mg/kg	0.42	
WPP-SB4 (0-2)	Sodium	SW6010	30.4		SO	4.8	29	mg/kg	30.4	
WPP-SB4 (0-2)	Thallium	SW6010	0.35	J	SO	0.096	0.57	mg/kg	0.35	J
WPP-SB4 (0-2)	Vanadium	SW6010	17.8		SO	0.014	0.096	mg/kg	17.8	
WPP-SB4 (0-2)	Zinc	SW6010	175		SO	0.06	0.36	mg/kg	175	
WPP-SB4 (0-2)	Mercury	SW7471B	0.17		SO	0.0024	0.0096	mg/kg	0.17	
WPP-SB4 (0-2)	Cyanide	SW9012	12		SO	0.76	3.3	mg/kg	12	
WPP-SB5 (0-2)	Aluminum	SW6010	5340		SO	0.047	0.28	mg/kg	5340	
WPP-SB5 (0-2)	Antimony	SW6010	1.7		SO	0.15	0.95	mg/kg	1.7	
WPP-SB5 (0-2)	Arsenic	SW6010	10		SO	0.15	0.95	mg/kg	10	
WPP-SB5 (0-2)	Barium	SW6010	477		SO	0.11	0.59	mg/kg	477	
WPP-SB5 (0-2)	Beryllium	SW6010	0.92	B	SO	0.0047	0.047	mg/kg	0.92	
WPP-SB5 (0-2)	Cadmium	SW6010	25.7		SO	0.0071	0.047	mg/kg	25.7	
WPP-SB5 (0-2)	Calcium	SW6010	19900		SO	0.28	1.7	mg/kg	19900	
WPP-SB5 (0-2)	Chromium	SW6010	48.6		SO	0.027	0.17	mg/kg	48.6	
WPP-SB5 (0-2)	Cobalt	SW6010	4		SO	0.047	0.28	mg/kg	4	
WPP-SB5 (0-2)	Copper	SW6010	142		SO	0.083	0.47	mg/kg	142	
WPP-SB5 (0-2)	Iron	SW6010	12200		SO	0.36	2.1	mg/kg	12200	
WPP-SB5 (0-2)	Lead	SW6010	717	B	SO	0.047	0.3	mg/kg	717	
WPP-SB5 (0-2)	Magnesium	SW6010	3500		SO	0.17	0.95	mg/kg	3500	
WPP-SB5 (0-2)	Manganese	SW6010	157		SO	0.03	0.18	mg/kg	157	
WPP-SB5 (0-2)	Nickel	SW6010	176		SO	0.025	0.14	mg/kg	176	
WPP-SB5 (0-2)	Potassium	SW6010	439		SO	13	78	mg/kg	439	
WPP-SB5 (0-2)	Selenium	SW6010	0.67	B	SO	0.071	0.47	mg/kg	0.67	J+
WPP-SB5 (0-2)	Silver	SW6010	0.48		SO	0.02	0.12	mg/kg	0.48	
WPP-SB5 (0-2)	Sodium	SW6010	239		SO	4.7	28	mg/kg	239	
WPP-SB5 (0-2)	Thallium	SW6010	0.095	U	SO	0.095	0.57	mg/kg	0.57	U
WPP-SB5 (0-2)	Vanadium	SW6010	19.8		SO	0.014	0.095	mg/kg	19.8	
WPP-SB5 (0-2)	Zinc	SW6010	382		SO	0.059	0.36	mg/kg	382	
WPP-SB5 (0-2)	Mercury	SW7471B	0.095		SO	0.0027	0.011	mg/kg	0.095	
WPP-SB5 (0-2)	Cyanide	SW9012	7.16		SO	0.83	3.6	mg/kg	7.16	

Williamson Polishing Plating  
Soil Sample Results  
CT Laboratories LLC/125864

Samp_No	Analyte	Method	Result	Lab_Qual	Matrix	MDL	RL	Units	Final Result	Final Qual
WPP-SB6 (0-2)	Aluminum	SW6010	1200		SO	0.044		0.26 mg/kg	1200	
WPP-SB6 (0-2)	Antimony	SW6010	1.1		SO	0.14		0.88 mg/kg	1.1	
WPP-SB6 (0-2)	Arsenic	SW6010	5.4		SO	0.14		0.88 mg/kg	5.4	
WPP-SB6 (0-2)	Barium	SW6010	55.7		SO	0.0099		0.055 mg/kg	55.7	
WPP-SB6 (0-2)	Beryllium	SW6010	0.95 B		SO	0.0044		0.044 mg/kg	0.95	
WPP-SB6 (0-2)	Cadmium	SW6010	67.8		SO	0.066		0.44 mg/kg	67.8	
WPP-SB6 (0-2)	Calcium	SW6010	5520		SO	0.26		1.5 mg/kg	5520	
WPP-SB6 (0-2)	Chromium	SW6010	100		SO	0.025		0.15 mg/kg	100	
WPP-SB6 (0-2)	Cobalt	SW6010	3.2		SO	0.044		0.26 mg/kg	3.2	
WPP-SB6 (0-2)	Copper	SW6010	297		SO	0.77		4.4 mg/kg	297	
WPP-SB6 (0-2)	Iron	SW6010	4040		SO	0.33		2 mg/kg	4040	
WPP-SB6 (0-2)	Lead	SW6010	68.6 B		SO	0.044		0.27 mg/kg	68.6	
WPP-SB6 (0-2)	Magnesium	SW6010	1150		SO	0.15		0.88 mg/kg	1150	
WPP-SB6 (0-2)	Manganese	SW6010	27.3		SO	0.027		0.16 mg/kg	27.3	
WPP-SB6 (0-2)	Nickel	SW6010	582		SO	0.23		1.3 mg/kg	582	
WPP-SB6 (0-2)	Potassium	SW6010	332		SO	12		72 mg/kg	332	
WPP-SB6 (0-2)	Selenium	SW6010	2.3		SO	0.066		0.44 mg/kg	2.3	
WPP-SB6 (0-2)	Silver	SW6010	3.8		SO	0.19		1.1 mg/kg	3.8	
WPP-SB6 (0-2)	Sodium	SW6010	139		SO	4.4		26 mg/kg	139	
WPP-SB6 (0-2)	Thallium	SW6010	0.088 U		SO	0.088		0.53 mg/kg	0.53 U	
WPP-SB6 (0-2)	Vanadium	SW6010	7.5		SO	0.013		0.088 mg/kg	7.5	
WPP-SB6 (0-2)	Zinc	SW6010	78.5		SO	0.055		0.33 mg/kg	78.5	
WPP-SB6 (0-2)	Mercury	SW7471B	0.011		SO	0.0023		0.0093 mg/kg	0.011	
WPP-SB6 (0-2)	Cyanide	SW9012	5.08		SO	0.79		3.4 mg/kg	5.08	
WPP-SB7 (0-2)	Aluminum	SW6010	2530		SO	0.048		0.29 mg/kg	2530	
WPP-SB7 (0-2)	Antimony	SW6010	13.9		SO	0.15		0.95 mg/kg	13.9	
WPP-SB7 (0-2)	Arsenic	SW6010	10		SO	0.15		0.95 mg/kg	10	
WPP-SB7 (0-2)	Barium	SW6010	52.3		SO	0.011		0.059 mg/kg	52.3	
WPP-SB7 (0-2)	Beryllium	SW6010	0.71 B		SO	0.0048		0.048 mg/kg	0.71	
WPP-SB7 (0-2)	Cadmium	SW6010	1.3		SO	0.0071		0.048 mg/kg	1.3	
WPP-SB7 (0-2)	Calcium	SW6010	28500		SO	0.29		1.7 mg/kg	28500	
WPP-SB7 (0-2)	Chromium	SW6010	7.1		SO	0.027		0.17 mg/kg	7.1	

Williamson Polishing Plating  
Soil Sample Results  
CT Laboratories LLC/125864

Samp_No	Analyte	Method	Result	Lab_Qual	Matrix	MDL	RL	Units	Final Result	Final Qual
WPP-SB7 (0-2)	Cobalt	SW6010	3.5		SO	0.048	0.29	mg/kg	3.5	
WPP-SB7 (0-2)	Copper	SW6010	90.6		SO	0.083	0.48	mg/kg	90.6	
WPP-SB7 (0-2)	Iron	SW6010	16800		SO	0.36	2.1	mg/kg	16800	
WPP-SB7 (0-2)	Lead	SW6010	582 B		SO	0.048	0.3	mg/kg	582	
WPP-SB7 (0-2)	Magnesium	SW6010	11100		SO	0.17	0.95	mg/kg	11100	
WPP-SB7 (0-2)	Manganese	SW6010	240		SO	0.03	0.18	mg/kg	240	
WPP-SB7 (0-2)	Nickel	SW6010	13.7		SO	0.025	0.14	mg/kg	13.7	
WPP-SB7 (0-2)	Potassium	SW6010	419		SO	13	78	mg/kg	419	
WPP-SB7 (0-2)	Selenium	SW6010	0.071 U		SO	0.071	0.48	mg/kg	0.48 U	
WPP-SB7 (0-2)	Silver	SW6010	0.19 B		SO	0.02	0.12	mg/kg	0.19 J+	
WPP-SB7 (0-2)	Sodium	SW6010	422		SO	4.8	29	mg/kg	422	
WPP-SB7 (0-2)	Thallium	SW6010	0.095 U		SO	0.095	0.57	mg/kg	0.57 U	
WPP-SB7 (0-2)	Vanadium	SW6010	12.5		SO	0.014	0.095	mg/kg	12.5	
WPP-SB7 (0-2)	Zinc	SW6010	80.8		SO	0.059	0.36	mg/kg	80.8	
WPP-SB7 (0-2)	Mercury	SW7471B	0.079		SO	0.0027	0.011	mg/kg	0.079	
WPP-SB7 (0-2)	Cyanide	SW9012	0.551 J		SO	0.16	0.67	mg/kg	0.551 J	

**DATA VALIDATION CHECKLIST – STAGE 2A**  
**EPA REGION 5 START CONTRACT**

<b>Site Name</b>	Williamson Polishing & Plating RS	<b>TDD No.</b>	0001-1610-011
<b>Document Tracking No.</b>	1634B	<b>Technical Reviewer (signature and date)</b>	<i>Jessica A. Vickers</i> April 6, 2017
<b>Data Reviewer (signature and date)</b>	<i>Debbie Kuhl</i> April 3, 2017	<b>Laboratory</b>	Pace Analytical Services, LLC
<b>Laboratory Report No.</b>	50157824		
<b>Analyses</b>	Toxicity Characteristic Leaching Procedure (TCLP) metals by EPA SW1311/6010 and SW1311/7470, pH by EPA SW9045, flashpoint by EPA SW1010, and total cyanide by EPA SW9012		
<b>Samples and Matrix</b>	7 waste samples		
<b>Field Duplicate Pairs</b>	None		
<b>Field Blanks</b>	None		

**INTRODUCTION**

This checklist summarizes the Stage 2A validation performed on the subject laboratory report, in accordance with the U.S. Environmental Protection Agency (EPA) *Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use* (January 2009). Analytical data were evaluated in general accordance with the EPA *National Functional Guidelines for Inorganic Superfund Methods Data Review* (January 2017).

**OVERALL EVALUATION**

All results are acceptable and usable as qualified in the attached results summary.

**Data completeness:**

Within Criteria	Exceedance/Notes
Y	



## DATA VALIDATION CHECKLIST – STAGE 2A EPA REGION 5 START CONTRACT

### Sample preservation, receipt, and holding times:

Within Criteria	Exceedance/Notes
N	<p>Cooler temperature was 10.7 degrees Celsius upon arrival at the laboratory. The detected cyanide result for sample WPP-CN-161031 was qualified as estimated and possibly biased low (flagged J-).</p> <p>Analysis for TCLP metals was requested for waste sample WPP-A4-161031. There was an insufficient amount of solids in the sample to do TCLP extraction; therefore, the lab analyzed the aqueous portion of the sample. The initial pH of the aqueous portion of the sample was 0. No data were qualified.</p> <p>Samples WPP-A7-161031, WPP-A22-161031, WPP-B32-161031, and WPP-B33-161031 were analyzed for pH 3 days after sample collection, which is outside the recommended holding time of “immediately.” All pH results were qualified as estimated (flagged J).</p>

### Method blanks:

Within Criteria	Exceedance/Notes
Y	

### Field blanks:

Within Criteria	Exceedance/Notes
NA	

### System monitoring compounds (surrogates and labeled compounds):

Within Criteria	Exceedance/Notes
NA	

**DATA VALIDATION CHECKLIST – STAGE 2A  
EPA REGION 5 START CONTRACT**

**MS/MSD:**

Within Criteria	Exceedance/Notes
N	MS/MSDs performed on non-project samples were not evaluated. <b>Parent sample WPP-A4-161031.</b> The percent recovery for cadmium was above the upper control limit. However, the amount of cadmium in the parent sample (10,900 mg/L) was more than 100 times the amount spiked, which overwhelmed the spiking solution and invalidated the spike results. No data were qualified.

**Laboratory duplicates:**

Within Criteria	Exceedance/Notes
NA	Laboratory duplicates performed on non-project samples were not evaluated.

**Field duplicates:**

Within Criteria	Exceedance/Notes
NA	

**LCSs/LCSDs:**

Within Criteria	Exceedance/Notes
Y	

**Sample dilutions:**

Within Criteria	Exceedance/Notes		
Y	The following samples required dilution because of matrix interference or to bring target analyte concentration(s) into calibration range.		
	Samples	Analyte	Dilution
	WPP-A4-161031	TCLP Cadmium	500
	WPP-CN-161031	Total Cyanide	500



**DATA VALIDATION CHECKLIST – STAGE 2A  
EPA REGION 5 START CONTRACT**

**Re-extraction and reanalysis:**

<b>Within Criteria</b>	<b>Exceedance/Notes</b>
NA	

**MDLs/RLs:**

<b>Within Criteria</b>	<b>Exceedance/Notes</b>
Y	No detected results below the RL were reported by the laboratory.

**Tentatively identified compounds:**

<b>Within Criteria</b>	<b>Exceedance/Notes</b>
NA	

**Other [specify]:**

<b>Within Criteria</b>	<b>Exceedance/Notes</b>
NA	

## DATA VALIDATION CHECKLIST – STAGE 2A EPA REGION 5 START CONTRACT

### Overall Qualifications:

See results summary pages attached for changes to the laboratory qualifiers based upon this validation. The following is a list of qualifiers and definitions that may be used for the validation of this data package:

J	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.
J-	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.
NJ	The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated value is the approximate concentration of the analyte in the sample.
R	The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.
U	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).
UJ	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.

Williamson Polishing Plating  
Waste Samples  
Pace/50157824

Samp_No	Analyte	Method	Result	Lab_Qual	Lab_Samp_No	Matrix	MDL	RL	Units	Final Result	Final Qual
WPP-A4-161031	Arsenic	EPA 6010	0.18		50157824001	Water	0.05		0.1 mg/L	0.18	
WPP-A4-161031	Barium	EPA 6010		U	50157824001	Water	0.25		5 mg/L		5 U
WPP-A4-161031	Cadmium	EPA 6010	10900		50157824001	Water	12.5		25 mg/L	10900	
WPP-A4-161031	Chromium	EPA 6010	23.9		50157824001	Water	0.052		0.1 mg/L	23.9	
WPP-A4-161031	Lead	EPA 6010		U	50157824001	Water	0.05		0.1 mg/L		0.1 U
WPP-A4-161031	Selenium	EPA 6010	0.79		50157824001	Water	0.05		0.1 mg/L	0.79	
WPP-A4-161031	Silver	EPA 6010		U	50157824001	Water	0.05		0.1 mg/L		0.1 U
WPP-A4-161031	Mercury	EPA 7470		U	50157824001	Water	0.001		0.002 mg/L		0.002 U
WPP-A7-161031	pH at 25 Degrees C	EPA 9045	11.5		50157824002	Water	0.1		0.1 Std. Units	11.5 J	
WPP-A22-161031	pH at 25 Degrees C	EPA 9045	13		50157824003	Water	0.1		0.1 Std. Units	13 J	
WPP-B32-161031	pH at 25 Degrees C	EPA 9045	0.82		50157824004	Water	0.1		0.1 Std. Units	0.82 J	
WPP-B33-161031	pH at 25 Degrees C	EPA 9045	0.7		50157824005	Water	0.1		0.1 Std. Units	0.7 J	
WPP-FLAM-161031	Flashpoint	EPA 1010	61		50157824006	Water	78		deg F	61	
WPP-CN-161031	Cyanide	EPA 9012	7300		50157824007	Soil	61		119 mg/kg	7300 J-	

**DATA VALIDATION CHECKLIST – STAGE 2A**  
**EPA REGION 5 START CONTRACT**

<b>Site Name</b>	Williamson Polishing & Plating RS	<b>TDD No.</b>	0001-1610-011
<b>Document Tracking No.</b>	1634C	<b>Technical Reviewer (signature and date)</b>	<i>Jessica A. Vickers</i> April 6, 2017
<b>Data Reviewer (signature and date)</b>	<i>Debbie Kuhl</i> April 5, 2017	<b>Laboratory</b>	ALS Environmental
<b>Laboratory Report No.</b>	P1701233		
<b>Analyses</b>	Volatile organic compounds (VOCs) by EPA TO-15		
<b>Samples and Matrix</b>	8 soil gas samples (including 1 field duplicate)		
<b>Field Duplicate Pairs</b>	WPP-SG2 and WPP-SG2-D		
<b>Field Blanks</b>	None		

**INTRODUCTION**

This checklist summarizes the Stage 2A validation performed on the subject laboratory report, in accordance with the U.S. Environmental Protection Agency (EPA) *Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use* (January 2009). Analytical data were evaluated in general accordance with the EPA *National Functional Guidelines (NFG) for Superfund Organic Methods Data Review* (January 2017).

**OVERALL EVALUATION**

All results are acceptable and usable as qualified in the attached results summary.

**Data completeness:**

Within Criteria	Exceedance/Notes
Y	

**Sample preservation, receipt, and holding times:**

Within Criteria	Exceedance/Notes
Y	



## DATA VALIDATION CHECKLIST – STAGE 2A EPA REGION 5 START CONTRACT

### Method blanks:

Within Criteria	Exceedance/Notes
Y	

### Field blanks:

Within Criteria	Exceedance/Notes
NA	

### System monitoring compounds (surrogates and labeled compounds):

Within Criteria	Exceedance/Notes
Y	

### MS/MSD:

Within Criteria	Exceedance/Notes
NA	

### Laboratory duplicates:

Within Criteria	Exceedance/Notes
Y	

### Field duplicates:

Within Criteria	Exceedance/Notes
N	The RPD for ethylbenzene (60%) exceeded the QAPP control criterion of 50%. The ethylbenzene results for WPP-SG2 and WPP-SG2-D were qualified as estimated (flagged J).

**DATA VALIDATION CHECKLIST – STAGE 2A**  
**EPA REGION 5 START CONTRACT**

**LCSs/LCSDs:**

Within Criteria	Exceedance/Notes
Y	

**Sample dilutions:**

Within Criteria	Exceedance/Notes		
Y	Samples were analyzed at effective dilution factors of 3.63 to 90.6, which were determined by combination of canister dilution factors and volume analyzed. The following samples required the additional dilutions listed below because of matrix interference or to bring target analyte concentration(s) into calibration range.		
	Sample	Analyte	Dilution
	WPP-SG2	Tetrachloroethene and trichloroethene	10
	WPP-SG2-D	Trichloroethene	10

**Re-extraction and reanalysis:**

Within Criteria	Exceedance/Notes
NA	

**MDLs/RLs:**

Within Criteria	Exceedance/Notes
Y	Detected results below the RL were not reported by the laboratory.

**Tentatively identified compounds:**

Within Criteria	Exceedance/Notes
NA	



## DATA VALIDATION CHECKLIST – STAGE 2A EPA REGION 5 START CONTRACT

Other [specify]:

Within Criteria	Exceedance/Notes
NA	

### Overall Qualifications:

See results summary pages attached for changes to the laboratory qualifiers based upon this validation. The following is a list of qualifiers and definitions that may be used for the validation of this data package:

J	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.
J-	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.
NJ	The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated value is the approximate concentration of the analyte in the sample.
R	The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.
U	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).
UJ	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.



Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG1	Air	1,1,1-Trichloroethane (TCA)	8.8		ppbV	0.49	1.4	8.8	
WPP-SG1	Air	1,1,2,2-Tetrachloroethane	1.1 U		ppbV	0.34	1.1	1.1 U	
WPP-SG1	Air	1,1,2-Trichloroethane	1.4 U		ppbV	0.46	1.4	1.4 U	
WPP-SG1	Air	1,1,2-Trichlorotrifluoroethane	1 U		ppbV	0.35	1	1 U	
WPP-SG1	Air	1,1-Dichloroethane (1,1-DCA)	1.9 U		ppbV	0.62	1.9	1.9 U	
WPP-SG1	Air	1,1-Dichloroethene (1,1-DCE)	2 U		ppbV	0.67	2	2 U	
WPP-SG1	Air	1,2,4-Trichlorobenzene	1.1 U		ppbV	0.34	1.1	1.1 U	
WPP-SG1	Air	1,2,4-Trimethylbenzene	1.6 U		ppbV	0.48	1.6	1.6 U	
WPP-SG1	Air	1,2-Dibromo 3-Chloropropane	0.81 U		ppbV	0.16	0.81	0.81 U	
WPP-SG1	Air	1,2-Dibromoethane	1 U		ppbV	0.32	1	1 U	
WPP-SG1	Air	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	1.1 U		ppbV	0.42	1.1	1.1 U	
WPP-SG1	Air	1,2-Dichlorobenzene	1.3 U		ppbV	0.39	1.3	1.3 U	
WPP-SG1	Air	1,2-Dichloroethane	1.9 U		ppbV	0.62	1.9	1.9 U	
WPP-SG1	Air	1,2-Dichloropropane	1.7 U		ppbV	0.54	1.7	1.7 U	
WPP-SG1	Air	1,3,5-Trimethylbenzene	1.6 U		ppbV	0.51	1.6	1.6 U	
WPP-SG1	Air	1,3-Butadiene	3.5 U		ppbV	1.6	3.5	3.5 U	
WPP-SG1	Air	1,3-Dichlorobenzene	1.3 U		ppbV	0.39	1.3	1.3 U	
WPP-SG1	Air	1,4-Dichlorobenzene	1.3 U		ppbV	0.36	1.3	1.3 U	
WPP-SG1	Air	1,4-Dioxane	2.2 U		ppbV	0.69	2.2	2.2 U	
WPP-SG1	Air	2-Butanone (MEK)	120		ppbV	1.1	26	120	
WPP-SG1	Air	2-Hexanone	10		ppbV	0.61	1.9	10	
WPP-SG1	Air	2-Propanol (Isopropyl Alcohol)	32 U		ppbV	2.7	32	32 U	
WPP-SG1	Air	3-Chloro-1-propene (Allyl Chloride)	2.5 U		ppbV	0.8	2.5	2.5 U	
WPP-SG1	Air	4-Ethyltoluene	1.6 U		ppbV	0.51	1.6	1.6 U	
WPP-SG1	Air	4-Methyl-2-pentanone	1.9 U		ppbV	0.61	1.9	1.9 U	
WPP-SG1	Air	Acetone	33 U		ppbV	5.1	33	33 U	
WPP-SG1	Air	Acetonitrile	4.6 U		ppbV	1.7	4.6	4.6 U	
WPP-SG1	Air	Acrolein	14 U		ppbV	1.2	14	14 U	
WPP-SG1	Air	Acrylonitrile	3.6 U		ppbV	1.2	3.6	3.6 U	
WPP-SG1	Air	alpha-Pinene	1.4 U		ppbV	0.39	1.4	1.4 U	
WPP-SG1	Air	Benzene	2.4 U		ppbV	0.78	2.4	2.4 U	
WPP-SG1	Air	Benzyl Chloride	1.5 U		ppbV	0.33	1.5	1.5 U	

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG1	Air	Bromodichloromethane	1.2	U	ppbV	0.35	1.2	1.2	U
WPP-SG1	Air	Bromoform	0.75	U	ppbV	0.23	0.75	0.75	U
WPP-SG1	Air	Bromomethane	2	U	ppbV	0.76	2	2	U
WPP-SG1	Air	Carbon Disulfide	25	U	ppbV	0.75	25	25	U
WPP-SG1	Air	Carbon Tetrachloride	1.2	U	ppbV	0.37	1.2	1.2	U
WPP-SG1	Air	Chlorobenzene	1.7	U	ppbV	0.54	1.7	1.7	U
WPP-SG1	Air	Chloroethane	3	U	ppbV	1	3	3	U
WPP-SG1	Air	Chloroform	1.6	U	ppbV	0.54	1.6	1.6	U
WPP-SG1	Air	Chloromethane	3.8	U	ppbV	1.1	3.8	3.8	U
WPP-SG1	Air	cis-1,2-Dichloroethene	2	U	ppbV	0.63	2	2	U
WPP-SG1	Air	cis-1,3-Dichloropropene	1.7	U	ppbV	0.48	1.7	1.7	U
WPP-SG1	Air	Cyclohexane	4.5	U	ppbV	1.3	4.5	4.5	U
WPP-SG1	Air	Dibromochloromethane	0.92	U	ppbV	0.29	0.92	0.92	U
WPP-SG1	Air	Dichlorodifluoromethane (CFC 12)	1.6	U	ppbV	0.54	1.6	1.6	U
WPP-SG1	Air	Dichloromethane (Methylene Chloride)	2.2	U	ppbV	0.76	2.2	2.2	U
WPP-SG1	Air	d-Limonene	1.4	U	ppbV	0.39	1.4	1.4	U
WPP-SG1	Air	Ethanol	41	U	ppbV	6.6	41	41	U
WPP-SG1	Air	Ethyl Acetate	4.3	U	ppbV	1.5	4.3	4.3	U
WPP-SG1	Air	Ethylbenzene	1.8	U	ppbV	0.57	1.8	1.8	U
WPP-SG1	Air	Hexachlorobutadiene	0.73	U	ppbV	0.2	0.73	0.73	U
WPP-SG1	Air	Isopropylbenzene (Cumene)	1.6	U	ppbV	0.48	1.6	1.6	U
WPP-SG1	Air	m,p-Xylenes	3.6	U	ppbV	1.1	3.6	3.6	U
WPP-SG1	Air	Methyl Methacrylate	3.8	U	ppbV	1.2	3.8	3.8	U
WPP-SG1	Air	Methyl tert-Butyl Ether	2.2	U	ppbV	0.74	2.2	2.2	U
WPP-SG1	Air	Naphthalene	1.5	U	ppbV	0.54	1.5	1.5	U
WPP-SG1	Air	n-Butyl Acetate	1.6	U	ppbV	0.53	1.6	1.6	U
WPP-SG1	Air	n-Heptane	2.8		ppbV	0.65	1.9	2.8	
WPP-SG1	Air	n-Hexane	4.5		ppbV	0.66	2.2	4.5	
WPP-SG1	Air	n-Nonane	1.5	U	ppbV	0.45	1.5	1.5	U
WPP-SG1	Air	n-Octane	1.7		ppbV	0.6	1.7	1.7	
WPP-SG1	Air	n-Propylbenzene	1.6	U	ppbV	0.51	1.6	1.6	U
WPP-SG1	Air	o-Xylene	1.8	U	ppbV	0.54	1.8	1.8	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG1	Air	Propene	17		ppbV	1.3	4.5	17	
WPP-SG1	Air	Styrene	1.8	U	ppbV	0.55	1.8	1.8	U
WPP-SG1	Air	Tetrachloroethene	6.1		ppbV	0.32	1.2	6.1	
WPP-SG1	Air	Tetrahydrofuran (THF)	2.6	U	ppbV	1.1	2.6	2.6	U
WPP-SG1	Air	Toluene	4		ppbV	0.7	2.1	4	
WPP-SG1	Air	trans-1,2-Dichloroethene	3.6		ppbV	0.75	2	3.6	
WPP-SG1	Air	trans-1,3-Dichloropropene	1.7	U	ppbV	0.55	1.7	1.7	U
WPP-SG1	Air	Trichloroethene (TCE)	270		ppbV	0.41	1.5	270	
WPP-SG1	Air	Trichlorofluoromethane (CFC 11)	1.4	U	ppbV	0.47	1.4	1.4	U
WPP-SG1	Air	Vinyl Acetate	22	U	ppbV	2.9	22	22	U
WPP-SG1	Air	Vinyl Chloride	3.1	U	ppbV	1	3.1	3.1	U
WPP-SG1	Air	1,1,1-Trichloroethane (TCA)	48		ug/m3	2.7	7.8	48	
WPP-SG1	Air	1,1,2,2-Tetrachloroethane	7.8	U	ug/m3	2.3	7.8	7.8	U
WPP-SG1	Air	1,1,2-Trichloroethane	7.8	U	ug/m3	2.5	7.8	7.8	U
WPP-SG1	Air	1,1,2-Trichlorotrifluoroethane	7.8	U	ug/m3	2.7	7.8	7.8	U
WPP-SG1	Air	1,1-Dichloroethane (1,1-DCA)	7.8	U	ug/m3	2.5	7.8	7.8	U
WPP-SG1	Air	1,1-Dichloroethene (1,1-DCE)	7.8	U	ug/m3	2.7	7.8	7.8	U
WPP-SG1	Air	1,2,4-Trichlorobenzene	7.8	U	ug/m3	2.5	7.8	7.8	U
WPP-SG1	Air	1,2,4-Trimethylbenzene	7.8	U	ug/m3	2.3	7.8	7.8	U
WPP-SG1	Air	1,2-Dibromo 3-Chloropropane	7.8	U	ug/m3	1.5	7.8	7.8	U
WPP-SG1	Air	1,2-Dibromoethane	7.8	U	ug/m3	2.5	7.8	7.8	U
WPP-SG1	Air	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	7.8	U	ug/m3	3	7.8	7.8	U
WPP-SG1	Air	1,2-Dichlorobenzene	7.8	U	ug/m3	2.3	7.8	7.8	U
WPP-SG1	Air	1,2-Dichloroethane	7.8	U	ug/m3	2.5	7.8	7.8	U
WPP-SG1	Air	1,2-Dichloropropane	7.8	U	ug/m3	2.5	7.8	7.8	U
WPP-SG1	Air	1,3,5-Trimethylbenzene	7.8	U	ug/m3	2.5	7.8	7.8	U
WPP-SG1	Air	1,3-Butadiene	7.8	U	ug/m3	3.4	7.8	7.8	U
WPP-SG1	Air	1,3-Dichlorobenzene	7.8	U	ug/m3	2.3	7.8	7.8	U
WPP-SG1	Air	1,4-Dichlorobenzene	7.8	U	ug/m3	2.2	7.8	7.8	U
WPP-SG1	Air	1,4-Dioxane	7.8	U	ug/m3	2.5	7.8	7.8	U
WPP-SG1	Air	2-Butanone (MEK)	360		ug/m3	3.3	78	360	
WPP-SG1	Air	2-Hexanone	41		ug/m3	2.5	7.8	41	

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG1	Air	2-Propanol (Isopropyl Alcohol)	78	U	ug/m3	6.6	78	78	U
WPP-SG1	Air	3-Chloro-1-propene (Allyl Chloride)	7.8	U	ug/m3	2.5	7.8	7.8	U
WPP-SG1	Air	4-Ethyltoluene	7.8	U	ug/m3	2.5	7.8	7.8	U
WPP-SG1	Air	4-Methyl-2-pentanone	7.8	U	ug/m3	2.5	7.8	7.8	U
WPP-SG1	Air	Acetone	78	U	ug/m3	12	78	78	U
WPP-SG1	Air	Acetonitrile	7.8	U	ug/m3	2.8	7.8	7.8	U
WPP-SG1	Air	Acrolein	31	U	ug/m3	2.7	31	31	U
WPP-SG1	Air	Acrylonitrile	7.8	U	ug/m3	2.7	7.8	7.8	U
WPP-SG1	Air	alpha-Pinene	7.8	U	ug/m3	2.2	7.8	7.8	U
WPP-SG1	Air	Benzene	7.8	U	ug/m3	2.5	7.8	7.8	U
WPP-SG1	Air	Benzyl Chloride	7.8	U	ug/m3	1.7	7.8	7.8	U
WPP-SG1	Air	Bromodichloromethane	7.8	U	ug/m3	2.3	7.8	7.8	U
WPP-SG1	Air	Bromoform	7.8	U	ug/m3	2.3	7.8	7.8	U
WPP-SG1	Air	Bromomethane	7.8	U	ug/m3	3	7.8	7.8	U
WPP-SG1	Air	Carbon Disulfide	78	U	ug/m3	2.3	78	78	U
WPP-SG1	Air	Carbon Tetrachloride	7.8	U	ug/m3	2.3	7.8	7.8	U
WPP-SG1	Air	Chlorobenzene	7.8	U	ug/m3	2.5	7.8	7.8	U
WPP-SG1	Air	Chloroethane	7.8	U	ug/m3	2.7	7.8	7.8	U
WPP-SG1	Air	Chloroform	7.8	U	ug/m3	2.7	7.8	7.8	U
WPP-SG1	Air	Chloromethane	7.8	U	ug/m3	2.3	7.8	7.8	U
WPP-SG1	Air	cis-1,2-Dichloroethene	7.8	U	ug/m3	2.5	7.8	7.8	U
WPP-SG1	Air	cis-1,3-Dichloropropene	7.8	U	ug/m3	2.2	7.8	7.8	U
WPP-SG1	Air	Cyclohexane	16	U	ug/m3	4.5	16	16	U
WPP-SG1	Air	Dibromochloromethane	7.8	U	ug/m3	2.5	7.8	7.8	U
WPP-SG1	Air	Dichlorodifluoromethane (CFC 12)	7.8	U	ug/m3	2.7	7.8	7.8	U
WPP-SG1	Air	Dichloromethane (Methylene Chloride)	7.8	U	ug/m3	2.7	7.8	7.8	U
WPP-SG1	Air	d-Limonene	7.8	U	ug/m3	2.2	7.8	7.8	U
WPP-SG1	Air	Ethanol	78	U	ug/m3	12	78	78	U
WPP-SG1	Air	Ethyl Acetate	16	U	ug/m3	5.5	16	16	U
WPP-SG1	Air	Ethylbenzene	7.8	U	ug/m3	2.5	7.8	7.8	U
WPP-SG1	Air	Hexachlorobutadiene	7.8	U	ug/m3	2.2	7.8	7.8	U
WPP-SG1	Air	Isopropylbenzene (Cumene)	7.8	U	ug/m3	2.3	7.8	7.8	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG1	Air	m,p-Xylenes	16 U		ug/m3	4.7	16	16 U	
WPP-SG1	Air	Methyl Methacrylate	16 U		ug/m3	4.8	16	16 U	
WPP-SG1	Air	Methyl tert-Butyl Ether	7.8 U		ug/m3	2.7	7.8	7.8 U	
WPP-SG1	Air	Naphthalene	7.8 U		ug/m3	2.8	7.8	7.8 U	
WPP-SG1	Air	n-Butyl Acetate	7.8 U		ug/m3	2.5	7.8	7.8 U	
WPP-SG1	Air	n-Heptane	11		ug/m3	2.7	7.8	11	
WPP-SG1	Air	n-Hexane	16		ug/m3	2.3	7.8	16	
WPP-SG1	Air	n-Nonane	7.8 U		ug/m3	2.3	7.8	7.8 U	
WPP-SG1	Air	n-Octane	7.8		ug/m3	2.8	7.8	7.8	
WPP-SG1	Air	n-Propylbenzene	7.8 U		ug/m3	2.5	7.8	7.8 U	
WPP-SG1	Air	o-Xylene	7.8 U		ug/m3	2.3	7.8	7.8 U	
WPP-SG1	Air	Propene	30		ug/m3	2.2	7.8	30	
WPP-SG1	Air	Styrene	7.8 U		ug/m3	2.3	7.8	7.8 U	
WPP-SG1	Air	Tetrachloroethene	42		ug/m3	2.2	7.8	42	
WPP-SG1	Air	Tetrahydrofuran (THF)	7.8 U		ug/m3	3.1	7.8	7.8 U	
WPP-SG1	Air	Toluene	15		ug/m3	2.7	7.8	15	
WPP-SG1	Air	trans-1,2-Dichloroethene	14		ug/m3	3	7.8	14	
WPP-SG1	Air	trans-1,3-Dichloropropene	7.8 U		ug/m3	2.5	7.8	7.8 U	
WPP-SG1	Air	Trichloroethene (TCE)	1400		ug/m3	2.2	7.8	1400	
WPP-SG1	Air	Trichlorofluoromethane (CFC 11)	7.8 U		ug/m3	2.7	7.8	7.8 U	
WPP-SG1	Air	Vinyl Acetate	78 U		ug/m3	10	78	78 U	
WPP-SG1	Air	Vinyl Chloride	7.8 U		ug/m3	2.7	7.8	7.8 U	
WPP-SG2	Air	1,1,1-Trichloroethane (TCA)	6.1		ppbV	0.11	0.33	6.1	
WPP-SG2	Air	1,1,2,2-Tetrachloroethane	0.26 U		ppbV	0.079	0.26	0.26 U	
WPP-SG2	Air	1,1,2-Trichloroethane	0.33 U		ppbV	0.11	0.33	0.33 U	
WPP-SG2	Air	1,1,2-Trichlorotrifluoroethane	1.1		ppbV	0.08	0.24	1.1	
WPP-SG2	Air	1,1-Dichloroethane (1,1-DCA)	0.45 U		ppbV	0.14	0.45	0.45 U	
WPP-SG2	Air	1,1-Dichloroethene (1,1-DCE)	0.46 U		ppbV	0.16	0.46	0.46 U	
WPP-SG2	Air	1,2,4-Trichlorobenzene	0.24 U		ppbV	0.078	0.24	0.24 U	
WPP-SG2	Air	1,2,4-Trimethylbenzene	1.1		ppbV	0.11	0.37	1.1	
WPP-SG2	Air	1,2-Dibromo 3-Chloropropane	0.19 U		ppbV	0.037	0.19	0.19 U	
WPP-SG2	Air	1,2-Dibromoethane	0.24 U		ppbV	0.076	0.24	0.24 U	

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG2	Air	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	0.26	U	ppbV	0.099	0.26	0.26	U
WPP-SG2	Air	1,2-Dichlorobenzene	0.3	U	ppbV	0.09	0.3	0.3	U
WPP-SG2	Air	1,2-Dichloroethane	0.45	U	ppbV	0.14	0.45	0.45	U
WPP-SG2	Air	1,2-Dichloropropane	0.39	U	ppbV	0.13	0.39	0.39	U
WPP-SG2	Air	1,3,5-Trimethylbenzene	0.37	U	ppbV	0.12	0.37	0.37	U
WPP-SG2	Air	1,3-Butadiene	0.82	U	ppbV	0.36	0.82	0.82	U
WPP-SG2	Air	1,3-Dichlorobenzene	0.3	U	ppbV	0.09	0.3	0.3	U
WPP-SG2	Air	1,4-Dichlorobenzene	0.3	U	ppbV	0.084	0.3	0.3	U
WPP-SG2	Air	1,4-Dioxane	0.5	U	ppbV	0.16	0.5	0.5	U
WPP-SG2	Air	2-Butanone (MEK)	45		ppbV	0.26	6.1	45	
WPP-SG2	Air	2-Hexanone	4.4		ppbV	0.14	0.44	4.4	
WPP-SG2	Air	2-Propanol (Isopropyl Alcohol)	7.4	U	ppbV	0.62	7.4	7.4	U
WPP-SG2	Air	3-Chloro-1-propene (Allyl Chloride)	0.58	U	ppbV	0.19	0.58	0.58	U
WPP-SG2	Air	4-Ethyltoluene	0.38		ppbV	0.12	0.37	0.38	
WPP-SG2	Air	4-Methyl-2-pentanone	0.44	U	ppbV	0.14	0.44	0.44	U
WPP-SG2	Air	Acetone	17		ppbV	1.2	7.6	17	
WPP-SG2	Air	Acetonitrile	1.1	U	ppbV	0.39	1.1	1.1	U
WPP-SG2	Air	Acrolein	3.2	U	ppbV	0.27	3.2	3.2	U
WPP-SG2	Air	Acrylonitrile	0.84	U	ppbV	0.28	0.84	0.84	U
WPP-SG2	Air	alpha-Pinene	0.52		ppbV	0.091	0.33	0.52	
WPP-SG2	Air	Benzene	2.5		ppbV	0.18	0.57	2.5	
WPP-SG2	Air	Benzyl Chloride	0.35	U	ppbV	0.077	0.35	0.35	U
WPP-SG2	Air	Bromodichloromethane	0.27	U	ppbV	0.081	0.27	0.27	U
WPP-SG2	Air	Bromoform	0.18	U	ppbV	0.053	0.18	0.18	U
WPP-SG2	Air	Bromomethane	0.47	U	ppbV	0.18	0.47	0.47	U
WPP-SG2	Air	Carbon Disulfide	5.8	U	ppbV	0.17	5.8	5.8	U
WPP-SG2	Air	Carbon Tetrachloride	0.29	U	ppbV	0.086	0.29	0.29	U
WPP-SG2	Air	Chlorobenzene	0.39	U	ppbV	0.13	0.39	0.39	U
WPP-SG2	Air	Chloroethane	0.69	U	ppbV	0.23	0.69	0.69	U
WPP-SG2	Air	Chloroform	1.3		ppbV	0.13	0.37	1.3	
WPP-SG2	Air	Chloromethane	0.88	U	ppbV	0.26	0.88	0.88	U
WPP-SG2	Air	cis-1,2-Dichloroethene	0.46	U	ppbV	0.15	0.46	0.46	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG2	Air	cis-1,3-Dichloropropene	0.4	U	ppbV	0.11	0.4	0.4	U
WPP-SG2	Air	Cyclohexane	1.1	U	ppbV	0.31	1.1	1.1	U
WPP-SG2	Air	Dibromochloromethane	0.21	U	ppbV	0.068	0.21	0.21	U
WPP-SG2	Air	Dichlorodifluoromethane (CFC 12)	0.48		ppbV	0.12	0.37	0.48	
WPP-SG2	Air	Dichloromethane (Methylene Chloride)	0.52	U	ppbV	0.18	0.52	0.52	U
WPP-SG2	Air	d-Limonene	0.36		ppbV	0.091	0.33	0.36	
WPP-SG2	Air	Ethanol	35		ppbV	1.5	9.6	35	
WPP-SG2	Air	Ethyl Acetate	3.7		ppbV	0.35	1	3.7	
WPP-SG2	Air	Ethylbenzene	1.5		ppbV	0.13	0.42	1.5	J
WPP-SG2	Air	Hexachlorobutadiene	0.17	U	ppbV	0.048	0.17	0.17	U
WPP-SG2	Air	Isopropylbenzene (Cumene)	0.37	U	ppbV	0.11	0.37	0.37	U
WPP-SG2	Air	m,p-Xylenes	3.5		ppbV	0.25	0.83	3.5	
WPP-SG2	Air	Methyl Methacrylate	0.89	U	ppbV	0.27	0.89	0.89	U
WPP-SG2	Air	Methyl tert-Butyl Ether	0.5	U	ppbV	0.17	0.5	0.5	U
WPP-SG2	Air	Naphthalene	0.35	U	ppbV	0.12	0.35	0.35	U
WPP-SG2	Air	n-Butyl Acetate	0.38	U	ppbV	0.12	0.38	0.38	U
WPP-SG2	Air	n-Heptane	1		ppbV	0.15	0.44	1	
WPP-SG2	Air	n-Hexane	1.2		ppbV	0.15	0.51	1.2	
WPP-SG2	Air	n-Nonane	0.57		ppbV	0.1	0.35	0.57	
WPP-SG2	Air	n-Octane	0.95		ppbV	0.14	0.39	0.95	
WPP-SG2	Air	n-Propylbenzene	0.37	U	ppbV	0.12	0.37	0.37	U
WPP-SG2	Air	o-Xylene	1.4		ppbV	0.13	0.42	1.4	
WPP-SG2	Air	Propene	6.8		ppbV	0.29	1.1	6.8	
WPP-SG2	Air	Styrene	0.43	U	ppbV	0.13	0.43	0.43	U
WPP-SG2	Air	Tetrachloroethene	54	D	ppbV	0.75	2.7	54	
WPP-SG2	Air	Tetrahydrofuran (THF)	0.61	U	ppbV	0.25	0.61	0.61	U
WPP-SG2	Air	Toluene	4.6		ppbV	0.16	0.48	4.6	
WPP-SG2	Air	trans-1,2-Dichloroethene	0.46	U	ppbV	0.17	0.46	0.46	U
WPP-SG2	Air	trans-1,3-Dichloropropene	0.4	U	ppbV	0.13	0.4	0.4	U
WPP-SG2	Air	Trichloroethene (TCE)	91	D	ppbV	0.94	3.4	91	
WPP-SG2	Air	Trichlorofluoromethane (CFC 11)	1		ppbV	0.11	0.32	1	
WPP-SG2	Air	Vinyl Acetate	5.1	U	ppbV	0.67	5.1	5.1	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG2	Air	Vinyl Chloride	0.71	U	ppbV	0.24	0.71	0.71	U
WPP-SG2	Air	1,1,1-Trichloroethane (TCA)	33		ug/m3	0.62	1.8	33	
WPP-SG2	Air	1,1,2,2-Tetrachloroethane	1.8	U	ug/m3	0.54	1.8	1.8	U
WPP-SG2	Air	1,1,2-Trichloroethane	1.8	U	ug/m3	0.58	1.8	1.8	U
WPP-SG2	Air	1,1,2-Trichlorotrifluoroethane	8.4		ug/m3	0.62	1.8	8.4	
WPP-SG2	Air	1,1-Dichloroethane (1,1-DCA)	1.8	U	ug/m3	0.58	1.8	1.8	U
WPP-SG2	Air	1,1-Dichloroethene (1,1-DCE)	1.8	U	ug/m3	0.62	1.8	1.8	U
WPP-SG2	Air	1,2,4-Trichlorobenzene	1.8	U	ug/m3	0.58	1.8	1.8	U
WPP-SG2	Air	1,2,4-Trimethylbenzene	5.4		ug/m3	0.54	1.8	5.4	
WPP-SG2	Air	1,2-Dibromo 3-Chloropropane	1.8	U	ug/m3	0.36	1.8	1.8	U
WPP-SG2	Air	1,2-Dibromoethane	1.8	U	ug/m3	0.58	1.8	1.8	U
WPP-SG2	Air	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	1.8	U	ug/m3	0.69	1.8	1.8	U
WPP-SG2	Air	1,2-Dichlorobenzene	1.8	U	ug/m3	0.54	1.8	1.8	U
WPP-SG2	Air	1,2-Dichloroethane	1.8	U	ug/m3	0.58	1.8	1.8	U
WPP-SG2	Air	1,2-Dichloropropane	1.8	U	ug/m3	0.58	1.8	1.8	U
WPP-SG2	Air	1,3,5-Trimethylbenzene	1.8	U	ug/m3	0.58	1.8	1.8	U
WPP-SG2	Air	1,3-Butadiene	1.8	U	ug/m3	0.8	1.8	1.8	U
WPP-SG2	Air	1,3-Dichlorobenzene	1.8	U	ug/m3	0.54	1.8	1.8	U
WPP-SG2	Air	1,4-Dichlorobenzene	1.8	U	ug/m3	0.51	1.8	1.8	U
WPP-SG2	Air	1,4-Dioxane	1.8	U	ug/m3	0.58	1.8	1.8	U
WPP-SG2	Air	2-Butanone (MEK)	130		ug/m3	0.76	18	130	
WPP-SG2	Air	2-Hexanone	18		ug/m3	0.58	1.8	18	
WPP-SG2	Air	2-Propanol (Isopropyl Alcohol)	18	U	ug/m3	1.5	18	18	U
WPP-SG2	Air	3-Chloro-1-propene (Allyl Chloride)	1.8	U	ug/m3	0.58	1.8	1.8	U
WPP-SG2	Air	4-Ethyltoluene	1.8		ug/m3	0.58	1.8	1.8	
WPP-SG2	Air	4-Methyl-2-pentanone	1.8	U	ug/m3	0.58	1.8	1.8	U
WPP-SG2	Air	Acetone	41		ug/m3	2.8	18	41	
WPP-SG2	Air	Acetonitrile	1.8	U	ug/m3	0.65	1.8	1.8	U
WPP-SG2	Air	Acrolein	7.3	U	ug/m3	0.62	7.3	7.3	U
WPP-SG2	Air	Acrylonitrile	1.8	U	ug/m3	0.62	1.8	1.8	U
WPP-SG2	Air	alpha-Pinene	2.9		ug/m3	0.51	1.8	2.9	
WPP-SG2	Air	Benzene	8.1		ug/m3	0.58	1.8	8.1	

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG2	Air	Benzyl Chloride	1.8	U	ug/m3	0.4	1.8	1.8	U
WPP-SG2	Air	Bromodichloromethane	1.8	U	ug/m3	0.54	1.8	1.8	U
WPP-SG2	Air	Bromoform	1.8	U	ug/m3	0.54	1.8	1.8	U
WPP-SG2	Air	Bromomethane	1.8	U	ug/m3	0.69	1.8	1.8	U
WPP-SG2	Air	Carbon Disulfide	18	U	ug/m3	0.54	18	18	U
WPP-SG2	Air	Carbon Tetrachloride	1.8	U	ug/m3	0.54	1.8	1.8	U
WPP-SG2	Air	Chlorobenzene	1.8	U	ug/m3	0.58	1.8	1.8	U
WPP-SG2	Air	Chloroethane	1.8	U	ug/m3	0.62	1.8	1.8	U
WPP-SG2	Air	Chloroform	6.3		ug/m3	0.62	1.8	6.3	
WPP-SG2	Air	Chloromethane	1.8	U	ug/m3	0.54	1.8	1.8	U
WPP-SG2	Air	cis-1,2-Dichloroethene	1.8	U	ug/m3	0.58	1.8	1.8	U
WPP-SG2	Air	cis-1,3-Dichloropropene	1.8	U	ug/m3	0.51	1.8	1.8	U
WPP-SG2	Air	Cyclohexane	3.6	U	ug/m3	1.1	3.6	3.6	U
WPP-SG2	Air	Dibromochloromethane	1.8	U	ug/m3	0.58	1.8	1.8	U
WPP-SG2	Air	Dichlorodifluoromethane (CFC 12)	2.4		ug/m3	0.62	1.8	2.4	
WPP-SG2	Air	Dichloromethane (Methylene Chloride)	1.8	U	ug/m3	0.62	1.8	1.8	U
WPP-SG2	Air	d-Limonene	2		ug/m3	0.51	1.8	2	
WPP-SG2	Air	Ethanol	67		ug/m3	2.9	18	67	
WPP-SG2	Air	Ethyl Acetate	13		ug/m3	1.3	3.6	13	
WPP-SG2	Air	Ethylbenzene	6.6		ug/m3	0.58	1.8	6.6	J
WPP-SG2	Air	Hexachlorobutadiene	1.8	U	ug/m3	0.51	1.8	1.8	U
WPP-SG2	Air	Isopropylbenzene (Cumene)	1.8	U	ug/m3	0.54	1.8	1.8	U
WPP-SG2	Air	m,p-Xylenes	15		ug/m3	1.1	3.6	15	
WPP-SG2	Air	Methyl Methacrylate	3.6	U	ug/m3	1.1	3.6	3.6	U
WPP-SG2	Air	Methyl tert-Butyl Ether	1.8	U	ug/m3	0.62	1.8	1.8	U
WPP-SG2	Air	Naphthalene	1.8	U	ug/m3	0.65	1.8	1.8	U
WPP-SG2	Air	n-Butyl Acetate	1.8	U	ug/m3	0.58	1.8	1.8	U
WPP-SG2	Air	n-Heptane	4.2		ug/m3	0.62	1.8	4.2	
WPP-SG2	Air	n-Hexane	4.3		ug/m3	0.54	1.8	4.3	
WPP-SG2	Air	n-Nonane	3		ug/m3	0.54	1.8	3	
WPP-SG2	Air	n-Octane	4.4		ug/m3	0.65	1.8	4.4	
WPP-SG2	Air	n-Propylbenzene	1.8	U	ug/m3	0.58	1.8	1.8	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG2	Air	o-Xylene	6.1		ug/m3	0.54	1.8	6.1	
WPP-SG2	Air	Propene	12		ug/m3	0.51	1.8	12	
WPP-SG2	Air	Styrene	1.8 U		ug/m3	0.54	1.8	1.8 U	
WPP-SG2	Air	Tetrachloroethene	360 D		ug/m3	5.1	18	360	
WPP-SG2	Air	Tetrahydrofuran (THF)	1.8 U		ug/m3	0.73	1.8	1.8 U	
WPP-SG2	Air	Toluene	17		ug/m3	0.62	1.8	17	
WPP-SG2	Air	trans-1,2-Dichloroethene	1.8 U		ug/m3	0.69	1.8	1.8 U	
WPP-SG2	Air	trans-1,3-Dichloropropene	1.8 U		ug/m3	0.58	1.8	1.8 U	
WPP-SG2	Air	Trichloroethene (TCE)	490 D		ug/m3	5.1	18	490	
WPP-SG2	Air	Trichlorofluoromethane (CFC 11)	5.6		ug/m3	0.62	1.8	5.6	
WPP-SG2	Air	Vinyl Acetate	18 U		ug/m3	2.4	18	18 U	
WPP-SG2	Air	Vinyl Chloride	1.8 U		ug/m3	0.62	1.8	1.8 U	
WPP-SG2-D	Air	1,1,1-Trichloroethane (TCA)	6		ppbV	0.12	0.35	6	
WPP-SG2-D	Air	1,1,2,2-Tetrachloroethane	0.28 U		ppbV	0.084	0.28	0.28 U	
WPP-SG2-D	Air	1,1,2-Trichloroethane	0.35 U		ppbV	0.11	0.35	0.35 U	
WPP-SG2-D	Air	1,1,2-Trichlorotrifluoroethane	1.1		ppbV	0.085	0.25	1.1	
WPP-SG2-D	Air	1,1-Dichloroethane (1,1-DCA)	0.48 U		ppbV	0.15	0.48	0.48 U	
WPP-SG2-D	Air	1,1-Dichloroethene (1,1-DCE)	0.49 U		ppbV	0.17	0.49	0.49 U	
WPP-SG2-D	Air	1,2,4-Trichlorobenzene	0.26 U		ppbV	0.083	0.26	0.26 U	
WPP-SG2-D	Air	1,2,4-Trimethylbenzene	1.2		ppbV	0.12	0.39	1.2	
WPP-SG2-D	Air	1,2-Dibromo 3-Chloropropane	0.2 U		ppbV	0.039	0.2	0.2 U	
WPP-SG2-D	Air	1,2-Dibromoethane	0.25 U		ppbV	0.08	0.25	0.25 U	
WPP-SG2-D	Air	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	0.28 U		ppbV	0.1	0.28	0.28 U	
WPP-SG2-D	Air	1,2-Dichlorobenzene	0.32 U		ppbV	0.096	0.32	0.32 U	
WPP-SG2-D	Air	1,2-Dichloroethane	0.48 U		ppbV	0.15	0.48	0.48 U	
WPP-SG2-D	Air	1,2-Dichloropropane	0.42 U		ppbV	0.13	0.42	0.42 U	
WPP-SG2-D	Air	1,3,5-Trimethylbenzene	0.39 U		ppbV	0.13	0.39	0.39 U	
WPP-SG2-D	Air	1,3-Butadiene	0.87 U		ppbV	0.38	0.87	0.87 U	
WPP-SG2-D	Air	1,3-Dichlorobenzene	0.32 U		ppbV	0.096	0.32	0.32 U	
WPP-SG2-D	Air	1,4-Dichlorobenzene	0.32 U		ppbV	0.09	0.32	0.32 U	
WPP-SG2-D	Air	1,4-Dioxane	0.53 U		ppbV	0.17	0.53	0.53 U	
WPP-SG2-D	Air	2-Butanone (MEK)	46		ppbV	0.27	6.5	46	

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG2-D	Air	2-Hexanone	4.2		ppbV	0.15	0.47	4.2	
WPP-SG2-D	Air	2-Propanol (Isopropyl Alcohol)	7.8	U	ppbV	0.66	7.8	7.8	U
WPP-SG2-D	Air	3-Chloro-1-propene (Allyl Chloride)	0.62	U	ppbV	0.2	0.62	0.62	U
WPP-SG2-D	Air	4-Ethyltoluene	0.39	U	ppbV	0.13	0.39	0.39	U
WPP-SG2-D	Air	4-Methyl-2-pentanone	0.47	U	ppbV	0.15	0.47	0.47	U
WPP-SG2-D	Air	Acetone	17		ppbV	1.2	8.1	17	
WPP-SG2-D	Air	Acetonitrile	1.1	U	ppbV	0.41	1.1	1.1	U
WPP-SG2-D	Air	Acrolein	3.4	U	ppbV	0.29	3.4	3.4	U
WPP-SG2-D	Air	Acrylonitrile	0.89	U	ppbV	0.3	0.89	0.89	U
WPP-SG2-D	Air	alpha-Pinene	0.54		ppbV	0.097	0.35	0.54	
WPP-SG2-D	Air	Benzene	2		ppbV	0.19	0.6	2	
WPP-SG2-D	Air	Benzyl Chloride	0.37	U	ppbV	0.082	0.37	0.37	U
WPP-SG2-D	Air	Bromodichloromethane	0.29	U	ppbV	0.086	0.29	0.29	U
WPP-SG2-D	Air	Bromoform	0.19	U	ppbV	0.056	0.19	0.19	U
WPP-SG2-D	Air	Bromomethane	0.5	U	ppbV	0.19	0.5	0.5	U
WPP-SG2-D	Air	Carbon Disulfide	6.2	U	ppbV	0.19	6.2	6.2	U
WPP-SG2-D	Air	Carbon Tetrachloride	0.31	U	ppbV	0.092	0.31	0.31	U
WPP-SG2-D	Air	Chlorobenzene	0.42	U	ppbV	0.13	0.42	0.42	U
WPP-SG2-D	Air	Chloroethane	0.73	U	ppbV	0.25	0.73	0.73	U
WPP-SG2-D	Air	Chloroform	1.3		ppbV	0.13	0.39	1.3	
WPP-SG2-D	Air	Chloromethane	0.93	U	ppbV	0.28	0.93	0.93	U
WPP-SG2-D	Air	cis-1,2-Dichloroethene	0.49	U	ppbV	0.16	0.49	0.49	U
WPP-SG2-D	Air	cis-1,3-Dichloropropene	0.42	U	ppbV	0.12	0.42	0.42	U
WPP-SG2-D	Air	Cyclohexane	1.1	U	ppbV	0.32	1.1	1.1	U
WPP-SG2-D	Air	Dibromochloromethane	0.23	U	ppbV	0.072	0.23	0.23	U
WPP-SG2-D	Air	Dichlorodifluoromethane (CFC 12)	0.47		ppbV	0.13	0.39	0.47	
WPP-SG2-D	Air	Dichloromethane (Methylene Chloride)	0.55	U	ppbV	0.19	0.55	0.55	U
WPP-SG2-D	Air	d-Limonene	0.48		ppbV	0.097	0.35	0.48	
WPP-SG2-D	Air	Ethanol	46		ppbV	1.6	10	46	
WPP-SG2-D	Air	Ethyl Acetate	2.8		ppbV	0.37	1.1	2.8	
WPP-SG2-D	Air	Ethylbenzene	0.81		ppbV	0.14	0.44	0.81	J
WPP-SG2-D	Air	Hexachlorobutadiene	0.18	U	ppbV	0.051	0.18	0.18	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG2-D	Air	Isopropylbenzene (Cumene)	0.39	U	ppbV	0.12	0.39	0.39	U
WPP-SG2-D	Air	m,p-Xylenes	3.1		ppbV	0.27	0.89	3.1	
WPP-SG2-D	Air	Methyl Methacrylate	0.94	U	ppbV	0.29	0.94	0.94	U
WPP-SG2-D	Air	Methyl tert-Butyl Ether	0.53	U	ppbV	0.18	0.53	0.53	U
WPP-SG2-D	Air	Naphthalene	0.37	U	ppbV	0.13	0.37	0.37	U
WPP-SG2-D	Air	n-Butyl Acetate	0.41	U	ppbV	0.13	0.41	0.41	U
WPP-SG2-D	Air	n-Heptane	0.9		ppbV	0.16	0.47	0.9	
WPP-SG2-D	Air	n-Hexane	1.1		ppbV	0.16	0.55	1.1	
WPP-SG2-D	Air	n-Nonane	0.58		ppbV	0.11	0.37	0.58	
WPP-SG2-D	Air	n-Octane	0.89		ppbV	0.15	0.41	0.89	
WPP-SG2-D	Air	n-Propylbenzene	0.39	U	ppbV	0.13	0.39	0.39	U
WPP-SG2-D	Air	o-Xylene	1.2		ppbV	0.13	0.44	1.2	
WPP-SG2-D	Air	Propene	7		ppbV	0.31	1.1	7	
WPP-SG2-D	Air	Styrene	0.45	U	ppbV	0.14	0.45	0.45	U
WPP-SG2-D	Air	Tetrachloroethene	60		ppbV	0.08	0.28	60	
WPP-SG2-D	Air	Tetrahydrofuran (THF)	0.65	U	ppbV	0.26	0.65	0.65	U
WPP-SG2-D	Air	Toluene	4.4		ppbV	0.17	0.51	4.4	
WPP-SG2-D	Air	trans-1,2-Dichloroethene	0.49	U	ppbV	0.18	0.49	0.49	U
WPP-SG2-D	Air	trans-1,3-Dichloropropene	0.42	U	ppbV	0.14	0.42	0.42	U
WPP-SG2-D	Air	Trichloroethene (TCE)	93	D	ppbV	1	3.6	93	
WPP-SG2-D	Air	Trichlorofluoromethane (CFC 11)	0.98		ppbV	0.12	0.34	0.98	
WPP-SG2-D	Air	Vinyl Acetate	5.5	U	ppbV	0.71	5.5	5.5	U
WPP-SG2-D	Air	Vinyl Chloride	0.75	U	ppbV	0.26	0.75	0.75	U
WPP-SG2-D	Air	1,1,1-Trichloroethane (TCA)	33		ug/m3	0.65	1.9	33	
WPP-SG2-D	Air	1,1,2,2-Tetrachloroethane	1.9	U	ug/m3	0.58	1.9	1.9	U
WPP-SG2-D	Air	1,1,2-Trichloroethane	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG2-D	Air	1,1,2-Trichlorotrifluoroethane	8.3		ug/m3	0.65	1.9	8.3	
WPP-SG2-D	Air	1,1-Dichloroethane (1,1-DCA)	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG2-D	Air	1,1-Dichloroethene (1,1-DCE)	1.9	U	ug/m3	0.65	1.9	1.9	U
WPP-SG2-D	Air	1,2,4-Trichlorobenzene	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG2-D	Air	1,2,4-Trimethylbenzene	5.7		ug/m3	0.58	1.9	5.7	
WPP-SG2-D	Air	1,2-Dibromo 3-Chloropropane	1.9	U	ug/m3	0.38	1.9	1.9	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG2-D	Air	1,2-Dibromoethane	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG2-D	Air	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	1.9	U	ug/m3	0.73	1.9	1.9	U
WPP-SG2-D	Air	1,2-Dichlorobenzene	1.9	U	ug/m3	0.58	1.9	1.9	U
WPP-SG2-D	Air	1,2-Dichloroethane	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG2-D	Air	1,2-Dichloropropane	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG2-D	Air	1,3,5-Trimethylbenzene	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG2-D	Air	1,3-Butadiene	1.9	U	ug/m3	0.85	1.9	1.9	U
WPP-SG2-D	Air	1,3-Dichlorobenzene	1.9	U	ug/m3	0.58	1.9	1.9	U
WPP-SG2-D	Air	1,4-Dichlorobenzene	1.9	U	ug/m3	0.54	1.9	1.9	U
WPP-SG2-D	Air	1,4-Dioxane	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG2-D	Air	2-Butanone (MEK)	140		ug/m3	0.81	19	140	
WPP-SG2-D	Air	2-Hexanone	17		ug/m3	0.62	1.9	17	
WPP-SG2-D	Air	2-Propanol (Isopropyl Alcohol)	19	U	ug/m3	1.6	19	19	U
WPP-SG2-D	Air	3-Chloro-1-propene (Allyl Chloride)	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG2-D	Air	4-Ethyltoluene	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG2-D	Air	4-Methyl-2-pentanone	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG2-D	Air	Acetone	41		ug/m3	3	19	41	
WPP-SG2-D	Air	Acetonitrile	1.9	U	ug/m3	0.69	1.9	1.9	U
WPP-SG2-D	Air	Acrolein	7.7	U	ug/m3	0.65	7.7	7.7	U
WPP-SG2-D	Air	Acrylonitrile	1.9	U	ug/m3	0.65	1.9	1.9	U
WPP-SG2-D	Air	alpha-Pinene	3		ug/m3	0.54	1.9	3	
WPP-SG2-D	Air	Benzene	6.4		ug/m3	0.62	1.9	6.4	
WPP-SG2-D	Air	Benzyl Chloride	1.9	U	ug/m3	0.42	1.9	1.9	U
WPP-SG2-D	Air	Bromodichloromethane	1.9	U	ug/m3	0.58	1.9	1.9	U
WPP-SG2-D	Air	Bromoform	1.9	U	ug/m3	0.58	1.9	1.9	U
WPP-SG2-D	Air	Bromomethane	1.9	U	ug/m3	0.73	1.9	1.9	U
WPP-SG2-D	Air	Carbon Disulfide	19	U	ug/m3	0.58	19	19	U
WPP-SG2-D	Air	Carbon Tetrachloride	1.9	U	ug/m3	0.58	1.9	1.9	U
WPP-SG2-D	Air	Chlorobenzene	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG2-D	Air	Chloroethane	1.9	U	ug/m3	0.65	1.9	1.9	U
WPP-SG2-D	Air	Chloroform	6.2		ug/m3	0.65	1.9	6.2	
WPP-SG2-D	Air	Chloromethane	1.9	U	ug/m3	0.58	1.9	1.9	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG2-D	Air	cis-1,2-Dichloroethene	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG2-D	Air	cis-1,3-Dichloropropene	1.9	U	ug/m3	0.54	1.9	1.9	U
WPP-SG2-D	Air	Cyclohexane	3.9	U	ug/m3	1.1	3.9	3.9	U
WPP-SG2-D	Air	Dibromochloromethane	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG2-D	Air	Dichlorodifluoromethane (CFC 12)	2.3		ug/m3	0.65	1.9	2.3	
WPP-SG2-D	Air	Dichloromethane (Methylene Chloride)	1.9	U	ug/m3	0.65	1.9	1.9	U
WPP-SG2-D	Air	d-Limonene	2.7		ug/m3	0.54	1.9	2.7	
WPP-SG2-D	Air	Ethanol	88		ug/m3	3.1	19	88	
WPP-SG2-D	Air	Ethyl Acetate	10		ug/m3	1.3	3.9	10	
WPP-SG2-D	Air	Ethylbenzene	3.5		ug/m3	0.62	1.9	3.5	J
WPP-SG2-D	Air	Hexachlorobutadiene	1.9	U	ug/m3	0.54	1.9	1.9	U
WPP-SG2-D	Air	Isopropylbenzene (Cumene)	1.9	U	ug/m3	0.58	1.9	1.9	U
WPP-SG2-D	Air	m,p-Xylenes	14		ug/m3	1.2	3.9	14	
WPP-SG2-D	Air	Methyl Methacrylate	3.9	U	ug/m3	1.2	3.9	3.9	U
WPP-SG2-D	Air	Methyl tert-Butyl Ether	1.9	U	ug/m3	0.65	1.9	1.9	U
WPP-SG2-D	Air	Naphthalene	1.9	U	ug/m3	0.69	1.9	1.9	U
WPP-SG2-D	Air	n-Butyl Acetate	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG2-D	Air	n-Heptane	3.7		ug/m3	0.65	1.9	3.7	
WPP-SG2-D	Air	n-Hexane	3.8		ug/m3	0.58	1.9	3.8	
WPP-SG2-D	Air	n-Nonane	3		ug/m3	0.58	1.9	3	
WPP-SG2-D	Air	n-Octane	4.2		ug/m3	0.69	1.9	4.2	
WPP-SG2-D	Air	n-Propylbenzene	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG2-D	Air	o-Xylene	5.3		ug/m3	0.58	1.9	5.3	
WPP-SG2-D	Air	Propene	12		ug/m3	0.54	1.9	12	
WPP-SG2-D	Air	Styrene	1.9	U	ug/m3	0.58	1.9	1.9	U
WPP-SG2-D	Air	Tetrachloroethene	400		ug/m3	0.54	1.9	400	
WPP-SG2-D	Air	Tetrahydrofuran (THF)	1.9	U	ug/m3	0.77	1.9	1.9	U
WPP-SG2-D	Air	Toluene	16		ug/m3	0.65	1.9	16	
WPP-SG2-D	Air	trans-1,2-Dichloroethene	1.9	U	ug/m3	0.73	1.9	1.9	U
WPP-SG2-D	Air	trans-1,3-Dichloropropene	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG2-D	Air	Trichloroethene (TCE)	500	D	ug/m3	5.4	19	500	
WPP-SG2-D	Air	Trichlorofluoromethane (CFC 11)	5.5		ug/m3	0.65	1.9	5.5	

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG2-D	Air	Vinyl Acetate	19 U		ug/m3	2.5	19	19 U	
WPP-SG2-D	Air	Vinyl Chloride	1.9 U		ug/m3	0.65	1.9	1.9 U	
WPP-SG3	Air	1,1,1-Trichloroethane (TCA)	2.7 U		ppbV	0.93	2.7	2.7 U	
WPP-SG3	Air	1,1,2,2-Tetrachloroethane	2.2 U		ppbV	0.65	2.2	2.2 U	
WPP-SG3	Air	1,1,2-Trichloroethane	2.7 U		ppbV	0.87	2.7	2.7 U	
WPP-SG3	Air	1,1,2-Trichlorotrifluoroethane	1.9 U		ppbV	0.66	1.9	1.9 U	
WPP-SG3	Air	1,1-Dichloroethane (1,1-DCA)	3.7 U		ppbV	1.2	3.7	3.7 U	
WPP-SG3	Air	1,1-Dichloroethene (1,1-DCE)	3.8 U		ppbV	1.3	3.8	3.8 U	
WPP-SG3	Air	1,2,4-Trichlorobenzene	2 U		ppbV	0.64	2	2 U	
WPP-SG3	Air	1,2,4-Trimethylbenzene	3 U		ppbV	0.91	3	3 U	
WPP-SG3	Air	1,2-Dibromo 3-Chloropropane	1.5 U		ppbV	0.31	1.5	1.5 U	
WPP-SG3	Air	1,2-Dibromoethane	1.9 U		ppbV	0.62	1.9	1.9 U	
WPP-SG3	Air	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.1 U		ppbV	0.81	2.1	2.1 U	
WPP-SG3	Air	1,2-Dichlorobenzene	2.5 U		ppbV	0.74	2.5	2.5 U	
WPP-SG3	Air	1,2-Dichloroethane	3.7 U		ppbV	1.2	3.7	3.7 U	
WPP-SG3	Air	1,2-Dichloropropane	3.2 U		ppbV	1	3.2	3.2 U	
WPP-SG3	Air	1,3,5-Trimethylbenzene	3 U		ppbV	0.97	3	3 U	
WPP-SG3	Air	1,3-Butadiene	6.7 U		ppbV	3	6.7	6.7 U	
WPP-SG3	Air	1,3-Dichlorobenzene	2.5 U		ppbV	0.74	2.5	2.5 U	
WPP-SG3	Air	1,4-Dichlorobenzene	2.5 U		ppbV	0.69	2.5	2.5 U	
WPP-SG3	Air	1,4-Dioxane	4.1 U		ppbV	1.3	4.1	4.1 U	
WPP-SG3	Air	2-Butanone (MEK)	51 U		ppbV	2.1	51	51 U	
WPP-SG3	Air	2-Hexanone	4.1		ppbV	1.2	3.6	4.1	
WPP-SG3	Air	2-Propanol (Isopropyl Alcohol)	61 U		ppbV	5.1	61	61 U	
WPP-SG3	Air	3-Chloro-1-propene (Allyl Chloride)	4.8 U		ppbV	1.5	4.8	4.8 U	
WPP-SG3	Air	4-Ethyltoluene	3 U		ppbV	0.97	3	3 U	
WPP-SG3	Air	4-Methyl-2-pentanone	3.6 U		ppbV	1.2	3.6	3.6 U	
WPP-SG3	Air	Acetone	63 U		ppbV	9.7	63	63 U	
WPP-SG3	Air	Acetonitrile	8.9 U		ppbV	3.2	8.9	8.9 U	
WPP-SG3	Air	Acrolein	26 U		ppbV	2.2	26	26 U	
WPP-SG3	Air	Acrylonitrile	6.9 U		ppbV	2.3	6.9	6.9 U	
WPP-SG3	Air	alpha-Pinene	2.7 U		ppbV	0.75	2.7	2.7 U	

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG3	Air	Benzene	4.7	U	ppbV	1.5	4.7	4.7	U
WPP-SG3	Air	Benzyl Chloride	2.9	U	ppbV	0.63	2.9	2.9	U
WPP-SG3	Air	Bromodichloromethane	2.2	U	ppbV	0.67	2.2	2.2	U
WPP-SG3	Air	Bromoform	1.4	U	ppbV	0.43	1.4	1.4	U
WPP-SG3	Air	Bromomethane	3.8	U	ppbV	1.5	3.8	3.8	U
WPP-SG3	Air	Carbon Disulfide	48	U	ppbV	1.4	48	48	U
WPP-SG3	Air	Carbon Tetrachloride	2.4	U	ppbV	0.71	2.4	2.4	U
WPP-SG3	Air	Chlorobenzene	3.2	U	ppbV	1	3.2	3.2	U
WPP-SG3	Air	Chloroethane	5.6	U	ppbV	1.9	5.6	5.6	U
WPP-SG3	Air	Chloroform	3.1	U	ppbV	1	3.1	3.1	U
WPP-SG3	Air	Chloromethane	7.2	U	ppbV	2.2	7.2	7.2	U
WPP-SG3	Air	cis-1,2-Dichloroethene	3.8	U	ppbV	1.2	3.8	3.8	U
WPP-SG3	Air	cis-1,3-Dichloropropene	3.3	U	ppbV	0.92	3.3	3.3	U
WPP-SG3	Air	Cyclohexane	8.7	U	ppbV	2.5	8.7	8.7	U
WPP-SG3	Air	Dibromochloromethane	1.7	U	ppbV	0.56	1.7	1.7	U
WPP-SG3	Air	Dichlorodifluoromethane (CFC 12)	3	U	ppbV	1	3	3	U
WPP-SG3	Air	Dichloromethane (Methylene Chloride)	4.3	U	ppbV	1.5	4.3	4.3	U
WPP-SG3	Air	d-Limonene	2.7	U	ppbV	0.75	2.7	2.7	U
WPP-SG3	Air	Ethanol	79	U	ppbV	13	79	79	U
WPP-SG3	Air	Ethyl Acetate	8.3	U	ppbV	2.9	8.3	8.3	U
WPP-SG3	Air	Ethylbenzene	3.4	U	ppbV	1.1	3.4	3.4	U
WPP-SG3	Air	Hexachlorobutadiene	1.4	U	ppbV	0.39	1.4	1.4	U
WPP-SG3	Air	Isopropylbenzene (Cumene)	3	U	ppbV	0.91	3	3	U
WPP-SG3	Air	m,p-Xylenes	6.9	U	ppbV	2.1	6.9	6.9	U
WPP-SG3	Air	Methyl Methacrylate	7.3	U	ppbV	2.3	7.3	7.3	U
WPP-SG3	Air	Methyl tert-Butyl Ether	4.1	U	ppbV	1.4	4.1	4.1	U
WPP-SG3	Air	Naphthalene	2.8	U	ppbV	1	2.8	2.8	U
WPP-SG3	Air	n-Butyl Acetate	3.1	U	ppbV	1	3.1	3.1	U
WPP-SG3	Air	n-Heptane	3.6	U	ppbV	1.2	3.6	3.6	U
WPP-SG3	Air	n-Hexane	4.2	U	ppbV	1.3	4.2	4.2	U
WPP-SG3	Air	n-Nonane	2.8	U	ppbV	0.85	2.8	2.8	U
WPP-SG3	Air	n-Octane	3.2	U	ppbV	1.1	3.2	3.2	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG3	Air	n-Propylbenzene	3	U	ppbV	0.97	3	3	U
WPP-SG3	Air	o-Xylene	3.4	U	ppbV	1	3.4	3.4	U
WPP-SG3	Air	Propene	8.7	U	ppbV	2.4	8.7	8.7	U
WPP-SG3	Air	Styrene	3.5	U	ppbV	1.1	3.5	3.5	U
WPP-SG3	Air	Tetrachloroethene	430		ppbV	0.62	2.2	430	
WPP-SG3	Air	Tetrahydrofuran (THF)	5.1	U	ppbV	2	5.1	5.1	U
WPP-SG3	Air	Toluene	4.5		ppbV	1.3	4	4.5	
WPP-SG3	Air	trans-1,2-Dichloroethene	3.8	U	ppbV	1.4	3.8	3.8	U
WPP-SG3	Air	trans-1,3-Dichloropropene	3.3	U	ppbV	1.1	3.3	3.3	U
WPP-SG3	Air	Trichloroethene (TCE)	65		ppbV	0.78	2.8	65	
WPP-SG3	Air	Trichlorofluoromethane (CFC 11)	2.7	U	ppbV	0.9	2.7	2.7	U
WPP-SG3	Air	Vinyl Acetate	42	U	ppbV	5.5	42	42	U
WPP-SG3	Air	Vinyl Chloride	5.8	U	ppbV	2	5.8	5.8	U
WPP-SG3	Air	1,1,1-Trichloroethane (TCA)	15	U	ug/m3	5.1	15	15	U
WPP-SG3	Air	1,1,2,2-Tetrachloroethane	15	U	ug/m3	4.5	15	15	U
WPP-SG3	Air	1,1,2-Trichloroethane	15	U	ug/m3	4.8	15	15	U
WPP-SG3	Air	1,1,2-Trichlorotrifluoroethane	15	U	ug/m3	5.1	15	15	U
WPP-SG3	Air	1,1-Dichloroethane (1,1-DCA)	15	U	ug/m3	4.8	15	15	U
WPP-SG3	Air	1,1-Dichloroethene (1,1-DCE)	15	U	ug/m3	5.1	15	15	U
WPP-SG3	Air	1,2,4-Trichlorobenzene	15	U	ug/m3	4.8	15	15	U
WPP-SG3	Air	1,2,4-Trimethylbenzene	15	U	ug/m3	4.5	15	15	U
WPP-SG3	Air	1,2-Dibromo 3-Chloropropane	15	U	ug/m3	3	15	15	U
WPP-SG3	Air	1,2-Dibromoethane	15	U	ug/m3	4.8	15	15	U
WPP-SG3	Air	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	15	U	ug/m3	5.7	15	15	U
WPP-SG3	Air	1,2-Dichlorobenzene	15	U	ug/m3	4.5	15	15	U
WPP-SG3	Air	1,2-Dichloroethane	15	U	ug/m3	4.8	15	15	U
WPP-SG3	Air	1,2-Dichloropropane	15	U	ug/m3	4.8	15	15	U
WPP-SG3	Air	1,3,5-Trimethylbenzene	15	U	ug/m3	4.8	15	15	U
WPP-SG3	Air	1,3-Butadiene	15	U	ug/m3	6.6	15	15	U
WPP-SG3	Air	1,3-Dichlorobenzene	15	U	ug/m3	4.5	15	15	U
WPP-SG3	Air	1,4-Dichlorobenzene	15	U	ug/m3	4.2	15	15	U
WPP-SG3	Air	1,4-Dioxane	15	U	ug/m3	4.8	15	15	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG3	Air	2-Butanone (MEK)	150	U	ug/m3	6.3	150	150	U
WPP-SG3	Air	2-Hexanone	17		ug/m3	4.8	15	17	
WPP-SG3	Air	2-Propanol (Isopropyl Alcohol)	150	U	ug/m3	13	150	150	U
WPP-SG3	Air	3-Chloro-1-propene (Allyl Chloride)	15	U	ug/m3	4.8	15	15	U
WPP-SG3	Air	4-Ethyltoluene	15	U	ug/m3	4.8	15	15	U
WPP-SG3	Air	4-Methyl-2-pentanone	15	U	ug/m3	4.8	15	15	U
WPP-SG3	Air	Acetone	150	U	ug/m3	23	150	150	U
WPP-SG3	Air	Acetonitrile	15	U	ug/m3	5.4	15	15	U
WPP-SG3	Air	Acrolein	60	U	ug/m3	5.1	60	60	U
WPP-SG3	Air	Acrylonitrile	15	U	ug/m3	5.1	15	15	U
WPP-SG3	Air	alpha-Pinene	15	U	ug/m3	4.2	15	15	U
WPP-SG3	Air	Benzene	15	U	ug/m3	4.8	15	15	U
WPP-SG3	Air	Benzyl Chloride	15	U	ug/m3	3.3	15	15	U
WPP-SG3	Air	Bromodichloromethane	15	U	ug/m3	4.5	15	15	U
WPP-SG3	Air	Bromoform	15	U	ug/m3	4.5	15	15	U
WPP-SG3	Air	Bromomethane	15	U	ug/m3	5.7	15	15	U
WPP-SG3	Air	Carbon Disulfide	150	U	ug/m3	4.5	150	150	U
WPP-SG3	Air	Carbon Tetrachloride	15	U	ug/m3	4.5	15	15	U
WPP-SG3	Air	Chlorobenzene	15	U	ug/m3	4.8	15	15	U
WPP-SG3	Air	Chloroethane	15	U	ug/m3	5.1	15	15	U
WPP-SG3	Air	Chloroform	15	U	ug/m3	5.1	15	15	U
WPP-SG3	Air	Chloromethane	15	U	ug/m3	4.5	15	15	U
WPP-SG3	Air	cis-1,2-Dichloroethene	15	U	ug/m3	4.8	15	15	U
WPP-SG3	Air	cis-1,3-Dichloropropene	15	U	ug/m3	4.2	15	15	U
WPP-SG3	Air	Cyclohexane	30	U	ug/m3	8.6	30	30	U
WPP-SG3	Air	Dibromochloromethane	15	U	ug/m3	4.8	15	15	U
WPP-SG3	Air	Dichlorodifluoromethane (CFC 12)	15	U	ug/m3	5.1	15	15	U
WPP-SG3	Air	Dichloromethane (Methylene Chloride)	15	U	ug/m3	5.1	15	15	U
WPP-SG3	Air	d-Limonene	15	U	ug/m3	4.2	15	15	U
WPP-SG3	Air	Ethanol	150	U	ug/m3	24	150	150	U
WPP-SG3	Air	Ethyl Acetate	30	U	ug/m3	10	30	30	U
WPP-SG3	Air	Ethylbenzene	15	U	ug/m3	4.8	15	15	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG3	Air	Hexachlorobutadiene	15	U	ug/m3	4.2	15	15	U
WPP-SG3	Air	Isopropylbenzene (Cumene)	15	U	ug/m3	4.5	15	15	U
WPP-SG3	Air	m,p-Xylenes	30	U	ug/m3	8.9	30	30	U
WPP-SG3	Air	Methyl Methacrylate	30	U	ug/m3	9.2	30	30	U
WPP-SG3	Air	Methyl tert-Butyl Ether	15	U	ug/m3	5.1	15	15	U
WPP-SG3	Air	Naphthalene	15	U	ug/m3	5.4	15	15	U
WPP-SG3	Air	n-Butyl Acetate	15	U	ug/m3	4.8	15	15	U
WPP-SG3	Air	n-Heptane	15	U	ug/m3	5.1	15	15	U
WPP-SG3	Air	n-Hexane	15	U	ug/m3	4.5	15	15	U
WPP-SG3	Air	n-Nonane	15	U	ug/m3	4.5	15	15	U
WPP-SG3	Air	n-Octane	15	U	ug/m3	5.4	15	15	U
WPP-SG3	Air	n-Propylbenzene	15	U	ug/m3	4.8	15	15	U
WPP-SG3	Air	o-Xylene	15	U	ug/m3	4.5	15	15	U
WPP-SG3	Air	Propene	15	U	ug/m3	4.2	15	15	U
WPP-SG3	Air	Styrene	15	U	ug/m3	4.5	15	15	U
WPP-SG3	Air	Tetrachloroethene	2900		ug/m3	4.2	15	2900	
WPP-SG3	Air	Tetrahydrofuran (THF)	15	U	ug/m3	6	15	15	U
WPP-SG3	Air	Toluene	17		ug/m3	5.1	15	17	
WPP-SG3	Air	trans-1,2-Dichloroethene	15	U	ug/m3	5.7	15	15	U
WPP-SG3	Air	trans-1,3-Dichloropropene	15	U	ug/m3	4.8	15	15	U
WPP-SG3	Air	Trichloroethene (TCE)	350		ug/m3	4.2	15	350	
WPP-SG3	Air	Trichlorofluoromethane (CFC 11)	15	U	ug/m3	5.1	15	15	U
WPP-SG3	Air	Vinyl Acetate	150	U	ug/m3	19	150	150	U
WPP-SG3	Air	Vinyl Chloride	15	U	ug/m3	5.1	15	15	U
WPP-SG4	Air	1,1,1-Trichloroethane (TCA)	2.1	U	ppbV	0.71	2.1	2.1	U
WPP-SG4	Air	1,1,2,2-Tetrachloroethane	1.7	U	ppbV	0.5	1.7	1.7	U
WPP-SG4	Air	1,1,2-Trichloroethane	2.1	U	ppbV	0.66	2.1	2.1	U
WPP-SG4	Air	1,1,2-Trichlorotrifluoroethane	2.2		ppbV	0.5	1.5	2.2	
WPP-SG4	Air	1,1-Dichloroethane (1,1-DCA)	2.8	U	ppbV	0.9	2.8	2.8	U
WPP-SG4	Air	1,1-Dichloroethene (1,1-DCE)	2.9	U	ppbV	0.97	2.9	2.9	U
WPP-SG4	Air	1,2,4-Trichlorobenzene	1.5	U	ppbV	0.49	1.5	1.5	U
WPP-SG4	Air	1,2,4-Trimethylbenzene	2.3	U	ppbV	0.69	2.3	2.3	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG4	Air	1,2-Dibromo 3-Chloropropane	1.2	U	ppbV	0.23	1.2	1.2	U
WPP-SG4	Air	1,2-Dibromoethane	1.5	U	ppbV	0.47	1.5	1.5	U
WPP-SG4	Air	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	1.6	U	ppbV	0.62	1.6	1.6	U
WPP-SG4	Air	1,2-Dichlorobenzene	1.9	U	ppbV	0.57	1.9	1.9	U
WPP-SG4	Air	1,2-Dichloroethane	2.8	U	ppbV	0.9	2.8	2.8	U
WPP-SG4	Air	1,2-Dichloropropane	2.5	U	ppbV	0.79	2.5	2.5	U
WPP-SG4	Air	1,3,5-Trimethylbenzene	2.3	U	ppbV	0.74	2.3	2.3	U
WPP-SG4	Air	1,3-Butadiene	5.1	U	ppbV	2.3	5.1	5.1	U
WPP-SG4	Air	1,3-Dichlorobenzene	1.9	U	ppbV	0.57	1.9	1.9	U
WPP-SG4	Air	1,4-Dichlorobenzene	1.9	U	ppbV	0.53	1.9	1.9	U
WPP-SG4	Air	1,4-Dioxane	3.1	U	ppbV	1	3.1	3.1	U
WPP-SG4	Air	2-Butanone (MEK)	38	U	ppbV	1.6	38	38	U
WPP-SG4	Air	2-Hexanone	3.3		ppbV	0.89	2.8	3.3	
WPP-SG4	Air	2-Propanol (Isopropyl Alcohol)	46	U	ppbV	3.9	46	46	U
WPP-SG4	Air	3-Chloro-1-propene (Allyl Chloride)	3.6	U	ppbV	1.2	3.6	3.6	U
WPP-SG4	Air	4-Ethyltoluene	2.3	U	ppbV	0.74	2.3	2.3	U
WPP-SG4	Air	4-Methyl-2-pentanone	2.8	U	ppbV	0.89	2.8	2.8	U
WPP-SG4	Air	Acetone	48	U	ppbV	7.4	48	48	U
WPP-SG4	Air	Acetonitrile	6.8	U	ppbV	2.4	6.8	6.8	U
WPP-SG4	Air	Acrolein	20	U	ppbV	1.7	20	20	U
WPP-SG4	Air	Acrylonitrile	5.2	U	ppbV	1.8	5.2	5.2	U
WPP-SG4	Air	alpha-Pinene	2	U	ppbV	0.57	2	2	U
WPP-SG4	Air	Benzene	3.5	U	ppbV	1.1	3.5	3.5	U
WPP-SG4	Air	Benzyl Chloride	2.2	U	ppbV	0.48	2.2	2.2	U
WPP-SG4	Air	Bromodichloromethane	1.7	U	ppbV	0.51	1.7	1.7	U
WPP-SG4	Air	Bromoform	1.1	U	ppbV	0.33	1.1	1.1	U
WPP-SG4	Air	Bromomethane	2.9	U	ppbV	1.1	2.9	2.9	U
WPP-SG4	Air	Carbon Disulfide	36	U	ppbV	1.1	36	36	U
WPP-SG4	Air	Carbon Tetrachloride	1.8	U	ppbV	0.54	1.8	1.8	U
WPP-SG4	Air	Chlorobenzene	2.5	U	ppbV	0.79	2.5	2.5	U
WPP-SG4	Air	Chloroethane	4.3	U	ppbV	1.5	4.3	4.3	U
WPP-SG4	Air	Chloroform	2.3	U	ppbV	0.79	2.3	2.3	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG4	Air	Chloromethane	5.5	U	ppbV	1.6	5.5	5.5	U
WPP-SG4	Air	cis-1,2-Dichloroethene	2.9	U	ppbV	0.92	2.9	2.9	U
WPP-SG4	Air	cis-1,3-Dichloropropene	2.5	U	ppbV	0.7	2.5	2.5	U
WPP-SG4	Air	Cyclohexane	6.6	U	ppbV	1.9	6.6	6.6	U
WPP-SG4	Air	Dibromochloromethane	1.3	U	ppbV	0.43	1.3	1.3	U
WPP-SG4	Air	Dichlorodifluoromethane (CFC 12)	2.3	U	ppbV	0.78	2.3	2.3	U
WPP-SG4	Air	Dichloromethane (Methylene Chloride)	3.5		ppbV	1.1	3.3	3.5	
WPP-SG4	Air	d-Limonene	2	U	ppbV	0.57	2	2	U
WPP-SG4	Air	Ethanol	60	U	ppbV	9.6	60	60	U
WPP-SG4	Air	Ethyl Acetate	6.3	U	ppbV	2.2	6.3	6.3	U
WPP-SG4	Air	Ethylbenzene	2.6	U	ppbV	0.84	2.6	2.6	U
WPP-SG4	Air	Hexachlorobutadiene	1.1	U	ppbV	0.3	1.1	1.1	U
WPP-SG4	Air	Isopropylbenzene (Cumene)	2.3	U	ppbV	0.69	2.3	2.3	U
WPP-SG4	Air	m,p-Xylenes	5.2	U	ppbV	1.6	5.2	5.2	U
WPP-SG4	Air	Methyl Methacrylate	5.5	U	ppbV	1.7	5.5	5.5	U
WPP-SG4	Air	Methyl tert-Butyl Ether	3.1	U	ppbV	1.1	3.1	3.1	U
WPP-SG4	Air	Naphthalene	2.2	U	ppbV	0.78	2.2	2.2	U
WPP-SG4	Air	n-Butyl Acetate	2.4	U	ppbV	0.76	2.4	2.4	U
WPP-SG4	Air	n-Heptane	2.8	U	ppbV	0.94	2.8	2.8	U
WPP-SG4	Air	n-Hexane	3.2	U	ppbV	0.97	3.2	3.2	U
WPP-SG4	Air	n-Nonane	2.2	U	ppbV	0.65	2.2	2.2	U
WPP-SG4	Air	n-Octane	2.4	U	ppbV	0.87	2.4	2.4	U
WPP-SG4	Air	n-Propylbenzene	2.3	U	ppbV	0.74	2.3	2.3	U
WPP-SG4	Air	o-Xylene	2.6	U	ppbV	0.78	2.6	2.6	U
WPP-SG4	Air	Propene	6.6	U	ppbV	1.8	6.6	6.6	U
WPP-SG4	Air	Styrene	2.7	U	ppbV	0.8	2.7	2.7	U
WPP-SG4	Air	Tetrachloroethene	270		ppbV	0.47	1.7	270	
WPP-SG4	Air	Tetrahydrofuran (THF)	3.8	U	ppbV	1.5	3.8	3.8	U
WPP-SG4	Air	Toluene	7.3		ppbV	1	3	7.3	
WPP-SG4	Air	trans-1,2-Dichloroethene	2.9	U	ppbV	1.1	2.9	2.9	U
WPP-SG4	Air	trans-1,3-Dichloropropene	2.5	U	ppbV	0.8	2.5	2.5	U
WPP-SG4	Air	Trichloroethene (TCE)	220		ppbV	0.59	2.1	220	

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG4	Air	Trichlorofluoromethane (CFC 11)	2	U	ppbV	0.69	2	2	U
WPP-SG4	Air	Vinyl Acetate	32	U	ppbV	4.2	32	32	U
WPP-SG4	Air	Vinyl Chloride	4.4	U	ppbV	1.5	4.4	4.4	U
WPP-SG4	Air	1,1,1-Trichloroethane (TCA)	11	U	ug/m3	3.9	11	11	U
WPP-SG4	Air	1,1,2,2-Tetrachloroethane	11	U	ug/m3	3.4	11	11	U
WPP-SG4	Air	1,1,2-Trichloroethane	11	U	ug/m3	3.6	11	11	U
WPP-SG4	Air	1,1,2-Trichlorotrifluoroethane	17		ug/m3	3.9	11	17	
WPP-SG4	Air	1,1-Dichloroethane (1,1-DCA)	11	U	ug/m3	3.6	11	11	U
WPP-SG4	Air	1,1-Dichloroethene (1,1-DCE)	11	U	ug/m3	3.9	11	11	U
WPP-SG4	Air	1,2,4-Trichlorobenzene	11	U	ug/m3	3.6	11	11	U
WPP-SG4	Air	1,2,4-Trimethylbenzene	11	U	ug/m3	3.4	11	11	U
WPP-SG4	Air	1,2-Dibromo 3-Chloropropane	11	U	ug/m3	2.2	11	11	U
WPP-SG4	Air	1,2-Dibromoethane	11	U	ug/m3	3.6	11	11	U
WPP-SG4	Air	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	11	U	ug/m3	4.3	11	11	U
WPP-SG4	Air	1,2-Dichlorobenzene	11	U	ug/m3	3.4	11	11	U
WPP-SG4	Air	1,2-Dichloroethane	11	U	ug/m3	3.6	11	11	U
WPP-SG4	Air	1,2-Dichloropropane	11	U	ug/m3	3.6	11	11	U
WPP-SG4	Air	1,3,5-Trimethylbenzene	11	U	ug/m3	3.6	11	11	U
WPP-SG4	Air	1,3-Butadiene	11	U	ug/m3	5	11	11	U
WPP-SG4	Air	1,3-Dichlorobenzene	11	U	ug/m3	3.4	11	11	U
WPP-SG4	Air	1,4-Dichlorobenzene	11	U	ug/m3	3.2	11	11	U
WPP-SG4	Air	1,4-Dioxane	11	U	ug/m3	3.6	11	11	U
WPP-SG4	Air	2-Butanone (MEK)	110	U	ug/m3	4.8	110	110	U
WPP-SG4	Air	2-Hexanone	14		ug/m3	3.6	11	14	
WPP-SG4	Air	2-Propanol (Isopropyl Alcohol)	110	U	ug/m3	9.5	110	110	U
WPP-SG4	Air	3-Chloro-1-propene (Allyl Chloride)	11	U	ug/m3	3.6	11	11	U
WPP-SG4	Air	4-Ethyltoluene	11	U	ug/m3	3.6	11	11	U
WPP-SG4	Air	4-Methyl-2-pentanone	11	U	ug/m3	3.6	11	11	U
WPP-SG4	Air	Acetone	110	U	ug/m3	17	110	110	U
WPP-SG4	Air	Acetonitrile	11	U	ug/m3	4.1	11	11	U
WPP-SG4	Air	Acrolein	45	U	ug/m3	3.9	45	45	U
WPP-SG4	Air	Acrylonitrile	11	U	ug/m3	3.9	11	11	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG4	Air	alpha-Pinene	11	U	ug/m3	3.2	11	11	U
WPP-SG4	Air	Benzene	11	U	ug/m3	3.6	11	11	U
WPP-SG4	Air	Benzyl Chloride	11	U	ug/m3	2.5	11	11	U
WPP-SG4	Air	Bromodichloromethane	11	U	ug/m3	3.4	11	11	U
WPP-SG4	Air	Bromoform	11	U	ug/m3	3.4	11	11	U
WPP-SG4	Air	Bromomethane	11	U	ug/m3	4.3	11	11	U
WPP-SG4	Air	Carbon Disulfide	110	U	ug/m3	3.4	110	110	U
WPP-SG4	Air	Carbon Tetrachloride	11	U	ug/m3	3.4	11	11	U
WPP-SG4	Air	Chlorobenzene	11	U	ug/m3	3.6	11	11	U
WPP-SG4	Air	Chloroethane	11	U	ug/m3	3.9	11	11	U
WPP-SG4	Air	Chloroform	11	U	ug/m3	3.9	11	11	U
WPP-SG4	Air	Chloromethane	11	U	ug/m3	3.4	11	11	U
WPP-SG4	Air	cis-1,2-Dichloroethene	11	U	ug/m3	3.6	11	11	U
WPP-SG4	Air	cis-1,3-Dichloropropene	11	U	ug/m3	3.2	11	11	U
WPP-SG4	Air	Cyclohexane	23	U	ug/m3	6.6	23	23	U
WPP-SG4	Air	Dibromochloromethane	11	U	ug/m3	3.6	11	11	U
WPP-SG4	Air	Dichlorodifluoromethane (CFC 12)	11	U	ug/m3	3.9	11	11	U
WPP-SG4	Air	Dichloromethane (Methylene Chloride)	12		ug/m3	3.9	11	12	
WPP-SG4	Air	d-Limonene	11	U	ug/m3	3.2	11	11	U
WPP-SG4	Air	Ethanol	110	U	ug/m3	18	110	110	U
WPP-SG4	Air	Ethyl Acetate	23	U	ug/m3	7.9	23	23	U
WPP-SG4	Air	Ethylbenzene	11	U	ug/m3	3.6	11	11	U
WPP-SG4	Air	Hexachlorobutadiene	11	U	ug/m3	3.2	11	11	U
WPP-SG4	Air	Isopropylbenzene (Cumene)	11	U	ug/m3	3.4	11	11	U
WPP-SG4	Air	m,p-Xylenes	23	U	ug/m3	6.8	23	23	U
WPP-SG4	Air	Methyl Methacrylate	23	U	ug/m3	7	23	23	U
WPP-SG4	Air	Methyl tert-Butyl Ether	11	U	ug/m3	3.9	11	11	U
WPP-SG4	Air	Naphthalene	11	U	ug/m3	4.1	11	11	U
WPP-SG4	Air	n-Butyl Acetate	11	U	ug/m3	3.6	11	11	U
WPP-SG4	Air	n-Heptane	11	U	ug/m3	3.9	11	11	U
WPP-SG4	Air	n-Hexane	11	U	ug/m3	3.4	11	11	U
WPP-SG4	Air	n-Nonane	11	U	ug/m3	3.4	11	11	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG4	Air	n-Octane	11	U	ug/m3	4.1	11	11	U
WPP-SG4	Air	n-Propylbenzene	11	U	ug/m3	3.6	11	11	U
WPP-SG4	Air	o-Xylene	11	U	ug/m3	3.4	11	11	U
WPP-SG4	Air	Propene	11	U	ug/m3	3.2	11	11	U
WPP-SG4	Air	Styrene	11	U	ug/m3	3.4	11	11	U
WPP-SG4	Air	Tetrachloroethene	1800		ug/m3	3.2	11	1800	
WPP-SG4	Air	Tetrahydrofuran (THF)	11	U	ug/m3	4.5	11	11	U
WPP-SG4	Air	Toluene	28		ug/m3	3.9	11	28	
WPP-SG4	Air	trans-1,2-Dichloroethene	11	U	ug/m3	4.3	11	11	U
WPP-SG4	Air	trans-1,3-Dichloropropene	11	U	ug/m3	3.6	11	11	U
WPP-SG4	Air	Trichloroethene (TCE)	1200		ug/m3	3.2	11	1200	
WPP-SG4	Air	Trichlorofluoromethane (CFC 11)	11	U	ug/m3	3.9	11	11	U
WPP-SG4	Air	Vinyl Acetate	110	U	ug/m3	15	110	110	U
WPP-SG4	Air	Vinyl Chloride	11	U	ug/m3	3.9	11	11	U
WPP-SG5	Air	1,1,1-Trichloroethane (TCA)	2.7	U	ppbV	0.92	2.7	2.7	U
WPP-SG5	Air	1,1,2,2-Tetrachloroethane	2.1	U	ppbV	0.64	2.1	2.1	U
WPP-SG5	Air	1,1,2-Trichloroethane	2.7	U	ppbV	0.86	2.7	2.7	U
WPP-SG5	Air	1,1,2-Trichlorotrifluoroethane	1.9	U	ppbV	0.65	1.9	1.9	U
WPP-SG5	Air	1,1-Dichloroethane (1,1-DCA)	3.6	U	ppbV	1.2	3.6	3.6	U
WPP-SG5	Air	1,1-Dichloroethene (1,1-DCE)	3.7	U	ppbV	1.3	3.7	3.7	U
WPP-SG5	Air	1,2,4-Trichlorobenzene	2	U	ppbV	0.63	2	2	U
WPP-SG5	Air	1,2,4-Trimethylbenzene	3	U	ppbV	0.9	3	3	U
WPP-SG5	Air	1,2-Dibromo 3-Chloropropane	1.5	U	ppbV	0.3	1.5	1.5	U
WPP-SG5	Air	1,2-Dibromoethane	1.9	U	ppbV	0.61	1.9	1.9	U
WPP-SG5	Air	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.1	U	ppbV	0.8	2.1	2.1	U
WPP-SG5	Air	1,2-Dichlorobenzene	2.4	U	ppbV	0.73	2.4	2.4	U
WPP-SG5	Air	1,2-Dichloroethane	3.6	U	ppbV	1.2	3.6	3.6	U
WPP-SG5	Air	1,2-Dichloropropane	3.2	U	ppbV	1	3.2	3.2	U
WPP-SG5	Air	1,3,5-Trimethylbenzene	3	U	ppbV	0.96	3	3	U
WPP-SG5	Air	1,3-Butadiene	6.6	U	ppbV	2.9	6.6	6.6	U
WPP-SG5	Air	1,3-Dichlorobenzene	2.4	U	ppbV	0.73	2.4	2.4	U
WPP-SG5	Air	1,4-Dichlorobenzene	2.4	U	ppbV	0.68	2.4	2.4	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG5	Air	1,4-Dioxane	4.1	U	ppbV	1.3	4.1	4.1	U
WPP-SG5	Air	2-Butanone (MEK)	54		ppbV	2.1	50	54	
WPP-SG5	Air	2-Hexanone	4.6		ppbV	1.1	3.6	4.6	
WPP-SG5	Air	2-Propanol (Isopropyl Alcohol)	60	U	ppbV	5	60	60	U
WPP-SG5	Air	3-Chloro-1-propene (Allyl Chloride)	4.7	U	ppbV	1.5	4.7	4.7	U
WPP-SG5	Air	4-Ethyltoluene	3	U	ppbV	0.96	3	3	U
WPP-SG5	Air	4-Methyl-2-pentanone	3.6	U	ppbV	1.1	3.6	3.6	U
WPP-SG5	Air	Acetone	62	U	ppbV	9.5	62	62	U
WPP-SG5	Air	Acetonitrile	8.8	U	ppbV	3.2	8.8	8.8	U
WPP-SG5	Air	Acrolein	26	U	ppbV	2.2	26	26	U
WPP-SG5	Air	Acrylonitrile	6.8	U	ppbV	2.3	6.8	6.8	U
WPP-SG5	Air	alpha-Pinene	2.6	U	ppbV	0.74	2.6	2.6	U
WPP-SG5	Air	Benzene	4.6	U	ppbV	1.5	4.6	4.6	U
WPP-SG5	Air	Benzyl Chloride	2.8	U	ppbV	0.62	2.8	2.8	U
WPP-SG5	Air	Bromodichloromethane	2.2	U	ppbV	0.66	2.2	2.2	U
WPP-SG5	Air	Bromoform	1.4	U	ppbV	0.43	1.4	1.4	U
WPP-SG5	Air	Bromomethane	3.8	U	ppbV	1.4	3.8	3.8	U
WPP-SG5	Air	Carbon Disulfide	47	U	ppbV	1.4	47	47	U
WPP-SG5	Air	Carbon Tetrachloride	2.3	U	ppbV	0.7	2.3	2.3	U
WPP-SG5	Air	Chlorobenzene	3.2	U	ppbV	1	3.2	3.2	U
WPP-SG5	Air	Chloroethane	5.6	U	ppbV	1.9	5.6	5.6	U
WPP-SG5	Air	Chloroform	3	U	ppbV	1	3	3	U
WPP-SG5	Air	Chloromethane	7.1	U	ppbV	2.1	7.1	7.1	U
WPP-SG5	Air	cis-1,2-Dichloroethene	3.7	U	ppbV	1.2	3.7	3.7	U
WPP-SG5	Air	cis-1,3-Dichloropropene	3.2	U	ppbV	0.91	3.2	3.2	U
WPP-SG5	Air	Cyclohexane	8.5	U	ppbV	2.5	8.5	8.5	U
WPP-SG5	Air	Dibromochloromethane	1.7	U	ppbV	0.55	1.7	1.7	U
WPP-SG5	Air	Dichlorodifluoromethane (CFC 12)	3	U	ppbV	1	3	3	U
WPP-SG5	Air	Dichloromethane (Methylene Chloride)	4.2	U	ppbV	1.4	4.2	4.2	U
WPP-SG5	Air	d-Limonene	2.6	U	ppbV	0.74	2.6	2.6	U
WPP-SG5	Air	Ethanol	78	U	ppbV	12	78	78	U
WPP-SG5	Air	Ethyl Acetate	8.2	U	ppbV	2.9	8.2	8.2	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG5	Air	Ethylbenzene	3.4	U	ppbV	1.1	3.4	3.4	U
WPP-SG5	Air	Hexachlorobutadiene	1.4	U	ppbV	0.39	1.4	1.4	U
WPP-SG5	Air	Isopropylbenzene (Cumene)	3	U	ppbV	0.9	3	3	U
WPP-SG5	Air	m,p-Xylenes	6.8	U	ppbV	2	6.8	6.8	U
WPP-SG5	Air	Methyl Methacrylate	7.2	U	ppbV	2.2	7.2	7.2	U
WPP-SG5	Air	Methyl tert-Butyl Ether	4.1	U	ppbV	1.4	4.1	4.1	U
WPP-SG5	Air	Naphthalene	2.8	U	ppbV	1	2.8	2.8	U
WPP-SG5	Air	n-Butyl Acetate	3.1	U	ppbV	0.99	3.1	3.1	U
WPP-SG5	Air	n-Heptane	3.6	U	ppbV	1.2	3.6	3.6	U
WPP-SG5	Air	n-Hexane	4.2	U	ppbV	1.3	4.2	4.2	U
WPP-SG5	Air	n-Nonane	2.8	U	ppbV	0.84	2.8	2.8	U
WPP-SG5	Air	n-Octane	3.1	U	ppbV	1.1	3.1	3.1	U
WPP-SG5	Air	n-Propylbenzene	3	U	ppbV	0.96	3	3	U
WPP-SG5	Air	o-Xylene	3.4	U	ppbV	1	3.4	3.4	U
WPP-SG5	Air	Propene	8.5	U	ppbV	2.4	8.5	8.5	U
WPP-SG5	Air	Styrene	3.5	U	ppbV	1	3.5	3.5	U
WPP-SG5	Air	Tetrachloroethene	2.2	U	ppbV	0.61	2.2	2.2	U
WPP-SG5	Air	Tetrahydrofuran (THF)	5	U	ppbV	2	5	5	U
WPP-SG5	Air	Toluene	4.1		ppbV	1.3	3.9	4.1	
WPP-SG5	Air	trans-1,2-Dichloroethene	3.7	U	ppbV	1.4	3.7	3.7	U
WPP-SG5	Air	trans-1,3-Dichloropropene	3.2	U	ppbV	1	3.2	3.2	U
WPP-SG5	Air	Trichloroethene (TCE)	410		ppbV	0.77	2.7	410	
WPP-SG5	Air	Trichlorofluoromethane (CFC 11)	2.6	U	ppbV	0.89	2.6	2.6	U
WPP-SG5	Air	Vinyl Acetate	42	U	ppbV	5.4	42	42	U
WPP-SG5	Air	Vinyl Chloride	5.8	U	ppbV	2	5.8	5.8	U
WPP-SG5	Air	1,1,1-Trichloroethane (TCA)	15	U	ug/m3	5	15	15	U
WPP-SG5	Air	1,1,2,2-Tetrachloroethane	15	U	ug/m3	4.4	15	15	U
WPP-SG5	Air	1,1,2-Trichloroethane	15	U	ug/m3	4.7	15	15	U
WPP-SG5	Air	1,1,2-Trichlorotrifluoroethane	15	U	ug/m3	5	15	15	U
WPP-SG5	Air	1,1-Dichloroethane (1,1-DCA)	15	U	ug/m3	4.7	15	15	U
WPP-SG5	Air	1,1-Dichloroethene (1,1-DCE)	15	U	ug/m3	5	15	15	U
WPP-SG5	Air	1,2,4-Trichlorobenzene	15	U	ug/m3	4.7	15	15	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG5	Air	1,2,4-Trimethylbenzene	15	U	ug/m3	4.4	15	15	U
WPP-SG5	Air	1,2-Dibromo 3-Chloropropane	15	U	ug/m3	2.9	15	15	U
WPP-SG5	Air	1,2-Dibromoethane	15	U	ug/m3	4.7	15	15	U
WPP-SG5	Air	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	15	U	ug/m3	5.6	15	15	U
WPP-SG5	Air	1,2-Dichlorobenzene	15	U	ug/m3	4.4	15	15	U
WPP-SG5	Air	1,2-Dichloroethane	15	U	ug/m3	4.7	15	15	U
WPP-SG5	Air	1,2-Dichloropropane	15	U	ug/m3	4.7	15	15	U
WPP-SG5	Air	1,3,5-Trimethylbenzene	15	U	ug/m3	4.7	15	15	U
WPP-SG5	Air	1,3-Butadiene	15	U	ug/m3	6.5	15	15	U
WPP-SG5	Air	1,3-Dichlorobenzene	15	U	ug/m3	4.4	15	15	U
WPP-SG5	Air	1,4-Dichlorobenzene	15	U	ug/m3	4.1	15	15	U
WPP-SG5	Air	1,4-Dioxane	15	U	ug/m3	4.7	15	15	U
WPP-SG5	Air	2-Butanone (MEK)	160		ug/m3	6.2	150	160	
WPP-SG5	Air	2-Hexanone	19		ug/m3	4.7	15	19	
WPP-SG5	Air	2-Propanol (Isopropyl Alcohol)	150	U	ug/m3	12	150	150	U
WPP-SG5	Air	3-Chloro-1-propene (Allyl Chloride)	15	U	ug/m3	4.7	15	15	U
WPP-SG5	Air	4-Ethyltoluene	15	U	ug/m3	4.7	15	15	U
WPP-SG5	Air	4-Methyl-2-pentanone	15	U	ug/m3	4.7	15	15	U
WPP-SG5	Air	Acetone	150	U	ug/m3	23	150	150	U
WPP-SG5	Air	Acetonitrile	15	U	ug/m3	5.3	15	15	U
WPP-SG5	Air	Acrolein	59	U	ug/m3	5	59	59	U
WPP-SG5	Air	Acrylonitrile	15	U	ug/m3	5	15	15	U
WPP-SG5	Air	alpha-Pinene	15	U	ug/m3	4.1	15	15	U
WPP-SG5	Air	Benzene	15	U	ug/m3	4.7	15	15	U
WPP-SG5	Air	Benzyl Chloride	15	U	ug/m3	3.2	15	15	U
WPP-SG5	Air	Bromodichloromethane	15	U	ug/m3	4.4	15	15	U
WPP-SG5	Air	Bromoform	15	U	ug/m3	4.4	15	15	U
WPP-SG5	Air	Bromomethane	15	U	ug/m3	5.6	15	15	U
WPP-SG5	Air	Carbon Disulfide	150	U	ug/m3	4.4	150	150	U
WPP-SG5	Air	Carbon Tetrachloride	15	U	ug/m3	4.4	15	15	U
WPP-SG5	Air	Chlorobenzene	15	U	ug/m3	4.7	15	15	U
WPP-SG5	Air	Chloroethane	15	U	ug/m3	5	15	15	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG5	Air	Chloroform	15	U	ug/m3	5	15	15	U
WPP-SG5	Air	Chloromethane	15	U	ug/m3	4.4	15	15	U
WPP-SG5	Air	cis-1,2-Dichloroethene	15	U	ug/m3	4.7	15	15	U
WPP-SG5	Air	cis-1,3-Dichloropropene	15	U	ug/m3	4.1	15	15	U
WPP-SG5	Air	Cyclohexane	29	U	ug/m3	8.5	29	29	U
WPP-SG5	Air	Dibromochloromethane	15	U	ug/m3	4.7	15	15	U
WPP-SG5	Air	Dichlorodifluoromethane (CFC 12)	15	U	ug/m3	5	15	15	U
WPP-SG5	Air	Dichloromethane (Methylene Chloride)	15	U	ug/m3	5	15	15	U
WPP-SG5	Air	d-Limonene	15	U	ug/m3	4.1	15	15	U
WPP-SG5	Air	Ethanol	150	U	ug/m3	24	150	150	U
WPP-SG5	Air	Ethyl Acetate	29	U	ug/m3	10	29	29	U
WPP-SG5	Air	Ethylbenzene	15	U	ug/m3	4.7	15	15	U
WPP-SG5	Air	Hexachlorobutadiene	15	U	ug/m3	4.1	15	15	U
WPP-SG5	Air	Isopropylbenzene (Cumene)	15	U	ug/m3	4.4	15	15	U
WPP-SG5	Air	m,p-Xylenes	29	U	ug/m3	8.8	29	29	U
WPP-SG5	Air	Methyl Methacrylate	29	U	ug/m3	9.1	29	29	U
WPP-SG5	Air	Methyl tert-Butyl Ether	15	U	ug/m3	5	15	15	U
WPP-SG5	Air	Naphthalene	15	U	ug/m3	5.3	15	15	U
WPP-SG5	Air	n-Butyl Acetate	15	U	ug/m3	4.7	15	15	U
WPP-SG5	Air	n-Heptane	15	U	ug/m3	5	15	15	U
WPP-SG5	Air	n-Hexane	15	U	ug/m3	4.4	15	15	U
WPP-SG5	Air	n-Nonane	15	U	ug/m3	4.4	15	15	U
WPP-SG5	Air	n-Octane	15	U	ug/m3	5.3	15	15	U
WPP-SG5	Air	n-Propylbenzene	15	U	ug/m3	4.7	15	15	U
WPP-SG5	Air	o-Xylene	15	U	ug/m3	4.4	15	15	U
WPP-SG5	Air	Propene	15	U	ug/m3	4.1	15	15	U
WPP-SG5	Air	Styrene	15	U	ug/m3	4.4	15	15	U
WPP-SG5	Air	Tetrachloroethene	15	U	ug/m3	4.1	15	15	U
WPP-SG5	Air	Tetrahydrofuran (THF)	15	U	ug/m3	5.9	15	15	U
WPP-SG5	Air	Toluene	15		ug/m3	5	15	15	
WPP-SG5	Air	trans-1,2-Dichloroethene	15	U	ug/m3	5.6	15	15	U
WPP-SG5	Air	trans-1,3-Dichloropropene	15	U	ug/m3	4.7	15	15	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG5	Air	Trichloroethene (TCE)	2200		ug/m3	4.1	15	2200	
WPP-SG5	Air	Trichlorofluoromethane (CFC 11)	15 U		ug/m3	5	15	15 U	
WPP-SG5	Air	Vinyl Acetate	150 U		ug/m3	19	150	150 U	
WPP-SG5	Air	Vinyl Chloride	15 U		ug/m3	5	15	15 U	
WPP-SG6	Air	1,1,1-Trichloroethane (TCA)	59		ppbV	2.8	8.3	59	
WPP-SG6	Air	1,1,2,2-Tetrachloroethane	6.6 U		ppbV	2	6.6	6.6 U	
WPP-SG6	Air	1,1,2-Trichloroethane	8.3 U		ppbV	2.7	8.3	8.3 U	
WPP-SG6	Air	1,1,2-Trichlorotrifluoroethane	5.9 U		ppbV	2	5.9	5.9 U	
WPP-SG6	Air	1,1-Dichloroethane (1,1-DCA)	11 U		ppbV	3.6	11	11 U	
WPP-SG6	Air	1,1-Dichloroethene (1,1-DCE)	11 U		ppbV	3.9	11	11 U	
WPP-SG6	Air	1,2,4-Trichlorobenzene	6.1 U		ppbV	2	6.1	6.1 U	
WPP-SG6	Air	1,2,4-Trimethylbenzene	9.2 U		ppbV	2.8	9.2	9.2 U	
WPP-SG6	Air	1,2-Dibromo 3-Chloropropane	4.7 U		ppbV	0.93	4.7	4.7 U	
WPP-SG6	Air	1,2-Dibromoethane	5.9 U		ppbV	1.9	5.9	5.9 U	
WPP-SG6	Air	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	6.5 U		ppbV	2.5	6.5	6.5 U	
WPP-SG6	Air	1,2-Dichlorobenzene	7.5 U		ppbV	2.3	7.5	7.5 U	
WPP-SG6	Air	1,2-Dichloroethane	11 U		ppbV	3.6	11	11 U	
WPP-SG6	Air	1,2-Dichloropropane	9.8 U		ppbV	3.1	9.8	9.8 U	
WPP-SG6	Air	1,3,5-Trimethylbenzene	9.2 U		ppbV	3	9.2	9.2 U	
WPP-SG6	Air	1,3-Butadiene	21 U		ppbV	9	21	21 U	
WPP-SG6	Air	1,3-Dichlorobenzene	7.5 U		ppbV	2.3	7.5	7.5 U	
WPP-SG6	Air	1,4-Dichlorobenzene	7.5 U		ppbV	2.1	7.5	7.5 U	
WPP-SG6	Air	1,4-Dioxane	13 U		ppbV	4	13	13 U	
WPP-SG6	Air	2-Butanone (MEK)	150 U		ppbV	6.5	150	150 U	
WPP-SG6	Air	2-Hexanone	11 U		ppbV	3.5	11	11 U	
WPP-SG6	Air	2-Propanol (Isopropyl Alcohol)	180 U		ppbV	15	180	180 U	
WPP-SG6	Air	3-Chloro-1-propene (Allyl Chloride)	14 U		ppbV	4.6	14	14 U	
WPP-SG6	Air	4-Ethyltoluene	9.2 U		ppbV	3	9.2	9.2 U	
WPP-SG6	Air	4-Methyl-2-pentanone	11 U		ppbV	3.5	11	11 U	
WPP-SG6	Air	Acetone	190 U		ppbV	29	190	190 U	
WPP-SG6	Air	Acetonitrile	27 U		ppbV	9.7	27	27 U	
WPP-SG6	Air	Acrolein	79 U		ppbV	6.7	79	79 U	

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG6	Air	Acrylonitrile	21	U	ppbV	7.1	21	21	U
WPP-SG6	Air	alpha-Pinene	8.1	U	ppbV	2.3	8.1	8.1	U
WPP-SG6	Air	Benzene	14	U	ppbV	4.5	14	14	U
WPP-SG6	Air	Benzyl Chloride	8.8	U	ppbV	1.9	8.8	8.8	U
WPP-SG6	Air	Bromodichloromethane	6.8	U	ppbV	2	6.8	6.8	U
WPP-SG6	Air	Bromoform	4.4	U	ppbV	1.3	4.4	4.4	U
WPP-SG6	Air	Bromomethane	12	U	ppbV	4.4	12	12	U
WPP-SG6	Air	Carbon Disulfide	150	U	ppbV	4.4	150	150	U
WPP-SG6	Air	Carbon Tetrachloride	7.2	U	ppbV	2.2	7.2	7.2	U
WPP-SG6	Air	Chlorobenzene	9.8	U	ppbV	3.2	9.8	9.8	U
WPP-SG6	Air	Chloroethane	17	U	ppbV	5.8	17	17	U
WPP-SG6	Air	Chloroform	9.3	U	ppbV	3.2	9.3	9.3	U
WPP-SG6	Air	Chloromethane	22	U	ppbV	6.6	22	22	U
WPP-SG6	Air	cis-1,2-Dichloroethene	21		ppbV	3.7	11	21	
WPP-SG6	Air	cis-1,3-Dichloropropene	10	U	ppbV	2.8	10	10	U
WPP-SG6	Air	Cyclohexane	26	U	ppbV	7.6	26	26	U
WPP-SG6	Air	Dibromochloromethane	5.3	U	ppbV	1.7	5.3	5.3	U
WPP-SG6	Air	Dichlorodifluoromethane (CFC 12)	9.2	U	ppbV	3.1	9.2	9.2	U
WPP-SG6	Air	Dichloromethane (Methylene Chloride)	13	U	ppbV	4.4	13	13	U
WPP-SG6	Air	d-Limonene	8.1	U	ppbV	2.3	8.1	8.1	U
WPP-SG6	Air	Ethanol	240	U	ppbV	39	240	240	U
WPP-SG6	Air	Ethyl Acetate	25	U	ppbV	8.8	25	25	U
WPP-SG6	Air	Ethylbenzene	10	U	ppbV	3.3	10	10	U
WPP-SG6	Air	Hexachlorobutadiene	4.3	U	ppbV	1.2	4.3	4.3	U
WPP-SG6	Air	Isopropylbenzene (Cumene)	9.2	U	ppbV	2.8	9.2	9.2	U
WPP-SG6	Air	m,p-Xylenes	21	U	ppbV	6.3	21	21	U
WPP-SG6	Air	Methyl Methacrylate	22	U	ppbV	6.9	22	22	U
WPP-SG6	Air	Methyl tert-Butyl Ether	13	U	ppbV	4.3	13	13	U
WPP-SG6	Air	Naphthalene	8.7	U	ppbV	3.1	8.7	8.7	U
WPP-SG6	Air	n-Butyl Acetate	9.5	U	ppbV	3.1	9.5	9.5	U
WPP-SG6	Air	n-Heptane	11	U	ppbV	3.8	11	11	U
WPP-SG6	Air	n-Hexane	13		ppbV	3.9	13	13	

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG6	Air	n-Nonane	8.6	U	ppbV	2.6	8.6	8.6	U
WPP-SG6	Air	n-Octane	9.7	U	ppbV	3.5	9.7	9.7	U
WPP-SG6	Air	n-Propylbenzene	9.2	U	ppbV	3	9.2	9.2	U
WPP-SG6	Air	o-Xylene	10	U	ppbV	3.1	10	10	U
WPP-SG6	Air	Propene	26	U	ppbV	7.4	26	26	U
WPP-SG6	Air	Styrene	11	U	ppbV	3.2	11	11	U
WPP-SG6	Air	Tetrachloroethene	6.7	U	ppbV	1.9	6.7	6.7	U
WPP-SG6	Air	Tetrahydrofuran (THF)	15	U	ppbV	6.2	15	15	U
WPP-SG6	Air	Toluene	12	U	ppbV	4.1	12	12	U
WPP-SG6	Air	trans-1,2-Dichloroethene	65		ppbV	4.3	11	65	
WPP-SG6	Air	trans-1,3-Dichloropropene	10	U	ppbV	3.2	10	10	U
WPP-SG6	Air	Trichloroethene (TCE)	1700		ppbV	2.4	8.4	1700	
WPP-SG6	Air	Trichlorofluoromethane (CFC 11)	8.1	U	ppbV	2.7	8.1	8.1	U
WPP-SG6	Air	Vinyl Acetate	130	U	ppbV	17	130	130	U
WPP-SG6	Air	Vinyl Chloride	18	U	ppbV	6	18	18	U
WPP-SG6	Air	1,1,1-Trichloroethane (TCA)	320		ug/m3	15	45	320	
WPP-SG6	Air	1,1,2,2-Tetrachloroethane	45	U	ug/m3	14	45	45	U
WPP-SG6	Air	1,1,2-Trichloroethane	45	U	ug/m3	15	45	45	U
WPP-SG6	Air	1,1,2-Trichlorotrifluoroethane	45	U	ug/m3	15	45	45	U
WPP-SG6	Air	1,1-Dichloroethane (1,1-DCA)	45	U	ug/m3	15	45	45	U
WPP-SG6	Air	1,1-Dichloroethene (1,1-DCE)	45	U	ug/m3	15	45	45	U
WPP-SG6	Air	1,2,4-Trichlorobenzene	45	U	ug/m3	15	45	45	U
WPP-SG6	Air	1,2,4-Trimethylbenzene	45	U	ug/m3	14	45	45	U
WPP-SG6	Air	1,2-Dibromo 3-Chloropropane	45	U	ug/m3	9	45	45	U
WPP-SG6	Air	1,2-Dibromoethane	45	U	ug/m3	15	45	45	U
WPP-SG6	Air	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	45	U	ug/m3	17	45	45	U
WPP-SG6	Air	1,2-Dichlorobenzene	45	U	ug/m3	14	45	45	U
WPP-SG6	Air	1,2-Dichloroethane	45	U	ug/m3	15	45	45	U
WPP-SG6	Air	1,2-Dichloropropane	45	U	ug/m3	15	45	45	U
WPP-SG6	Air	1,3,5-Trimethylbenzene	45	U	ug/m3	15	45	45	U
WPP-SG6	Air	1,3-Butadiene	45	U	ug/m3	20	45	45	U
WPP-SG6	Air	1,3-Dichlorobenzene	45	U	ug/m3	14	45	45	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG6	Air	1,4-Dichlorobenzene	45	U	ug/m3	13	45	45	U
WPP-SG6	Air	1,4-Dioxane	45	U	ug/m3	15	45	45	U
WPP-SG6	Air	2-Butanone (MEK)	450	U	ug/m3	19	450	450	U
WPP-SG6	Air	2-Hexanone	45	U	ug/m3	15	45	45	U
WPP-SG6	Air	2-Propanol (Isopropyl Alcohol)	450	U	ug/m3	38	450	450	U
WPP-SG6	Air	3-Chloro-1-propene (Allyl Chloride)	45	U	ug/m3	15	45	45	U
WPP-SG6	Air	4-Ethyltoluene	45	U	ug/m3	15	45	45	U
WPP-SG6	Air	4-Methyl-2-pentanone	45	U	ug/m3	15	45	45	U
WPP-SG6	Air	Acetone	450	U	ug/m3	70	450	450	U
WPP-SG6	Air	Acetonitrile	45	U	ug/m3	16	45	45	U
WPP-SG6	Air	Acrolein	180	U	ug/m3	15	180	180	U
WPP-SG6	Air	Acrylonitrile	45	U	ug/m3	15	45	45	U
WPP-SG6	Air	alpha-Pinene	45	U	ug/m3	13	45	45	U
WPP-SG6	Air	Benzene	45	U	ug/m3	15	45	45	U
WPP-SG6	Air	Benzyl Chloride	45	U	ug/m3	10	45	45	U
WPP-SG6	Air	Bromodichloromethane	45	U	ug/m3	14	45	45	U
WPP-SG6	Air	Bromoform	45	U	ug/m3	14	45	45	U
WPP-SG6	Air	Bromomethane	45	U	ug/m3	17	45	45	U
WPP-SG6	Air	Carbon Disulfide	450	U	ug/m3	14	450	450	U
WPP-SG6	Air	Carbon Tetrachloride	45	U	ug/m3	14	45	45	U
WPP-SG6	Air	Chlorobenzene	45	U	ug/m3	15	45	45	U
WPP-SG6	Air	Chloroethane	45	U	ug/m3	15	45	45	U
WPP-SG6	Air	Chloroform	45	U	ug/m3	15	45	45	U
WPP-SG6	Air	Chloromethane	45	U	ug/m3	14	45	45	U
WPP-SG6	Air	cis-1,2-Dichloroethene	85		ug/m3	15	45	85	
WPP-SG6	Air	cis-1,3-Dichloropropene	45	U	ug/m3	13	45	45	U
WPP-SG6	Air	Cyclohexane	91	U	ug/m3	26	91	91	U
WPP-SG6	Air	Dibromochloromethane	45	U	ug/m3	15	45	45	U
WPP-SG6	Air	Dichlorodifluoromethane (CFC 12)	45	U	ug/m3	15	45	45	U
WPP-SG6	Air	Dichloromethane (Methylene Chloride)	45	U	ug/m3	15	45	45	U
WPP-SG6	Air	d-Limonene	45	U	ug/m3	13	45	45	U
WPP-SG6	Air	Ethanol	450	U	ug/m3	73	450	450	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG6	Air	Ethyl Acetate	91	U	ug/m3	32	91	91	U
WPP-SG6	Air	Ethylbenzene	45	U	ug/m3	15	45	45	U
WPP-SG6	Air	Hexachlorobutadiene	45	U	ug/m3	13	45	45	U
WPP-SG6	Air	Isopropylbenzene (Cumene)	45	U	ug/m3	14	45	45	U
WPP-SG6	Air	m,p-Xylenes	91	U	ug/m3	27	91	91	U
WPP-SG6	Air	Methyl Methacrylate	91	U	ug/m3	28	91	91	U
WPP-SG6	Air	Methyl tert-Butyl Ether	45	U	ug/m3	15	45	45	U
WPP-SG6	Air	Naphthalene	45	U	ug/m3	16	45	45	U
WPP-SG6	Air	n-Butyl Acetate	45	U	ug/m3	15	45	45	U
WPP-SG6	Air	n-Heptane	45	U	ug/m3	15	45	45	U
WPP-SG6	Air	n-Hexane	45		ug/m3	14	45	45	
WPP-SG6	Air	n-Nonane	45	U	ug/m3	14	45	45	U
WPP-SG6	Air	n-Octane	45	U	ug/m3	16	45	45	U
WPP-SG6	Air	n-Propylbenzene	45	U	ug/m3	15	45	45	U
WPP-SG6	Air	o-Xylene	45	U	ug/m3	14	45	45	U
WPP-SG6	Air	Propene	45	U	ug/m3	13	45	45	U
WPP-SG6	Air	Styrene	45	U	ug/m3	14	45	45	U
WPP-SG6	Air	Tetrachloroethene	45	U	ug/m3	13	45	45	U
WPP-SG6	Air	Tetrahydrofuran (THF)	45	U	ug/m3	18	45	45	U
WPP-SG6	Air	Toluene	45	U	ug/m3	15	45	45	U
WPP-SG6	Air	trans-1,2-Dichloroethene	260		ug/m3	17	45	260	
WPP-SG6	Air	trans-1,3-Dichloropropene	45	U	ug/m3	15	45	45	U
WPP-SG6	Air	Trichloroethene (TCE)	9300		ug/m3	13	45	9300	
WPP-SG6	Air	Trichlorofluoromethane (CFC 11)	45	U	ug/m3	15	45	45	U
WPP-SG6	Air	Vinyl Acetate	450	U	ug/m3	59	450	450	U
WPP-SG6	Air	Vinyl Chloride	45	U	ug/m3	15	45	45	U
WPP-SG7	Air	1,1,1-Trichloroethane (TCA)	4.8	U	ppbV	1.6	4.8	4.8	U
WPP-SG7	Air	1,1,2,2-Tetrachloroethane	3.8	U	ppbV	1.1	3.8	3.8	U
WPP-SG7	Air	1,1,2-Trichloroethane	4.8	U	ppbV	1.5	4.8	4.8	U
WPP-SG7	Air	1,1,2-Trichlorotrifluoroethane	3.4	U	ppbV	1.2	3.4	3.4	U
WPP-SG7	Air	1,1-Dichloroethane (1,1-DCA)	6.4	U	ppbV	2.1	6.4	6.4	U
WPP-SG7	Air	1,1-Dichloroethene (1,1-DCE)	6.6	U	ppbV	2.2	6.6	6.6	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG7	Air	1,2,4-Trichlorobenzene	3.5	U	ppbV	1.1	3.5	3.5	U
WPP-SG7	Air	1,2,4-Trimethylbenzene	5.3	U	ppbV	1.6	5.3	5.3	U
WPP-SG7	Air	1,2-Dibromo 3-Chloropropane	2.7	U	ppbV	0.53	2.7	2.7	U
WPP-SG7	Air	1,2-Dibromoethane	3.4	U	ppbV	1.1	3.4	3.4	U
WPP-SG7	Air	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	3.7	U	ppbV	1.4	3.7	3.7	U
WPP-SG7	Air	1,2-Dichlorobenzene	4.3	U	ppbV	1.3	4.3	4.3	U
WPP-SG7	Air	1,2-Dichloroethane	6.4	U	ppbV	2.1	6.4	6.4	U
WPP-SG7	Air	1,2-Dichloropropane	5.6	U	ppbV	1.8	5.6	5.6	U
WPP-SG7	Air	1,3,5-Trimethylbenzene	5.3	U	ppbV	1.7	5.3	5.3	U
WPP-SG7	Air	1,3-Butadiene	12	U	ppbV	5.2	12	12	U
WPP-SG7	Air	1,3-Dichlorobenzene	4.3	U	ppbV	1.3	4.3	4.3	U
WPP-SG7	Air	1,4-Dichlorobenzene	4.3	U	ppbV	1.2	4.3	4.3	U
WPP-SG7	Air	1,4-Dioxane	7.2	U	ppbV	2.3	7.2	7.2	U
WPP-SG7	Air	2-Butanone (MEK)	120		ppbV	3.7	88	120	
WPP-SG7	Air	2-Hexanone	8.3		ppbV	2	6.3	8.3	
WPP-SG7	Air	2-Propanol (Isopropyl Alcohol)	110	U	ppbV	8.9	110	110	U
WPP-SG7	Air	3-Chloro-1-propene (Allyl Chloride)	8.3	U	ppbV	2.7	8.3	8.3	U
WPP-SG7	Air	4-Ethyltoluene	5.3	U	ppbV	1.7	5.3	5.3	U
WPP-SG7	Air	4-Methyl-2-pentanone	6.3	U	ppbV	2	6.3	6.3	U
WPP-SG7	Air	Acetone	110	U	ppbV	17	110	110	U
WPP-SG7	Air	Acetonitrile	15	U	ppbV	5.6	15	15	U
WPP-SG7	Air	Acrolein	45	U	ppbV	3.9	45	45	U
WPP-SG7	Air	Acrylonitrile	12	U	ppbV	4.1	12	12	U
WPP-SG7	Air	alpha-Pinene	4.7	U	ppbV	1.3	4.7	4.7	U
WPP-SG7	Air	Benzene	8.1	U	ppbV	2.6	8.1	8.1	U
WPP-SG7	Air	Benzyl Chloride	5	U	ppbV	1.1	5	5	U
WPP-SG7	Air	Bromodichloromethane	3.9	U	ppbV	1.2	3.9	3.9	U
WPP-SG7	Air	Bromoform	2.5	U	ppbV	0.75	2.5	2.5	U
WPP-SG7	Air	Bromomethane	6.7	U	ppbV	2.5	6.7	6.7	U
WPP-SG7	Air	Carbon Disulfide	84	U	ppbV	2.5	84	84	U
WPP-SG7	Air	Carbon Tetrachloride	4.1	U	ppbV	1.2	4.1	4.1	U
WPP-SG7	Air	Chlorobenzene	5.6	U	ppbV	1.8	5.6	5.6	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG7	Air	Chloroethane	9.9	U	ppbV	3.4	9.9	9.9	U
WPP-SG7	Air	Chloroform	5.3	U	ppbV	1.8	5.3	5.3	U
WPP-SG7	Air	Chloromethane	13	U	ppbV	3.8	13	13	U
WPP-SG7	Air	cis-1,2-Dichloroethene	8.4		ppbV	2.1	6.6	8.4	
WPP-SG7	Air	cis-1,3-Dichloropropene	5.7	U	ppbV	1.6	5.7	5.7	U
WPP-SG7	Air	Cyclohexane	15	U	ppbV	4.4	15	15	U
WPP-SG7	Air	Dibromochloromethane	3.1	U	ppbV	0.98	3.1	3.1	U
WPP-SG7	Air	Dichlorodifluoromethane (CFC 12)	5.3	U	ppbV	1.8	5.3	5.3	U
WPP-SG7	Air	Dichloromethane (Methylene Chloride)	7.5	U	ppbV	2.5	7.5	7.5	U
WPP-SG7	Air	d-Limonene	4.7	U	ppbV	1.3	4.7	4.7	U
WPP-SG7	Air	Ethanol	140	U	ppbV	22	140	140	U
WPP-SG7	Air	Ethyl Acetate	14	U	ppbV	5.1	14	14	U
WPP-SG7	Air	Ethylbenzene	6	U	ppbV	1.9	6	6	U
WPP-SG7	Air	Hexachlorobutadiene	2.4	U	ppbV	0.68	2.4	2.4	U
WPP-SG7	Air	Isopropylbenzene (Cumene)	5.3	U	ppbV	1.6	5.3	5.3	U
WPP-SG7	Air	m,p-Xylenes	12	U	ppbV	3.6	12	12	U
WPP-SG7	Air	Methyl Methacrylate	13	U	ppbV	3.9	13	13	U
WPP-SG7	Air	Methyl tert-Butyl Ether	7.2	U	ppbV	2.5	7.2	7.2	U
WPP-SG7	Air	Naphthalene	5	U	ppbV	1.8	5	5	U
WPP-SG7	Air	n-Butyl Acetate	5.5	U	ppbV	1.8	5.5	5.5	U
WPP-SG7	Air	n-Heptane	6.3	U	ppbV	2.2	6.3	6.3	U
WPP-SG7	Air	n-Hexane	7.4	U	ppbV	2.2	7.4	7.4	U
WPP-SG7	Air	n-Nonane	5	U	ppbV	1.5	5	5	U
WPP-SG7	Air	n-Octane	5.6	U	ppbV	2	5.6	5.6	U
WPP-SG7	Air	n-Propylbenzene	5.3	U	ppbV	1.7	5.3	5.3	U
WPP-SG7	Air	o-Xylene	6	U	ppbV	1.8	6	6	U
WPP-SG7	Air	Propene	15	U	ppbV	4.2	15	15	U
WPP-SG7	Air	Styrene	6.1	U	ppbV	1.8	6.1	6.1	U
WPP-SG7	Air	Tetrachloroethene	3.8	U	ppbV	1.1	3.8	3.8	U
WPP-SG7	Air	Tetrahydrofuran (THF)	8.8	U	ppbV	3.5	8.8	8.8	U
WPP-SG7	Air	Toluene	6.9	U	ppbV	2.3	6.9	6.9	U
WPP-SG7	Air	trans-1,2-Dichloroethene	210		ppbV	2.5	6.6	210	

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG7	Air	trans-1,3-Dichloropropene	5.7	U	ppbV	1.8	5.7	5.7	U
WPP-SG7	Air	Trichloroethene (TCE)	750		ppbV	1.4	4.8	750	
WPP-SG7	Air	Trichlorofluoromethane (CFC 11)	4.6	U	ppbV	1.6	4.6	4.6	U
WPP-SG7	Air	Vinyl Acetate	74	U	ppbV	9.6	74	74	U
WPP-SG7	Air	Vinyl Chloride	10	U	ppbV	3.5	10	10	U
WPP-SG7	Air	1,1,1-Trichloroethane (TCA)	26	U	ug/m3	8.8	26	26	U
WPP-SG7	Air	1,1,2,2-Tetrachloroethane	26	U	ug/m3	7.8	26	26	U
WPP-SG7	Air	1,1,2-Trichloroethane	26	U	ug/m3	8.3	26	26	U
WPP-SG7	Air	1,1,2-Trichlorotrifluoroethane	26	U	ug/m3	8.8	26	26	U
WPP-SG7	Air	1,1-Dichloroethane (1,1-DCA)	26	U	ug/m3	8.3	26	26	U
WPP-SG7	Air	1,1-Dichloroethene (1,1-DCE)	26	U	ug/m3	8.8	26	26	U
WPP-SG7	Air	1,2,4-Trichlorobenzene	26	U	ug/m3	8.3	26	26	U
WPP-SG7	Air	1,2,4-Trimethylbenzene	26	U	ug/m3	7.8	26	26	U
WPP-SG7	Air	1,2-Dibromo 3-Chloropropane	26	U	ug/m3	5.1	26	26	U
WPP-SG7	Air	1,2-Dibromoethane	26	U	ug/m3	8.3	26	26	U
WPP-SG7	Air	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	26	U	ug/m3	9.9	26	26	U
WPP-SG7	Air	1,2-Dichlorobenzene	26	U	ug/m3	7.8	26	26	U
WPP-SG7	Air	1,2-Dichloroethane	26	U	ug/m3	8.3	26	26	U
WPP-SG7	Air	1,2-Dichloropropane	26	U	ug/m3	8.3	26	26	U
WPP-SG7	Air	1,3,5-Trimethylbenzene	26	U	ug/m3	8.3	26	26	U
WPP-SG7	Air	1,3-Butadiene	26	U	ug/m3	11	26	26	U
WPP-SG7	Air	1,3-Dichlorobenzene	26	U	ug/m3	7.8	26	26	U
WPP-SG7	Air	1,4-Dichlorobenzene	26	U	ug/m3	7.3	26	26	U
WPP-SG7	Air	1,4-Dioxane	26	U	ug/m3	8.3	26	26	U
WPP-SG7	Air	2-Butanone (MEK)	350		ug/m3	11	260	350	
WPP-SG7	Air	2-Hexanone	34		ug/m3	8.3	26	34	
WPP-SG7	Air	2-Propanol (Isopropyl Alcohol)	260	U	ug/m3	22	260	260	U
WPP-SG7	Air	3-Chloro-1-propene (Allyl Chloride)	26	U	ug/m3	8.3	26	26	U
WPP-SG7	Air	4-Ethyltoluene	26	U	ug/m3	8.3	26	26	U
WPP-SG7	Air	4-Methyl-2-pentanone	26	U	ug/m3	8.3	26	26	U
WPP-SG7	Air	Acetone	260	U	ug/m3	40	260	260	U
WPP-SG7	Air	Acetonitrile	26	U	ug/m3	9.4	26	26	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG7	Air	Acrolein	100	U	ug/m3	8.8	100	100	U
WPP-SG7	Air	Acrylonitrile	26	U	ug/m3	8.8	26	26	U
WPP-SG7	Air	alpha-Pinene	26	U	ug/m3	7.3	26	26	U
WPP-SG7	Air	Benzene	26	U	ug/m3	8.3	26	26	U
WPP-SG7	Air	Benzyl Chloride	26	U	ug/m3	5.7	26	26	U
WPP-SG7	Air	Bromodichloromethane	26	U	ug/m3	7.8	26	26	U
WPP-SG7	Air	Bromoform	26	U	ug/m3	7.8	26	26	U
WPP-SG7	Air	Bromomethane	26	U	ug/m3	9.9	26	26	U
WPP-SG7	Air	Carbon Disulfide	260	U	ug/m3	7.8	260	260	U
WPP-SG7	Air	Carbon Tetrachloride	26	U	ug/m3	7.8	26	26	U
WPP-SG7	Air	Chlorobenzene	26	U	ug/m3	8.3	26	26	U
WPP-SG7	Air	Chloroethane	26	U	ug/m3	8.8	26	26	U
WPP-SG7	Air	Chloroform	26	U	ug/m3	8.8	26	26	U
WPP-SG7	Air	Chloromethane	26	U	ug/m3	7.8	26	26	U
WPP-SG7	Air	cis-1,2-Dichloroethene	33		ug/m3	8.3	26	33	
WPP-SG7	Air	cis-1,3-Dichloropropene	26	U	ug/m3	7.3	26	26	U
WPP-SG7	Air	Cyclohexane	52	U	ug/m3	15	52	52	U
WPP-SG7	Air	Dibromochloromethane	26	U	ug/m3	8.3	26	26	U
WPP-SG7	Air	Dichlorodifluoromethane (CFC 12)	26	U	ug/m3	8.8	26	26	U
WPP-SG7	Air	Dichloromethane (Methylene Chloride)	26	U	ug/m3	8.8	26	26	U
WPP-SG7	Air	d-Limonene	26	U	ug/m3	7.3	26	26	U
WPP-SG7	Air	Ethanol	260	U	ug/m3	42	260	260	U
WPP-SG7	Air	Ethyl Acetate	52	U	ug/m3	18	52	52	U
WPP-SG7	Air	Ethylbenzene	26	U	ug/m3	8.3	26	26	U
WPP-SG7	Air	Hexachlorobutadiene	26	U	ug/m3	7.3	26	26	U
WPP-SG7	Air	Isopropylbenzene (Cumene)	26	U	ug/m3	7.8	26	26	U
WPP-SG7	Air	m,p-Xylenes	52	U	ug/m3	16	52	52	U
WPP-SG7	Air	Methyl Methacrylate	52	U	ug/m3	16	52	52	U
WPP-SG7	Air	Methyl tert-Butyl Ether	26	U	ug/m3	8.8	26	26	U
WPP-SG7	Air	Naphthalene	26	U	ug/m3	9.4	26	26	U
WPP-SG7	Air	n-Butyl Acetate	26	U	ug/m3	8.3	26	26	U
WPP-SG7	Air	n-Heptane	26	U	ug/m3	8.8	26	26	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701233

Samp_No	Matrix	Analyte	Result	Lab_Qual	Units	MDL	RL	Final Result	Final Qual
WPP-SG7	Air	n-Hexane	26	U	ug/m3	7.8	26	26	U
WPP-SG7	Air	n-Nonane	26	U	ug/m3	7.8	26	26	U
WPP-SG7	Air	n-Octane	26	U	ug/m3	9.4	26	26	U
WPP-SG7	Air	n-Propylbenzene	26	U	ug/m3	8.3	26	26	U
WPP-SG7	Air	o-Xylene	26	U	ug/m3	7.8	26	26	U
WPP-SG7	Air	Propene	26	U	ug/m3	7.3	26	26	U
WPP-SG7	Air	Styrene	26	U	ug/m3	7.8	26	26	U
WPP-SG7	Air	Tetrachloroethene	26	U	ug/m3	7.3	26	26	U
WPP-SG7	Air	Tetrahydrofuran (THF)	26	U	ug/m3	10	26	26	U
WPP-SG7	Air	Toluene	26	U	ug/m3	8.8	26	26	U
WPP-SG7	Air	trans-1,2-Dichloroethene	830		ug/m3	9.9	26	830	
WPP-SG7	Air	trans-1,3-Dichloropropene	26	U	ug/m3	8.3	26	26	U
WPP-SG7	Air	Trichloroethene (TCE)	4000		ug/m3	7.3	26	4000	
WPP-SG7	Air	Trichlorofluoromethane (CFC 11)	26	U	ug/m3	8.8	26	26	U
WPP-SG7	Air	Vinyl Acetate	260	U	ug/m3	34	260	260	U
WPP-SG7	Air	Vinyl Chloride	26	U	ug/m3	8.8	26	26	U



May 31, 2017

Shelly Lam, LPG  
Federal On-Scene Coordinator  
U.S. Environmental Protection Agency  
2525 N. Shadeland Avenue, Suite 100  
Indianapolis, IN 46219

**Subject: Data Validation Reports  
Williamson Polishing and Plating  
EPA Contract No. EP-S5-13-01  
Technical Direction Document No. S05-0001-1610-011  
Document Tracking No. 1743**

Dear Ms. Lam:

Tetra Tech, Inc. (Tetra Tech) is submitting these Data Validation Reports for fourteen air samples (including one field duplicate) and fifteen water samples (including two field duplicates and one trip blank) collected at the Williamson Polishing and Plating site. The samples were collected from April 26 to April 28, 2017. The air samples were analyzed for volatile organic compounds (VOCs) by ALS Environmental Laboratories. The water samples were analyzed for VOCs by CT Laboratories, LLC. The final laboratory data packages were received on May 11, 2017 (ALS Environmental Laboratories) and May 17, 2017 (CT Laboratories, LLC.).

Analytical data were evaluated in general accordance with the U.S. Environmental Protection Agency's *National Functional Guidelines (NFG) for Organic Superfund Methods Data Review* (January 2017).

None of the data required rejection. All results may be used as qualified.

If you have any questions regarding these data validation reports, please call me at (678) 773-5429.

Sincerely,

A handwritten signature in cursive script that reads 'Shanna Davis'.

Shanna Davis  
START Environmental Scientist

Enclosure

cc: Kevin Scott, Tetra Tech Program Manager  
Lucas Stamps, QEPI Project Manager  
TDD File

## **ATTACHMENT 1**

**DATA VALIDATION REPORTS FOR  
SAMPLES COLLECTED FROM APRIL 26 TO APRIL 28, 2017**

**DATA VALIDATION CHECKLIST – STAGE 2A**  
**EPA REGION 5 START CONTRACT**

<b>Site Name</b>	Williamson Polishing & Plating RS	<b>TDD No.</b>	0001-1610-011
<b>Document Tracking No.</b>	1743A	<b>Technical Reviewer (signature and date)</b>	<i>Jessica A. Vickers</i> May 30, 2017
<b>Data Reviewer (signature and date)</b>	<i>Shanna Davis</i> May 23, 2017	<b>Laboratory</b>	ALS Environmental, Simi Valley, CA
<b>Laboratory Report No.</b>	P1701990		
<b>Analyses</b>	Volatile organic compounds (VOCs) by EPA TO-15		
<b>Samples and Matrix</b>	Fourteen air samples (including one field duplicate)		
<b>Field Duplicate Pairs</b>	WPP-SG09-170426 and WPP-SG09-170426-D		
<b>Field Blanks</b>	None		

**INTRODUCTION**

This checklist summarizes the Stage 2A validation performed on the subject laboratory report, in accordance with the U.S. Environmental Protection Agency (EPA) *Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use* (January 2009). Analytical data were evaluated in general accordance with the EPA *National Functional Guidelines (NFG) for Organic Superfund Methods Data Review* (January 2017).

**OVERALL EVALUATION**

All results are acceptable and usable as qualified in the attached results summary.

**Data completeness:**

Within Criteria	Exceedance/Notes
Y	

**Sample preservation, receipt, and holding times:**

Within Criteria	Exceedance/Notes
Y	



**DATA VALIDATION CHECKLIST – STAGE 2A  
EPA REGION 5 START CONTRACT**

**Method blanks:**

Within Criteria	Exceedance/Notes
Y	

**Field blanks:**

Within Criteria	Exceedance/Notes
NA	

**System monitoring compounds (surrogates and labeled compounds):**

Within Criteria	Exceedance/Notes
Y	

**MS/MSD:**

Within Criteria	Exceedance/Notes
NA	

**Laboratory duplicates:**

Within Criteria	Exceedance/Notes
NA	

**Field duplicates:**

Within Criteria	Exceedance/Notes
Y	



## DATA VALIDATION CHECKLIST – STAGE 2A EPA REGION 5 START CONTRACT

### LCSs/LCSDs:

Within Criteria	Exceedance/Notes
N	The trichlorofluoromethane (CFC 11) and carbon tetrachloride recoveries for P170503-LCS and the trichlorofluoromethane (CFC 11) recovery for P170504-LCS were above the acceptance limits. The trichlorofluoromethane (CFC 11) result in sample WPP-SG08-170426 was qualified as estimated (flagged “J+”) and may be biased high. No further qualifications were required because the associated results were non-detect.

### Sample dilutions:

Within Criteria	Exceedance/Notes
Y	Samples were analyzed at canister dilution factors of 1.55 to 1.76.

### Re-extraction and reanalysis:

Within Criteria	Exceedance/Notes
NA	

### MDLs/RLs:

Within Criteria	Exceedance/Notes
Y	Detected results below the RL were not reported by the laboratory.

### Tentatively identified compounds:

Within Criteria	Exceedance/Notes
NA	

## DATA VALIDATION CHECKLIST – STAGE 2A EPA REGION 5 START CONTRACT

Other [specify]:

Within Criteria	Exceedance/Notes
NA	

### Overall Qualifications:

See results summary pages attached for changes to the laboratory qualifiers based upon this validation. The following is a list of qualifiers and definitions that may be used for the validation of this data package:

J	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.
J-	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.
NJ	The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated value is the approximate concentration of the analyte in the sample.
R	The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.
U	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).
UJ	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.



Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701990

Sample Number	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-AA03-170426	1,1,1-Trichloroethane (TCA)	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-AA03-170426	1,1,2,2-Tetrachloroethane	2.1	U	ug/m3	0.63	2.1	2.1	U
WPP-AA03-170426	1,1,2-Trichloroethane	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-AA03-170426	1,1,2-Trichlorotrifluoroethane	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-AA03-170426	1,1-Dichloroethane (1,1-DCA)	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-AA03-170426	1,1-Dichloroethene (1,1-DCE)	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-AA03-170426	1,2,4-Trichlorobenzene	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-AA03-170426	1,2,4-Trimethylbenzene	2.1	U	ug/m3	0.63	2.1	2.1	U
WPP-AA03-170426	1,2-Dibromo 3-Chloropropane	2.1	U	ug/m3	0.41	2.1	2.1	U
WPP-AA03-170426	1,2-Dibromoethane	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-AA03-170426	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.1	U	ug/m3	0.79	2.1	2.1	U
WPP-AA03-170426	1,2-Dichlorobenzene	2.1	U	ug/m3	0.63	2.1	2.1	U
WPP-AA03-170426	1,2-Dichloroethane	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-AA03-170426	1,2-Dichloropropane	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-AA03-170426	1,3,5-Trimethylbenzene	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-AA03-170426	1,3-Butadiene	2.1	U	ug/m3	0.92	2.1	2.1	U
WPP-AA03-170426	1,3-Dichlorobenzene	2.1	U	ug/m3	0.63	2.1	2.1	U
WPP-AA03-170426	1,4-Dichlorobenzene	2.1	U	ug/m3	0.58	2.1	2.1	U
WPP-AA03-170426	1,4-Dioxane	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-AA03-170426	2-Butanone (MEK)	21	U	ug/m3	0.88	21	21	U
WPP-AA03-170426	2-Hexanone	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-AA03-170426	2-Propanol (Isopropyl Alcohol)	21	U	ug/m3	1.8	21	21	U
WPP-AA03-170426	3-Chloro-1-propene (Allyl Chloride)	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-AA03-170426	4-Ethyltoluene	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-AA03-170426	4-Methyl-2-pentanone	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-AA03-170426	Acetone	21	U	ug/m3	3.2	21	21	U
WPP-AA03-170426	Acetonitrile	2.1	U	ug/m3	0.75	2.1	2.1	U
WPP-AA03-170426	Acrolein	8.4	U	ug/m3	0.71	8.4	8.4	U
WPP-AA03-170426	Acrylonitrile	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-AA03-170426	alpha-Pinene	2.1	U	ug/m3	0.58	2.1	2.1	U
WPP-AA03-170426	Benzene	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-AA03-170426	Benzyl Chloride	2.1	U	ug/m3	0.46	2.1	2.1	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701990

Sample Number	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-AA03-170426	Bromodichloromethane	2.1	U	ug/m3	0.63	2.1	2.1	U
WPP-AA03-170426	Bromoform	2.1	U	ug/m3	0.63	2.1	2.1	U
WPP-AA03-170426	Bromomethane	2.1	U	ug/m3	0.79	2.1	2.1	U
WPP-AA03-170426	Carbon Disulfide	21	U	ug/m3	0.63	21	21	U
WPP-AA03-170426	Carbon Tetrachloride	2.1	U	ug/m3	0.63	2.1	2.1	U
WPP-AA03-170426	Chlorobenzene	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-AA03-170426	Chloroethane	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-AA03-170426	Chloroform	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-AA03-170426	Chloromethane	2.1	U	ug/m3	0.63	2.1	2.1	U
WPP-AA03-170426	cis-1,2-Dichloroethene	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-AA03-170426	cis-1,3-Dichloropropene	2.1	U	ug/m3	0.58	2.1	2.1	U
WPP-AA03-170426	Cyclohexane	4.2	U	ug/m3	1.2	4.2	4.2	U
WPP-AA03-170426	Dibromochloromethane	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-AA03-170426	Dichlorodifluoromethane (CFC 12)	2.6		ug/m3	0.71	2.1	2.6	
WPP-AA03-170426	Dichloromethane (Methylene Chloride)	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-AA03-170426	d-Limonene	2.1	U	ug/m3	0.58	2.1	2.1	U
WPP-AA03-170426	Ethanol	21	U	ug/m3	3.3	21	21	U
WPP-AA03-170426	Ethyl Acetate	4.2	U	ug/m3	1.5	4.2	4.2	U
WPP-AA03-170426	Ethylbenzene	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-AA03-170426	Hexachlorobutadiene	2.1	U	ug/m3	0.58	2.1	2.1	U
WPP-AA03-170426	Isopropylbenzene (Cumene)	2.1	U	ug/m3	0.63	2.1	2.1	U
WPP-AA03-170426	m,p-Xylenes	4.2	U	ug/m3	1.3	4.2	4.2	U
WPP-AA03-170426	Methyl Methacrylate	4.2	U	ug/m3	1.3	4.2	4.2	U
WPP-AA03-170426	Methyl tert-Butyl Ether	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-AA03-170426	Naphthalene	2.1	U	ug/m3	0.75	2.1	2.1	U
WPP-AA03-170426	n-Butyl Acetate	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-AA03-170426	n-Heptane	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-AA03-170426	n-Hexane	2.1	U	ug/m3	0.63	2.1	2.1	U
WPP-AA03-170426	n-Nonane	2.1	U	ug/m3	0.63	2.1	2.1	U
WPP-AA03-170426	n-Octane	2.1	U	ug/m3	0.75	2.1	2.1	U
WPP-AA03-170426	n-Propylbenzene	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-AA03-170426	o-Xylene	2.1	U	ug/m3	0.63	2.1	2.1	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701990

Sample Number	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-AA03-170426	Propene	2.1	U	ug/m3	0.58	2.1	2.1	U
WPP-AA03-170426	Styrene	2.1	U	ug/m3	0.63	2.1	2.1	U
WPP-AA03-170426	Tetrachloroethene	2.1	U	ug/m3	0.58	2.1	2.1	U
WPP-AA03-170426	Tetrahydrofuran (THF)	2.1	U	ug/m3	0.84	2.1	2.1	U
WPP-AA03-170426	Toluene	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-AA03-170426	trans-1,2-Dichloroethene	2.1	U	ug/m3	0.79	2.1	2.1	U
WPP-AA03-170426	trans-1,3-Dichloropropene	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-AA03-170426	Trichloroethene (TCE)	2.1	U	ug/m3	0.58	2.1	2.1	U
WPP-AA03-170426	Trichlorofluoromethane (CFC 11)	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-AA03-170426	Vinyl Acetate	21	U	ug/m3	2.7	21	21	U
WPP-AA03-170426	Vinyl Chloride	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-SG02-170426	1,1,1-Trichloroethane (TCA)	2.1	U	ug/m3	0.73	2.1	2.1	U
WPP-SG02-170426	1,1,2,2-Tetrachloroethane	2.1	U	ug/m3	0.64	2.1	2.1	U
WPP-SG02-170426	1,1,2-Trichloroethane	2.1	U	ug/m3	0.68	2.1	2.1	U
WPP-SG02-170426	1,1,2-Trichlorotrifluoroethane	2.1	U	ug/m3	0.73	2.1	2.1	U
WPP-SG02-170426	1,1-Dichloroethane (1,1-DCA)	2.1	U	ug/m3	0.68	2.1	2.1	U
WPP-SG02-170426	1,1-Dichloroethene (1,1-DCE)	2.1	U	ug/m3	0.73	2.1	2.1	U
WPP-SG02-170426	1,2,4-Trichlorobenzene	2.1	U	ug/m3	0.68	2.1	2.1	U
WPP-SG02-170426	1,2,4-Trimethylbenzene	6.3		ug/m3	0.64	2.1	6.3	
WPP-SG02-170426	1,2-Dibromo 3-Chloropropane	2.1	U	ug/m3	0.42	2.1	2.1	U
WPP-SG02-170426	1,2-Dibromoethane	2.1	U	ug/m3	0.68	2.1	2.1	U
WPP-SG02-170426	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.1	U	ug/m3	0.81	2.1	2.1	U
WPP-SG02-170426	1,2-Dichlorobenzene	2.1	U	ug/m3	0.64	2.1	2.1	U
WPP-SG02-170426	1,2-Dichloroethane	2.1	U	ug/m3	0.68	2.1	2.1	U
WPP-SG02-170426	1,2-Dichloropropane	2.1	U	ug/m3	0.68	2.1	2.1	U
WPP-SG02-170426	1,3,5-Trimethylbenzene	2.1	U	ug/m3	0.68	2.1	2.1	U
WPP-SG02-170426	1,3-Butadiene	2.1	U	ug/m3	0.94	2.1	2.1	U
WPP-SG02-170426	1,3-Dichlorobenzene	72		ug/m3	0.64	2.1	72	
WPP-SG02-170426	1,4-Dichlorobenzene	2.1	U	ug/m3	0.6	2.1	2.1	U
WPP-SG02-170426	1,4-Dioxane	2.1	U	ug/m3	0.68	2.1	2.1	U
WPP-SG02-170426	2-Butanone (MEK)	43		ug/m3	0.9	21	43	
WPP-SG02-170426	2-Hexanone	8.9		ug/m3	0.68	2.1	8.9	

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701990

Sample Number	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-SG02-170426	2-Propanol (Isopropyl Alcohol)	85		ug/m3	1.8	21	85	
WPP-SG02-170426	3-Chloro-1-propene (Allyl Chloride)	2.1 U		ug/m3	0.68	2.1	2.1 U	
WPP-SG02-170426	4-Ethyltoluene	2.1 U		ug/m3	0.68	2.1	2.1 U	
WPP-SG02-170426	4-Methyl-2-pentanone	2.1 U		ug/m3	0.68	2.1	2.1 U	
WPP-SG02-170426	Acetone	840		ug/m3	3.3	21	840	
WPP-SG02-170426	Acetonitrile	2.1 U		ug/m3	0.77	2.1	2.1 U	
WPP-SG02-170426	Acrolein	15		ug/m3	0.73	8.6	15	
WPP-SG02-170426	Acrylonitrile	2.1 U		ug/m3	0.73	2.1	2.1 U	
WPP-SG02-170426	alpha-Pinene	30		ug/m3	0.6	2.1	30	
WPP-SG02-170426	Benzene	9.8		ug/m3	0.68	2.1	9.8	
WPP-SG02-170426	Benzyl Chloride	2.1 U		ug/m3	0.47	2.1	2.1 U	
WPP-SG02-170426	Bromodichloromethane	2.1 U		ug/m3	0.64	2.1	2.1 U	
WPP-SG02-170426	Bromoform	2.1 U		ug/m3	0.64	2.1	2.1 U	
WPP-SG02-170426	Bromomethane	2.1 U		ug/m3	0.81	2.1	2.1 U	
WPP-SG02-170426	Carbon Disulfide	21 U		ug/m3	0.64	21	21 U	
WPP-SG02-170426	Carbon Tetrachloride	2.1 U		ug/m3	0.64	2.1	2.1 U	
WPP-SG02-170426	Chlorobenzene	2.1 U		ug/m3	0.68	2.1	2.1 U	
WPP-SG02-170426	Chloroethane	2.1 U		ug/m3	0.73	2.1	2.1 U	
WPP-SG02-170426	Chloroform	2.1 U		ug/m3	0.73	2.1	2.1 U	
WPP-SG02-170426	Chloromethane	2.1 U		ug/m3	0.64	2.1	2.1 U	
WPP-SG02-170426	cis-1,2-Dichloroethene	2.1 U		ug/m3	0.68	2.1	2.1 U	
WPP-SG02-170426	cis-1,3-Dichloropropene	2.1 U		ug/m3	0.6	2.1	2.1 U	
WPP-SG02-170426	Cyclohexane	11		ug/m3	1.2	4.3	11	
WPP-SG02-170426	Dibromochloromethane	2.1 U		ug/m3	0.68	2.1	2.1 U	
WPP-SG02-170426	Dichlorodifluoromethane (CFC 12)	2.3		ug/m3	0.73	2.1	2.3	
WPP-SG02-170426	Dichloromethane (Methylene Chloride)	2.1 U		ug/m3	0.73	2.1	2.1 U	
WPP-SG02-170426	d-Limonene	15		ug/m3	0.6	2.1	15	
WPP-SG02-170426	Ethanol	94		ug/m3	3.4	21	94	
WPP-SG02-170426	Ethyl Acetate	22		ug/m3	1.5	4.3	22	
WPP-SG02-170426	Ethylbenzene	3.5		ug/m3	0.68	2.1	3.5	
WPP-SG02-170426	Hexachlorobutadiene	2.1 U		ug/m3	0.6	2.1	2.1 U	
WPP-SG02-170426	Isopropylbenzene (Cumene)	2.1 U		ug/m3	0.64	2.1	2.1 U	

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701990

Sample Number	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-SG02-170426	m,p-Xylenes	10		ug/m3	1.3	4.3	10	
WPP-SG02-170426	Methyl Methacrylate	4.3 U		ug/m3	1.3	4.3	4.3 U	
WPP-SG02-170426	Methyl tert-Butyl Ether	2.1 U		ug/m3	0.73	2.1	2.1 U	
WPP-SG02-170426	Naphthalene	2.1 U		ug/m3	0.77	2.1	2.1 U	
WPP-SG02-170426	n-Butyl Acetate	2.1 U		ug/m3	0.68	2.1	2.1 U	
WPP-SG02-170426	n-Heptane	11		ug/m3	0.73	2.1	11	
WPP-SG02-170426	n-Hexane	22		ug/m3	0.64	2.1	22	
WPP-SG02-170426	n-Nonane	7.9		ug/m3	0.64	2.1	7.9	
WPP-SG02-170426	n-Octane	9.7		ug/m3	0.77	2.1	9.7	
WPP-SG02-170426	n-Propylbenzene	2.1 U		ug/m3	0.68	2.1	2.1 U	
WPP-SG02-170426	o-Xylene	4.9		ug/m3	0.64	2.1	4.9	
WPP-SG02-170426	Propene	26		ug/m3	0.6	2.1	26	
WPP-SG02-170426	Styrene	2.2		ug/m3	0.64	2.1	2.2	
WPP-SG02-170426	Tetrachloroethene	2.1 U		ug/m3	0.6	2.1	2.1 U	
WPP-SG02-170426	Tetrahydrofuran (THF)	2.1 U		ug/m3	0.86	2.1	2.1 U	
WPP-SG02-170426	Toluene	26		ug/m3	0.73	2.1	26	
WPP-SG02-170426	trans-1,2-Dichloroethene	2.1 U		ug/m3	0.81	2.1	2.1 U	
WPP-SG02-170426	trans-1,3-Dichloropropene	2.1 U		ug/m3	0.68	2.1	2.1 U	
WPP-SG02-170426	Trichloroethene (TCE)	2.1 U		ug/m3	0.6	2.1	2.1 U	
WPP-SG02-170426	Trichlorofluoromethane (CFC 11)	2.1 U		ug/m3	0.73	2.1	2.1 U	
WPP-SG02-170426	Vinyl Acetate	21 U		ug/m3	2.8	21	21 U	
WPP-SG02-170426	Vinyl Chloride	2.1 U		ug/m3	0.73	2.1	2.1 U	
WPP-SG03-170426	1,1,1-Trichloroethane (TCA)	26		ug/m3	0.6	1.8	26	
WPP-SG03-170426	1,1,2,2-Tetrachloroethane	1.8 U		ug/m3	0.53	1.8	1.8 U	
WPP-SG03-170426	1,1,2-Trichloroethane	1.8 U		ug/m3	0.56	1.8	1.8 U	
WPP-SG03-170426	1,1,2-Trichlorotrifluoroethane	1.8 U		ug/m3	0.6	1.8	1.8 U	
WPP-SG03-170426	1,1-Dichloroethane (1,1-DCA)	1.8 U		ug/m3	0.56	1.8	1.8 U	
WPP-SG03-170426	1,1-Dichloroethene (1,1-DCE)	1.8 U		ug/m3	0.6	1.8	1.8 U	
WPP-SG03-170426	1,2,4-Trichlorobenzene	1.8 U		ug/m3	0.56	1.8	1.8 U	
WPP-SG03-170426	1,2,4-Trimethylbenzene	5.1		ug/m3	0.53	1.8	5.1	
WPP-SG03-170426	1,2-Dibromo 3-Chloropropane	1.8 U		ug/m3	0.35	1.8	1.8 U	
WPP-SG03-170426	1,2-Dibromoethane	1.8 U		ug/m3	0.56	1.8	1.8 U	

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701990

Sample Number	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-SG03-170426	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	1.8	U	ug/m3	0.67	1.8	1.8	U
WPP-SG03-170426	1,2-Dichlorobenzene	1.8	U	ug/m3	0.53	1.8	1.8	U
WPP-SG03-170426	1,2-Dichloroethane	1.8	U	ug/m3	0.56	1.8	1.8	U
WPP-SG03-170426	1,2-Dichloropropane	1.8	U	ug/m3	0.56	1.8	1.8	U
WPP-SG03-170426	1,3,5-Trimethylbenzene	1.8	U	ug/m3	0.56	1.8	1.8	U
WPP-SG03-170426	1,3-Butadiene	1.8	U	ug/m3	0.77	1.8	1.8	U
WPP-SG03-170426	1,3-Dichlorobenzene	39		ug/m3	0.53	1.8	39	
WPP-SG03-170426	1,4-Dichlorobenzene	1.8	U	ug/m3	0.49	1.8	1.8	U
WPP-SG03-170426	1,4-Dioxane	1.8	U	ug/m3	0.56	1.8	1.8	U
WPP-SG03-170426	2-Butanone (MEK)	18	U	ug/m3	0.74	18	18	U
WPP-SG03-170426	2-Hexanone	2.2		ug/m3	0.56	1.8	2.2	
WPP-SG03-170426	2-Propanol (Isopropyl Alcohol)	45		ug/m3	1.5	18	45	
WPP-SG03-170426	3-Chloro-1-propene (Allyl Chloride)	1.8	U	ug/m3	0.56	1.8	1.8	U
WPP-SG03-170426	4-Ethyltoluene	1.8	U	ug/m3	0.56	1.8	1.8	U
WPP-SG03-170426	4-Methyl-2-pentanone	1.8	U	ug/m3	0.56	1.8	1.8	U
WPP-SG03-170426	Acetone	200		ug/m3	2.7	18	200	
WPP-SG03-170426	Acetonitrile	1.8	U	ug/m3	0.63	1.8	1.8	U
WPP-SG03-170426	Acrolein	7.9		ug/m3	0.6	7	7.9	
WPP-SG03-170426	Acrylonitrile	1.8	U	ug/m3	0.6	1.8	1.8	U
WPP-SG03-170426	alpha-Pinene	21		ug/m3	0.49	1.8	21	
WPP-SG03-170426	Benzene	2.6		ug/m3	0.56	1.8	2.6	
WPP-SG03-170426	Benzyl Chloride	1.8	U	ug/m3	0.39	1.8	1.8	U
WPP-SG03-170426	Bromodichloromethane	1.8	U	ug/m3	0.53	1.8	1.8	U
WPP-SG03-170426	Bromoform	1.8	U	ug/m3	0.53	1.8	1.8	U
WPP-SG03-170426	Bromomethane	1.8	U	ug/m3	0.67	1.8	1.8	U
WPP-SG03-170426	Carbon Disulfide	18	U	ug/m3	0.53	18	18	U
WPP-SG03-170426	Carbon Tetrachloride	1.8	U	ug/m3	0.53	1.8	1.8	U
WPP-SG03-170426	Chlorobenzene	1.8	U	ug/m3	0.56	1.8	1.8	U
WPP-SG03-170426	Chloroethane	1.8	U	ug/m3	0.6	1.8	1.8	U
WPP-SG03-170426	Chloroform	1.8	U	ug/m3	0.6	1.8	1.8	U
WPP-SG03-170426	Chloromethane	1.8	U	ug/m3	0.53	1.8	1.8	U
WPP-SG03-170426	cis-1,2-Dichloroethene	1.8	U	ug/m3	0.56	1.8	1.8	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701990

Sample Number	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-SG03-170426	cis-1,3-Dichloropropene	1.8	U	ug/m3	0.49	1.8	1.8	U
WPP-SG03-170426	Cyclohexane	3.5	U	ug/m3	1	3.5	3.5	U
WPP-SG03-170426	Dibromochloromethane	1.8	U	ug/m3	0.56	1.8	1.8	U
WPP-SG03-170426	Dichlorodifluoromethane (CFC 12)	2.5		ug/m3	0.6	1.8	2.5	
WPP-SG03-170426	Dichloromethane (Methylene Chloride)	1.8	U	ug/m3	0.6	1.8	1.8	U
WPP-SG03-170426	d-Limonene	15		ug/m3	0.49	1.8	15	
WPP-SG03-170426	Ethanol	48		ug/m3	2.8	18	48	
WPP-SG03-170426	Ethyl Acetate	25		ug/m3	1.2	3.5	25	
WPP-SG03-170426	Ethylbenzene	1.9		ug/m3	0.56	1.8	1.9	
WPP-SG03-170426	Hexachlorobutadiene	1.8	U	ug/m3	0.49	1.8	1.8	U
WPP-SG03-170426	Isopropylbenzene (Cumene)	1.8	U	ug/m3	0.53	1.8	1.8	U
WPP-SG03-170426	m,p-Xylenes	7		ug/m3	1.1	3.5	7	
WPP-SG03-170426	Methyl Methacrylate	3.5	U	ug/m3	1.1	3.5	3.5	U
WPP-SG03-170426	Methyl tert-Butyl Ether	1.8	U	ug/m3	0.6	1.8	1.8	U
WPP-SG03-170426	Naphthalene	1.8	U	ug/m3	0.63	1.8	1.8	U
WPP-SG03-170426	n-Butyl Acetate	1.8	U	ug/m3	0.56	1.8	1.8	U
WPP-SG03-170426	n-Heptane	1.8	U	ug/m3	0.6	1.8	1.8	U
WPP-SG03-170426	n-Hexane	3.5		ug/m3	0.53	1.8	3.5	
WPP-SG03-170426	n-Nonane	4.1		ug/m3	0.53	1.8	4.1	
WPP-SG03-170426	n-Octane	3.2		ug/m3	0.63	1.8	3.2	
WPP-SG03-170426	n-Propylbenzene	1.8	U	ug/m3	0.56	1.8	1.8	U
WPP-SG03-170426	o-Xylene	3.4		ug/m3	0.53	1.8	3.4	
WPP-SG03-170426	Propene	11		ug/m3	0.49	1.8	11	
WPP-SG03-170426	Styrene	1.8		ug/m3	0.53	1.8	1.8	
WPP-SG03-170426	Tetrachloroethene	3.9		ug/m3	0.49	1.8	3.9	
WPP-SG03-170426	Tetrahydrofuran (THF)	1.8	U	ug/m3	0.7	1.8	1.8	U
WPP-SG03-170426	Toluene	14		ug/m3	0.6	1.8	14	
WPP-SG03-170426	trans-1,2-Dichloroethene	1.8	U	ug/m3	0.67	1.8	1.8	U
WPP-SG03-170426	trans-1,3-Dichloropropene	1.8	U	ug/m3	0.56	1.8	1.8	U
WPP-SG03-170426	Trichloroethene (TCE)	1.8	U	ug/m3	0.49	1.8	1.8	U
WPP-SG03-170426	Trichlorofluoromethane (CFC 11)	1.8	U	ug/m3	0.6	1.8	1.8	U
WPP-SG03-170426	Vinyl Acetate	18	U	ug/m3	2.3	18	18	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701990

Sample Number	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-SG03-170426	Vinyl Chloride	1.8	U	ug/m3	0.6	1.8	1.8	U
WPP-SG04-170426	1,1,1-Trichloroethane (TCA)	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-SG04-170426	1,1,2,2-Tetrachloroethane	2.1	U	ug/m3	0.63	2.1	2.1	U
WPP-SG04-170426	1,1,2-Trichloroethane	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-SG04-170426	1,1,2-Trichlorotrifluoroethane	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-SG04-170426	1,1-Dichloroethane (1,1-DCA)	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-SG04-170426	1,1-Dichloroethene (1,1-DCE)	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-SG04-170426	1,2,4-Trichlorobenzene	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-SG04-170426	1,2,4-Trimethylbenzene	3.9		ug/m3	0.63	2.1	3.9	
WPP-SG04-170426	1,2-Dibromo 3-Chloropropane	2.1	U	ug/m3	0.42	2.1	2.1	U
WPP-SG04-170426	1,2-Dibromoethane	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-SG04-170426	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.1	U	ug/m3	0.8	2.1	2.1	U
WPP-SG04-170426	1,2-Dichlorobenzene	2.1	U	ug/m3	0.63	2.1	2.1	U
WPP-SG04-170426	1,2-Dichloroethane	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-SG04-170426	1,2-Dichloropropane	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-SG04-170426	1,3,5-Trimethylbenzene	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-SG04-170426	1,3-Butadiene	2.1	U	ug/m3	0.92	2.1	2.1	U
WPP-SG04-170426	1,3-Dichlorobenzene	40		ug/m3	0.63	2.1	40	
WPP-SG04-170426	1,4-Dichlorobenzene	2.1	U	ug/m3	0.59	2.1	2.1	U
WPP-SG04-170426	1,4-Dioxane	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-SG04-170426	2-Butanone (MEK)	21	U	ug/m3	0.88	21	21	U
WPP-SG04-170426	2-Hexanone	4.5		ug/m3	0.67	2.1	4.5	
WPP-SG04-170426	2-Propanol (Isopropyl Alcohol)	60		ug/m3	1.8	21	60	
WPP-SG04-170426	3-Chloro-1-propene (Allyl Chloride)	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-SG04-170426	4-Ethyltoluene	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-SG04-170426	4-Methyl-2-pentanone	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-SG04-170426	Acetone	290		ug/m3	3.2	21	290	
WPP-SG04-170426	Acetonitrile	2.1	U	ug/m3	0.76	2.1	2.1	U
WPP-SG04-170426	Acrolein	8.4	U	ug/m3	0.71	8.4	8.4	U
WPP-SG04-170426	Acrylonitrile	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-SG04-170426	alpha-Pinene	23		ug/m3	0.59	2.1	23	
WPP-SG04-170426	Benzene	4.8		ug/m3	0.67	2.1	4.8	

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701990

Sample Number	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-SG04-170426	Benzyl Chloride	2.1	U	ug/m3	0.46	2.1	2.1	U
WPP-SG04-170426	Bromodichloromethane	2.1	U	ug/m3	0.63	2.1	2.1	U
WPP-SG04-170426	Bromoform	2.1	U	ug/m3	0.63	2.1	2.1	U
WPP-SG04-170426	Bromomethane	2.1	U	ug/m3	0.8	2.1	2.1	U
WPP-SG04-170426	Carbon Disulfide	21	U	ug/m3	0.63	21	21	U
WPP-SG04-170426	Carbon Tetrachloride	2.1	U	ug/m3	0.63	2.1	2.1	U
WPP-SG04-170426	Chlorobenzene	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-SG04-170426	Chloroethane	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-SG04-170426	Chloroform	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-SG04-170426	Chloromethane	2.1	U	ug/m3	0.63	2.1	2.1	U
WPP-SG04-170426	cis-1,2-Dichloroethene	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-SG04-170426	cis-1,3-Dichloropropene	2.1	U	ug/m3	0.59	2.1	2.1	U
WPP-SG04-170426	Cyclohexane	4.2	U	ug/m3	1.2	4.2	4.2	U
WPP-SG04-170426	Dibromochloromethane	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-SG04-170426	Dichlorodifluoromethane (CFC 12)	2.5		ug/m3	0.71	2.1	2.5	
WPP-SG04-170426	Dichloromethane (Methylene Chloride)	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-SG04-170426	d-Limonene	12		ug/m3	0.59	2.1	12	
WPP-SG04-170426	Ethanol	50		ug/m3	3.4	21	50	
WPP-SG04-170426	Ethyl Acetate	26		ug/m3	1.5	4.2	26	
WPP-SG04-170426	Ethylbenzene	2.2		ug/m3	0.67	2.1	2.2	
WPP-SG04-170426	Hexachlorobutadiene	2.1	U	ug/m3	0.59	2.1	2.1	U
WPP-SG04-170426	Isopropylbenzene (Cumene)	2.1	U	ug/m3	0.63	2.1	2.1	U
WPP-SG04-170426	m,p-Xylenes	6.6		ug/m3	1.3	4.2	6.6	
WPP-SG04-170426	Methyl Methacrylate	4.2	U	ug/m3	1.3	4.2	4.2	U
WPP-SG04-170426	Methyl tert-Butyl Ether	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-SG04-170426	Naphthalene	2.1	U	ug/m3	0.76	2.1	2.1	U
WPP-SG04-170426	n-Butyl Acetate	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-SG04-170426	n-Heptane	5.6		ug/m3	0.71	2.1	5.6	
WPP-SG04-170426	n-Hexane	9.1		ug/m3	0.63	2.1	9.1	
WPP-SG04-170426	n-Nonane	5.4		ug/m3	0.63	2.1	5.4	
WPP-SG04-170426	n-Octane	7.2		ug/m3	0.76	2.1	7.2	
WPP-SG04-170426	n-Propylbenzene	2.1	U	ug/m3	0.67	2.1	2.1	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701990

Sample Number	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-SG04-170426	o-Xylene	3.4		ug/m3	0.63	2.1	3.4	
WPP-SG04-170426	Propene	16		ug/m3	0.59	2.1	16	
WPP-SG04-170426	Styrene	2.1	U	ug/m3	0.63	2.1	2.1	U
WPP-SG04-170426	Tetrachloroethene	2.1	U	ug/m3	0.59	2.1	2.1	U
WPP-SG04-170426	Tetrahydrofuran (THF)	2.1	U	ug/m3	0.84	2.1	2.1	U
WPP-SG04-170426	Toluene	18		ug/m3	0.71	2.1	18	
WPP-SG04-170426	trans-1,2-Dichloroethene	2.1	U	ug/m3	0.8	2.1	2.1	U
WPP-SG04-170426	trans-1,3-Dichloropropene	2.1	U	ug/m3	0.67	2.1	2.1	U
WPP-SG04-170426	Trichloroethene (TCE)	2.1	U	ug/m3	0.59	2.1	2.1	U
WPP-SG04-170426	Trichlorofluoromethane (CFC 11)	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-SG04-170426	Vinyl Acetate	21	U	ug/m3	2.7	21	21	U
WPP-SG04-170426	Vinyl Chloride	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-SG05-170426	1,1,1-Trichloroethane (TCA)	10		ug/m3	0.69	2	10	
WPP-SG05-170426	1,1,2,2-Tetrachloroethane	2	U	ug/m3	0.61	2	2	U
WPP-SG05-170426	1,1,2-Trichloroethane	2	U	ug/m3	0.65	2	2	U
WPP-SG05-170426	1,1,2-Trichlorotrifluoroethane	2	U	ug/m3	0.69	2	2	U
WPP-SG05-170426	1,1-Dichloroethane (1,1-DCA)	2	U	ug/m3	0.65	2	2	U
WPP-SG05-170426	1,1-Dichloroethene (1,1-DCE)	2	U	ug/m3	0.69	2	2	U
WPP-SG05-170426	1,2,4-Trichlorobenzene	2	U	ug/m3	0.65	2	2	U
WPP-SG05-170426	1,2,4-Trimethylbenzene	2.5		ug/m3	0.61	2	2.5	
WPP-SG05-170426	1,2-Dibromo 3-Chloropropane	2	U	ug/m3	0.4	2	2	U
WPP-SG05-170426	1,2-Dibromoethane	2	U	ug/m3	0.65	2	2	U
WPP-SG05-170426	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2	U	ug/m3	0.77	2	2	U
WPP-SG05-170426	1,2-Dichlorobenzene	2	U	ug/m3	0.61	2	2	U
WPP-SG05-170426	1,2-Dichloroethane	2	U	ug/m3	0.65	2	2	U
WPP-SG05-170426	1,2-Dichloropropane	2	U	ug/m3	0.65	2	2	U
WPP-SG05-170426	1,3,5-Trimethylbenzene	2	U	ug/m3	0.65	2	2	U
WPP-SG05-170426	1,3-Butadiene	2	U	ug/m3	0.9	2	2	U
WPP-SG05-170426	1,3-Dichlorobenzene	27		ug/m3	0.61	2	27	
WPP-SG05-170426	1,4-Dichlorobenzene	2	U	ug/m3	0.57	2	2	U
WPP-SG05-170426	1,4-Dioxane	2	U	ug/m3	0.65	2	2	U
WPP-SG05-170426	2-Butanone (MEK)	20	U	ug/m3	0.86	20	20	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701990

Sample Number	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-SG05-170426	2-Hexanone	2	U	ug/m3	0.65	2	2	U
WPP-SG05-170426	2-Propanol (Isopropyl Alcohol)	29		ug/m3	1.7	20	29	
WPP-SG05-170426	3-Chloro-1-propene (Allyl Chloride)	2	U	ug/m3	0.65	2	2	U
WPP-SG05-170426	4-Ethyltoluene	2	U	ug/m3	0.65	2	2	U
WPP-SG05-170426	4-Methyl-2-pentanone	2	U	ug/m3	0.65	2	2	U
WPP-SG05-170426	Acetone	160		ug/m3	3.1	20	160	
WPP-SG05-170426	Acetonitrile	2	U	ug/m3	0.73	2	2	U
WPP-SG05-170426	Acrolein	8.2	U	ug/m3	0.69	8.2	8.2	U
WPP-SG05-170426	Acrylonitrile	2	U	ug/m3	0.69	2	2	U
WPP-SG05-170426	alpha-Pinene	10		ug/m3	0.57	2	10	
WPP-SG05-170426	Benzene	6.8		ug/m3	0.65	2	6.8	
WPP-SG05-170426	Benzyl Chloride	2	U	ug/m3	0.45	2	2	U
WPP-SG05-170426	Bromodichloromethane	2	U	ug/m3	0.61	2	2	U
WPP-SG05-170426	Bromoform	2	U	ug/m3	0.61	2	2	U
WPP-SG05-170426	Bromomethane	2	U	ug/m3	0.77	2	2	U
WPP-SG05-170426	Carbon Disulfide	20	U	ug/m3	0.61	20	20	U
WPP-SG05-170426	Carbon Tetrachloride	2	U	ug/m3	0.61	2	2	U
WPP-SG05-170426	Chlorobenzene	2	U	ug/m3	0.65	2	2	U
WPP-SG05-170426	Chloroethane	2	U	ug/m3	0.69	2	2	U
WPP-SG05-170426	Chloroform	2	U	ug/m3	0.69	2	2	U
WPP-SG05-170426	Chloromethane	2	U	ug/m3	0.61	2	2	U
WPP-SG05-170426	cis-1,2-Dichloroethene	2	U	ug/m3	0.65	2	2	U
WPP-SG05-170426	cis-1,3-Dichloropropene	2	U	ug/m3	0.57	2	2	U
WPP-SG05-170426	Cyclohexane	5.7		ug/m3	1.2	4.1	5.7	
WPP-SG05-170426	Dibromochloromethane	2	U	ug/m3	0.65	2	2	U
WPP-SG05-170426	Dichlorodifluoromethane (CFC 12)	2.8		ug/m3	0.69	2	2.8	
WPP-SG05-170426	Dichloromethane (Methylene Chloride)	2	U	ug/m3	0.69	2	2	U
WPP-SG05-170426	d-Limonene	5.3		ug/m3	0.57	2	5.3	
WPP-SG05-170426	Ethanol	46		ug/m3	3.3	20	46	
WPP-SG05-170426	Ethyl Acetate	5		ug/m3	1.4	4.1	5	
WPP-SG05-170426	Ethylbenzene	2.8		ug/m3	0.65	2	2.8	
WPP-SG05-170426	Hexachlorobutadiene	2	U	ug/m3	0.57	2	2	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701990

Sample Number	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-SG05-170426	Isopropylbenzene (Cumene)	2	U	ug/m3	0.61	2	2	U
WPP-SG05-170426	m,p-Xylenes	5.9		ug/m3	1.2	4.1	5.9	
WPP-SG05-170426	Methyl Methacrylate	4.1	U	ug/m3	1.3	4.1	4.1	U
WPP-SG05-170426	Methyl tert-Butyl Ether	2	U	ug/m3	0.69	2	2	U
WPP-SG05-170426	Naphthalene	2	U	ug/m3	0.73	2	2	U
WPP-SG05-170426	n-Butyl Acetate	2	U	ug/m3	0.65	2	2	U
WPP-SG05-170426	n-Heptane	7.4		ug/m3	0.69	2	7.4	
WPP-SG05-170426	n-Hexane	12		ug/m3	0.61	2	12	
WPP-SG05-170426	n-Nonane	3.2		ug/m3	0.61	2	3.2	
WPP-SG05-170426	n-Octane	4.6		ug/m3	0.73	2	4.6	
WPP-SG05-170426	n-Propylbenzene	2	U	ug/m3	0.65	2	2	U
WPP-SG05-170426	o-Xylene	2.6		ug/m3	0.61	2	2.6	
WPP-SG05-170426	Propene	10		ug/m3	0.57	2	10	
WPP-SG05-170426	Styrene	2	U	ug/m3	0.61	2	2	U
WPP-SG05-170426	Tetrachloroethene	13		ug/m3	0.57	2	13	
WPP-SG05-170426	Tetrahydrofuran (THF)	2	U	ug/m3	0.82	2	2	U
WPP-SG05-170426	Toluene	18		ug/m3	0.69	2	18	
WPP-SG05-170426	trans-1,2-Dichloroethene	2	U	ug/m3	0.77	2	2	U
WPP-SG05-170426	trans-1,3-Dichloropropene	2	U	ug/m3	0.65	2	2	U
WPP-SG05-170426	Trichloroethene (TCE)	51		ug/m3	0.57	2	51	
WPP-SG05-170426	Trichlorofluoromethane (CFC 11)	2	U	ug/m3	0.69	2	2	U
WPP-SG05-170426	Vinyl Acetate	20	U	ug/m3	2.6	20	20	U
WPP-SG05-170426	Vinyl Chloride	2	U	ug/m3	0.69	2	2	U
WPP-SG06-170426	1,1,1-Trichloroethane (TCA)	2.1	U	ug/m3	0.7	2.1	2.1	U
WPP-SG06-170426	1,1,2,2-Tetrachloroethane	2.1	U	ug/m3	0.62	2.1	2.1	U
WPP-SG06-170426	1,1,2-Trichloroethane	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG06-170426	1,1,2-Trichlorotrifluoroethane	2.1	U	ug/m3	0.7	2.1	2.1	U
WPP-SG06-170426	1,1-Dichloroethane (1,1-DCA)	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG06-170426	1,1-Dichloroethene (1,1-DCE)	2.1	U	ug/m3	0.7	2.1	2.1	U
WPP-SG06-170426	1,2,4-Trichlorobenzene	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG06-170426	1,2,4-Trimethylbenzene	4.3		ug/m3	0.62	2.1	4.3	
WPP-SG06-170426	1,2-Dibromo 3-Chloropropane	2.1	U	ug/m3	0.41	2.1	2.1	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701990

Sample Number	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-SG06-170426	1,2-Dibromoethane	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG06-170426	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.1	U	ug/m3	0.78	2.1	2.1	U
WPP-SG06-170426	1,2-Dichlorobenzene	2.1	U	ug/m3	0.62	2.1	2.1	U
WPP-SG06-170426	1,2-Dichloroethane	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG06-170426	1,2-Dichloropropane	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG06-170426	1,3,5-Trimethylbenzene	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG06-170426	1,3-Butadiene	2.1	U	ug/m3	0.9	2.1	2.1	U
WPP-SG06-170426	1,3-Dichlorobenzene	32		ug/m3	0.62	2.1	32	
WPP-SG06-170426	1,4-Dichlorobenzene	2.1	U	ug/m3	0.57	2.1	2.1	U
WPP-SG06-170426	1,4-Dioxane	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG06-170426	2-Butanone (MEK)	24		ug/m3	0.86	21	24	
WPP-SG06-170426	2-Hexanone	3.9		ug/m3	0.66	2.1	3.9	
WPP-SG06-170426	2-Propanol (Isopropyl Alcohol)	48		ug/m3	1.7	21	48	
WPP-SG06-170426	3-Chloro-1-propene (Allyl Chloride)	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG06-170426	4-Ethyltoluene	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG06-170426	4-Methyl-2-pentanone	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG06-170426	Acetone	460		ug/m3	3.2	21	460	
WPP-SG06-170426	Acetonitrile	2.1	U	ug/m3	0.74	2.1	2.1	U
WPP-SG06-170426	Acrolein	11		ug/m3	0.7	8.2	11	
WPP-SG06-170426	Acrylonitrile	2.1	U	ug/m3	0.7	2.1	2.1	U
WPP-SG06-170426	alpha-Pinene	19		ug/m3	0.57	2.1	19	
WPP-SG06-170426	Benzene	2.4		ug/m3	0.66	2.1	2.4	
WPP-SG06-170426	Benzyl Chloride	2.1	U	ug/m3	0.45	2.1	2.1	U
WPP-SG06-170426	Bromodichloromethane	2.1	U	ug/m3	0.62	2.1	2.1	U
WPP-SG06-170426	Bromoform	2.1	U	ug/m3	0.62	2.1	2.1	U
WPP-SG06-170426	Bromomethane	2.1	U	ug/m3	0.78	2.1	2.1	U
WPP-SG06-170426	Carbon Disulfide	21	U	ug/m3	0.62	21	21	U
WPP-SG06-170426	Carbon Tetrachloride	2.1	U	ug/m3	0.62	2.1	2.1	U
WPP-SG06-170426	Chlorobenzene	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG06-170426	Chloroethane	2.1	U	ug/m3	0.7	2.1	2.1	U
WPP-SG06-170426	Chloroform	2.1	U	ug/m3	0.7	2.1	2.1	U
WPP-SG06-170426	Chloromethane	2.1	U	ug/m3	0.62	2.1	2.1	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701990

Sample Number	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-SG06-170426	cis-1,2-Dichloroethene	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG06-170426	cis-1,3-Dichloropropene	2.1	U	ug/m3	0.57	2.1	2.1	U
WPP-SG06-170426	Cyclohexane	4.1	U	ug/m3	1.2	4.1	4.1	U
WPP-SG06-170426	Dibromochloromethane	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG06-170426	Dichlorodifluoromethane (CFC 12)	2.5		ug/m3	0.7	2.1	2.5	
WPP-SG06-170426	Dichloromethane (Methylene Chloride)	2.1	U	ug/m3	0.7	2.1	2.1	U
WPP-SG06-170426	d-Limonene	9.4		ug/m3	0.57	2.1	9.4	
WPP-SG06-170426	Ethanol	66		ug/m3	3.3	21	66	
WPP-SG06-170426	Ethyl Acetate	7.2		ug/m3	1.4	4.1	7.2	
WPP-SG06-170426	Ethylbenzene	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG06-170426	Hexachlorobutadiene	2.1	U	ug/m3	0.57	2.1	2.1	U
WPP-SG06-170426	Isopropylbenzene (Cumene)	2.1	U	ug/m3	0.62	2.1	2.1	U
WPP-SG06-170426	m,p-Xylenes	6.8		ug/m3	1.2	4.1	6.8	
WPP-SG06-170426	Methyl Methacrylate	4.1	U	ug/m3	1.3	4.1	4.1	U
WPP-SG06-170426	Methyl tert-Butyl Ether	2.1	U	ug/m3	0.7	2.1	2.1	U
WPP-SG06-170426	Naphthalene	2.1	U	ug/m3	0.74	2.1	2.1	U
WPP-SG06-170426	n-Butyl Acetate	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG06-170426	n-Heptane	2.5		ug/m3	0.7	2.1	2.5	
WPP-SG06-170426	n-Hexane	4.4		ug/m3	0.62	2.1	4.4	
WPP-SG06-170426	n-Nonane	4.5		ug/m3	0.62	2.1	4.5	
WPP-SG06-170426	n-Octane	3.3		ug/m3	0.74	2.1	3.3	
WPP-SG06-170426	n-Propylbenzene	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG06-170426	o-Xylene	3.1		ug/m3	0.62	2.1	3.1	
WPP-SG06-170426	Propene	15		ug/m3	0.57	2.1	15	
WPP-SG06-170426	Styrene	2.1	U	ug/m3	0.62	2.1	2.1	U
WPP-SG06-170426	Tetrachloroethene	3.9		ug/m3	0.57	2.1	3.9	
WPP-SG06-170426	Tetrahydrofuran (THF)	2.1	U	ug/m3	0.82	2.1	2.1	U
WPP-SG06-170426	Toluene	15		ug/m3	0.7	2.1	15	
WPP-SG06-170426	trans-1,2-Dichloroethene	2.1	U	ug/m3	0.78	2.1	2.1	U
WPP-SG06-170426	trans-1,3-Dichloropropene	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG06-170426	Trichloroethene (TCE)	2.1	U	ug/m3	0.57	2.1	2.1	U
WPP-SG06-170426	Trichlorofluoromethane (CFC 11)	2.1	U	ug/m3	0.7	2.1	2.1	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701990

Sample Number	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-SG06-170426	Vinyl Acetate	21	U	ug/m3	2.7	21	21	U
WPP-SG06-170426	Vinyl Chloride	2.1	U	ug/m3	0.7	2.1	2.1	U
WPP-SG07-170426	1,1,1-Trichloroethane (TCA)	230		ug/m3	0.71	2.1	230	
WPP-SG07-170426	1,1,2,2-Tetrachloroethane	2.1	U	ug/m3	0.62	2.1	2.1	U
WPP-SG07-170426	1,1,2-Trichloroethane	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG07-170426	1,1,2-Trichlorotrifluoroethane	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-SG07-170426	1,1-Dichloroethane (1,1-DCA)	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG07-170426	1,1-Dichloroethene (1,1-DCE)	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-SG07-170426	1,2,4-Trichlorobenzene	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG07-170426	1,2,4-Trimethylbenzene	3.4		ug/m3	0.62	2.1	3.4	
WPP-SG07-170426	1,2-Dibromo 3-Chloropropane	2.1	U	ug/m3	0.41	2.1	2.1	U
WPP-SG07-170426	1,2-Dibromoethane	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG07-170426	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.1	U	ug/m3	0.79	2.1	2.1	U
WPP-SG07-170426	1,2-Dichlorobenzene	2.1	U	ug/m3	0.62	2.1	2.1	U
WPP-SG07-170426	1,2-Dichloroethane	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG07-170426	1,2-Dichloropropane	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG07-170426	1,3,5-Trimethylbenzene	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG07-170426	1,3-Butadiene	2.1	U	ug/m3	0.91	2.1	2.1	U
WPP-SG07-170426	1,3-Dichlorobenzene	20		ug/m3	0.62	2.1	20	
WPP-SG07-170426	1,4-Dichlorobenzene	2.1	U	ug/m3	0.58	2.1	2.1	U
WPP-SG07-170426	1,4-Dioxane	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG07-170426	2-Butanone (MEK)	29		ug/m3	0.87	21	29	
WPP-SG07-170426	2-Hexanone	4.1		ug/m3	0.66	2.1	4.1	
WPP-SG07-170426	2-Propanol (Isopropyl Alcohol)	54		ug/m3	1.7	21	54	
WPP-SG07-170426	3-Chloro-1-propene (Allyl Chloride)	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG07-170426	4-Ethyltoluene	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG07-170426	4-Methyl-2-pentanone	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG07-170426	Acetone	580		ug/m3	3.2	21	580	
WPP-SG07-170426	Acetonitrile	2.1	U	ug/m3	0.75	2.1	2.1	U
WPP-SG07-170426	Acrolein	8.3	U	ug/m3	0.71	8.3	8.3	U
WPP-SG07-170426	Acrylonitrile	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-SG07-170426	alpha-Pinene	16		ug/m3	0.58	2.1	16	

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701990

Sample Number	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-SG07-170426	Benzene	2.3		ug/m3	0.66	2.1	2.3	
WPP-SG07-170426	Benzyl Chloride	2.1 U		ug/m3	0.46	2.1	2.1 U	
WPP-SG07-170426	Bromodichloromethane	2.1 U		ug/m3	0.62	2.1	2.1 U	
WPP-SG07-170426	Bromoform	2.1 U		ug/m3	0.62	2.1	2.1 U	
WPP-SG07-170426	Bromomethane	2.1 U		ug/m3	0.79	2.1	2.1 U	
WPP-SG07-170426	Carbon Disulfide	21 U		ug/m3	0.62	21	21 U	
WPP-SG07-170426	Carbon Tetrachloride	2.1 U		ug/m3	0.62	2.1	2.1 U	
WPP-SG07-170426	Chlorobenzene	2.1 U		ug/m3	0.66	2.1	2.1 U	
WPP-SG07-170426	Chloroethane	2.1 U		ug/m3	0.71	2.1	2.1 U	
WPP-SG07-170426	Chloroform	99		ug/m3	0.71	2.1	99	
WPP-SG07-170426	Chloromethane	2.1 U		ug/m3	0.62	2.1	2.1 U	
WPP-SG07-170426	cis-1,2-Dichloroethene	2.1 U		ug/m3	0.66	2.1	2.1 U	
WPP-SG07-170426	cis-1,3-Dichloropropene	2.1 U		ug/m3	0.58	2.1	2.1 U	
WPP-SG07-170426	Cyclohexane	4.2 U		ug/m3	1.2	4.2	4.2 U	
WPP-SG07-170426	Dibromochloromethane	2.1 U		ug/m3	0.66	2.1	2.1 U	
WPP-SG07-170426	Dichlorodifluoromethane (CFC 12)	2.8		ug/m3	0.71	2.1	2.8	
WPP-SG07-170426	Dichloromethane (Methylene Chloride)	2.1 U		ug/m3	0.71	2.1	2.1 U	
WPP-SG07-170426	d-Limonene	9.5		ug/m3	0.58	2.1	9.5	
WPP-SG07-170426	Ethanol	94		ug/m3	3.3	21	94	
WPP-SG07-170426	Ethyl Acetate	6.3		ug/m3	1.5	4.2	6.3	
WPP-SG07-170426	Ethylbenzene	2.1 U		ug/m3	0.66	2.1	2.1 U	
WPP-SG07-170426	Hexachlorobutadiene	2.1 U		ug/m3	0.58	2.1	2.1 U	
WPP-SG07-170426	Isopropylbenzene (Cumene)	2.1 U		ug/m3	0.62	2.1	2.1 U	
WPP-SG07-170426	m,p-Xylenes	5.3		ug/m3	1.2	4.2	5.3	
WPP-SG07-170426	Methyl Methacrylate	4.2 U		ug/m3	1.3	4.2	4.2 U	
WPP-SG07-170426	Methyl tert-Butyl Ether	2.1 U		ug/m3	0.71	2.1	2.1 U	
WPP-SG07-170426	Naphthalene	2.1 U		ug/m3	0.75	2.1	2.1 U	
WPP-SG07-170426	n-Butyl Acetate	2.1 U		ug/m3	0.66	2.1	2.1 U	
WPP-SG07-170426	n-Heptane	2.1 U		ug/m3	0.71	2.1	2.1 U	
WPP-SG07-170426	n-Hexane	3.3		ug/m3	0.62	2.1	3.3	
WPP-SG07-170426	n-Nonane	3.3		ug/m3	0.62	2.1	3.3	
WPP-SG07-170426	n-Octane	2.8		ug/m3	0.75	2.1	2.8	

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701990

Sample Number	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-SG07-170426	n-Propylbenzene	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG07-170426	o-Xylene	2.5		ug/m3	0.62	2.1	2.5	
WPP-SG07-170426	Propene	16		ug/m3	0.58	2.1	16	
WPP-SG07-170426	Styrene	2.1	U	ug/m3	0.62	2.1	2.1	U
WPP-SG07-170426	Tetrachloroethene	20		ug/m3	0.58	2.1	20	
WPP-SG07-170426	Tetrahydrofuran (THF)	2.1	U	ug/m3	0.83	2.1	2.1	U
WPP-SG07-170426	Toluene	15		ug/m3	0.71	2.1	15	
WPP-SG07-170426	trans-1,2-Dichloroethene	2.1	U	ug/m3	0.79	2.1	2.1	U
WPP-SG07-170426	trans-1,3-Dichloropropene	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG07-170426	Trichloroethene (TCE)	45		ug/m3	0.58	2.1	45	
WPP-SG07-170426	Trichlorofluoromethane (CFC 11)	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-SG07-170426	Vinyl Acetate	21	U	ug/m3	2.7	21	21	U
WPP-SG07-170426	Vinyl Chloride	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-SG08-170426	1,1,1-Trichloroethane (TCA)	21		ug/m3	0.7	2.1	21	
WPP-SG08-170426	1,1,2,2-Tetrachloroethane	2.1	U	ug/m3	0.62	2.1	2.1	U
WPP-SG08-170426	1,1,2-Trichloroethane	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG08-170426	1,1,2-Trichlorotrifluoroethane	2.1	U	ug/m3	0.7	2.1	2.1	U
WPP-SG08-170426	1,1-Dichloroethane (1,1-DCA)	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG08-170426	1,1-Dichloroethene (1,1-DCE)	2.1	U	ug/m3	0.7	2.1	2.1	U
WPP-SG08-170426	1,2,4-Trichlorobenzene	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG08-170426	1,2,4-Trimethylbenzene	5.6		ug/m3	0.62	2.1	5.6	
WPP-SG08-170426	1,2-Dibromo 3-Chloropropane	2.1	U	ug/m3	0.41	2.1	2.1	U
WPP-SG08-170426	1,2-Dibromoethane	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG08-170426	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.1	U	ug/m3	0.78	2.1	2.1	U
WPP-SG08-170426	1,2-Dichlorobenzene	2.1	U	ug/m3	0.62	2.1	2.1	U
WPP-SG08-170426	1,2-Dichloroethane	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG08-170426	1,2-Dichloropropane	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG08-170426	1,3,5-Trimethylbenzene	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG08-170426	1,3-Butadiene	2.1	U	ug/m3	0.9	2.1	2.1	U
WPP-SG08-170426	1,3-Dichlorobenzene	43		ug/m3	0.62	2.1	43	
WPP-SG08-170426	1,4-Dichlorobenzene	2.1	U	ug/m3	0.57	2.1	2.1	U
WPP-SG08-170426	1,4-Dioxane	2.1	U	ug/m3	0.66	2.1	2.1	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701990

Sample Number	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-SG08-170426	2-Butanone (MEK)	31		ug/m3	0.86	21	31	
WPP-SG08-170426	2-Hexanone	5.8		ug/m3	0.66	2.1	5.8	
WPP-SG08-170426	2-Propanol (Isopropyl Alcohol)	78		ug/m3	1.7	21	78	
WPP-SG08-170426	3-Chloro-1-propene (Allyl Chloride)	2.1 U		ug/m3	0.66	2.1	2.1 U	
WPP-SG08-170426	4-Ethyltoluene	2.1 U		ug/m3	0.66	2.1	2.1 U	
WPP-SG08-170426	4-Methyl-2-pentanone	2.1 U		ug/m3	0.66	2.1	2.1 U	
WPP-SG08-170426	Acetone	600		ug/m3	3.2	21	600	
WPP-SG08-170426	Acetonitrile	2.1 U		ug/m3	0.74	2.1	2.1 U	
WPP-SG08-170426	Acrolein	14		ug/m3	0.7	8.2	14	
WPP-SG08-170426	Acrylonitrile	2.1 U		ug/m3	0.7	2.1	2.1 U	
WPP-SG08-170426	alpha-Pinene	32		ug/m3	0.57	2.1	32	
WPP-SG08-170426	Benzene	3.2		ug/m3	0.66	2.1	3.2	
WPP-SG08-170426	Benzyl Chloride	2.1 U		ug/m3	0.45	2.1	2.1 U	
WPP-SG08-170426	Bromodichloromethane	2.1 U		ug/m3	0.62	2.1	2.1 U	
WPP-SG08-170426	Bromoform	2.1 U		ug/m3	0.62	2.1	2.1 U	
WPP-SG08-170426	Bromomethane	2.1 U		ug/m3	0.78	2.1	2.1 U	
WPP-SG08-170426	Carbon Disulfide	21 U		ug/m3	0.62	21	21 U	
WPP-SG08-170426	Carbon Tetrachloride	2.1 U		ug/m3	0.62	2.1	2.1 U	
WPP-SG08-170426	Chlorobenzene	2.1 U		ug/m3	0.66	2.1	2.1 U	
WPP-SG08-170426	Chloroethane	2.1 U		ug/m3	0.7	2.1	2.1 U	
WPP-SG08-170426	Chloroform	2.1 U		ug/m3	0.7	2.1	2.1 U	
WPP-SG08-170426	Chloromethane	2.1 U		ug/m3	0.62	2.1	2.1 U	
WPP-SG08-170426	cis-1,2-Dichloroethene	2.1 U		ug/m3	0.66	2.1	2.1 U	
WPP-SG08-170426	cis-1,3-Dichloropropene	2.1 U		ug/m3	0.57	2.1	2.1 U	
WPP-SG08-170426	Cyclohexane	10		ug/m3	1.2	4.1	10	
WPP-SG08-170426	Dibromochloromethane	2.1 U		ug/m3	0.66	2.1	2.1 U	
WPP-SG08-170426	Dichlorodifluoromethane (CFC 12)	2.4		ug/m3	0.7	2.1	2.4	
WPP-SG08-170426	Dichloromethane (Methylene Chloride)	2.1 U		ug/m3	0.7	2.1	2.1 U	
WPP-SG08-170426	d-Limonene	15		ug/m3	0.57	2.1	15	
WPP-SG08-170426	Ethanol	150		ug/m3	3.3	21	150	
WPP-SG08-170426	Ethyl Acetate	130		ug/m3	1.4	4.1	130	
WPP-SG08-170426	Ethylbenzene	2.5		ug/m3	0.66	2.1	2.5	

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701990

Sample Number	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-SG08-170426	Hexachlorobutadiene	2.1	U	ug/m3	0.57	2.1	2.1	U
WPP-SG08-170426	Isopropylbenzene (Cumene)	2.1	U	ug/m3	0.62	2.1	2.1	U
WPP-SG08-170426	m,p-Xylenes	8.4		ug/m3	1.2	4.1	8.4	
WPP-SG08-170426	Methyl Methacrylate	4.1	U	ug/m3	1.3	4.1	4.1	U
WPP-SG08-170426	Methyl tert-Butyl Ether	2.1	U	ug/m3	0.7	2.1	2.1	U
WPP-SG08-170426	Naphthalene	2.1	U	ug/m3	0.74	2.1	2.1	U
WPP-SG08-170426	n-Butyl Acetate	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG08-170426	n-Heptane	5.2		ug/m3	0.7	2.1	5.2	
WPP-SG08-170426	n-Hexane	10		ug/m3	0.62	2.1	10	
WPP-SG08-170426	n-Nonane	6.2		ug/m3	0.62	2.1	6.2	
WPP-SG08-170426	n-Octane	7.7		ug/m3	0.74	2.1	7.7	
WPP-SG08-170426	n-Propylbenzene	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG08-170426	o-Xylene	4.1		ug/m3	0.62	2.1	4.1	
WPP-SG08-170426	Propene	21		ug/m3	0.57	2.1	21	
WPP-SG08-170426	Styrene	2.1	U	ug/m3	0.62	2.1	2.1	U
WPP-SG08-170426	Tetrachloroethene	2.1	U	ug/m3	0.57	2.1	2.1	U
WPP-SG08-170426	Tetrahydrofuran (THF)	2.1	U	ug/m3	0.82	2.1	2.1	U
WPP-SG08-170426	Toluene	21		ug/m3	0.7	2.1	21	
WPP-SG08-170426	trans-1,2-Dichloroethene	2.1	U	ug/m3	0.78	2.1	2.1	U
WPP-SG08-170426	trans-1,3-Dichloropropene	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG08-170426	Trichloroethene (TCE)	2.1	U	ug/m3	0.57	2.1	2.1	U
WPP-SG08-170426	Trichlorofluoromethane (CFC 11)	3.1		ug/m3	0.7	2.1	3.1	J+
WPP-SG08-170426	Vinyl Acetate	21	U	ug/m3	2.7	21	21	U
WPP-SG08-170426	Vinyl Chloride	2.1	U	ug/m3	0.7	2.1	2.1	U
WPP-SG09-170426	1,1,1-Trichloroethane (TCA)	42		ug/m3	0.66	1.9	42	
WPP-SG09-170426	1,1,2,2-Tetrachloroethane	1.9	U	ug/m3	0.58	1.9	1.9	U
WPP-SG09-170426	1,1,2-Trichloroethane	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG09-170426	1,1,2-Trichlorotrifluoroethane	1.9	U	ug/m3	0.66	1.9	1.9	U
WPP-SG09-170426	1,1-Dichloroethane (1,1-DCA)	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG09-170426	1,1-Dichloroethene (1,1-DCE)	1.9	U	ug/m3	0.66	1.9	1.9	U
WPP-SG09-170426	1,2,4-Trichlorobenzene	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG09-170426	1,2,4-Trimethylbenzene	2.6		ug/m3	0.58	1.9	2.6	

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701990

Sample Number	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-SG09-170426	1,2-Dibromo 3-Chloropropane	1.9	U	ug/m3	0.38	1.9	1.9	U
WPP-SG09-170426	1,2-Dibromoethane	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG09-170426	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	1.9	U	ug/m3	0.74	1.9	1.9	U
WPP-SG09-170426	1,2-Dichlorobenzene	1.9	U	ug/m3	0.58	1.9	1.9	U
WPP-SG09-170426	1,2-Dichloroethane	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG09-170426	1,2-Dichloropropane	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG09-170426	1,3,5-Trimethylbenzene	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG09-170426	1,3-Butadiene	1.9	U	ug/m3	0.85	1.9	1.9	U
WPP-SG09-170426	1,3-Dichlorobenzene	23		ug/m3	0.58	1.9	23	
WPP-SG09-170426	1,4-Dichlorobenzene	1.9	U	ug/m3	0.54	1.9	1.9	U
WPP-SG09-170426	1,4-Dioxane	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG09-170426	2-Butanone (MEK)	19	U	ug/m3	0.81	19	19	U
WPP-SG09-170426	2-Hexanone	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG09-170426	2-Propanol (Isopropyl Alcohol)	22		ug/m3	1.6	19	22	
WPP-SG09-170426	3-Chloro-1-propene (Allyl Chloride)	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG09-170426	4-Ethyltoluene	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG09-170426	4-Methyl-2-pentanone	2.2		ug/m3	0.62	1.9	2.2	
WPP-SG09-170426	Acetone	100		ug/m3	3	19	100	
WPP-SG09-170426	Acetonitrile	1.9	U	ug/m3	0.7	1.9	1.9	U
WPP-SG09-170426	Acrolein	7.8	U	ug/m3	0.66	7.8	7.8	U
WPP-SG09-170426	Acrylonitrile	1.9	U	ug/m3	0.66	1.9	1.9	U
WPP-SG09-170426	alpha-Pinene	7.9		ug/m3	0.54	1.9	7.9	
WPP-SG09-170426	Benzene	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG09-170426	Benzyl Chloride	1.9	U	ug/m3	0.43	1.9	1.9	U
WPP-SG09-170426	Bromodichloromethane	1.9	U	ug/m3	0.58	1.9	1.9	U
WPP-SG09-170426	Bromoform	1.9	U	ug/m3	0.58	1.9	1.9	U
WPP-SG09-170426	Bromomethane	1.9	U	ug/m3	0.74	1.9	1.9	U
WPP-SG09-170426	Carbon Disulfide	19	U	ug/m3	0.58	19	19	U
WPP-SG09-170426	Carbon Tetrachloride	1.9	U	ug/m3	0.58	1.9	1.9	U
WPP-SG09-170426	Chlorobenzene	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG09-170426	Chloroethane	1.9	U	ug/m3	0.66	1.9	1.9	U
WPP-SG09-170426	Chloroform	1.9	U	ug/m3	0.66	1.9	1.9	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701990

Sample Number	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-SG09-170426	Chloromethane	1.9	U	ug/m3	0.58	1.9	1.9	U
WPP-SG09-170426	cis-1,2-Dichloroethene	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG09-170426	cis-1,3-Dichloropropene	1.9	U	ug/m3	0.54	1.9	1.9	U
WPP-SG09-170426	Cyclohexane	3.9	U	ug/m3	1.1	3.9	3.9	U
WPP-SG09-170426	Dibromochloromethane	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG09-170426	Dichlorodifluoromethane (CFC 12)	2.6		ug/m3	0.66	1.9	2.6	
WPP-SG09-170426	Dichloromethane (Methylene Chloride)	1.9	U	ug/m3	0.66	1.9	1.9	U
WPP-SG09-170426	d-Limonene	6.5		ug/m3	0.54	1.9	6.5	
WPP-SG09-170426	Ethanol	52		ug/m3	3.1	19	52	
WPP-SG09-170426	Ethyl Acetate	12		ug/m3	1.4	3.9	12	
WPP-SG09-170426	Ethylbenzene	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG09-170426	Hexachlorobutadiene	1.9	U	ug/m3	0.54	1.9	1.9	U
WPP-SG09-170426	Isopropylbenzene (Cumene)	1.9	U	ug/m3	0.58	1.9	1.9	U
WPP-SG09-170426	m,p-Xylenes	4.3		ug/m3	1.2	3.9	4.3	
WPP-SG09-170426	Methyl Methacrylate	3.9	U	ug/m3	1.2	3.9	3.9	U
WPP-SG09-170426	Methyl tert-Butyl Ether	1.9	U	ug/m3	0.66	1.9	1.9	U
WPP-SG09-170426	Naphthalene	1.9	U	ug/m3	0.7	1.9	1.9	U
WPP-SG09-170426	n-Butyl Acetate	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG09-170426	n-Heptane	1.9	U	ug/m3	0.66	1.9	1.9	U
WPP-SG09-170426	n-Hexane	2.1		ug/m3	0.58	1.9	2.1	
WPP-SG09-170426	n-Nonane	1.9	U	ug/m3	0.58	1.9	1.9	U
WPP-SG09-170426	n-Octane	1.9	U	ug/m3	0.7	1.9	1.9	U
WPP-SG09-170426	n-Propylbenzene	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG09-170426	o-Xylene	1.9	U	ug/m3	0.58	1.9	1.9	U
WPP-SG09-170426	Propene	6.2		ug/m3	0.54	1.9	6.2	
WPP-SG09-170426	Styrene	1.9	U	ug/m3	0.58	1.9	1.9	U
WPP-SG09-170426	Tetrachloroethene	5.4		ug/m3	0.54	1.9	5.4	
WPP-SG09-170426	Tetrahydrofuran (THF)	1.9	U	ug/m3	0.78	1.9	1.9	U
WPP-SG09-170426	Toluene	9.6		ug/m3	0.66	1.9	9.6	
WPP-SG09-170426	trans-1,2-Dichloroethene	1.9	U	ug/m3	0.74	1.9	1.9	U
WPP-SG09-170426	trans-1,3-Dichloropropene	1.9	U	ug/m3	0.62	1.9	1.9	U
WPP-SG09-170426	Trichloroethene (TCE)	1.9	U	ug/m3	0.54	1.9	1.9	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701990

Sample Number	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-SG09-170426	Trichlorofluoromethane (CFC 11)	1.9	U	ug/m3	0.66	1.9	1.9	U
WPP-SG09-170426	Vinyl Acetate	19	U	ug/m3	2.5	19	19	U
WPP-SG09-170426	Vinyl Chloride	1.9	U	ug/m3	0.66	1.9	1.9	U
WPP-SG09-170426-D	1,1,1-Trichloroethane (TCA)	44		ug/m3	0.71	2.1	44	
WPP-SG09-170426-D	1,1,2,2-Tetrachloroethane	2.1	U	ug/m3	0.62	2.1	2.1	U
WPP-SG09-170426-D	1,1,2-Trichloroethane	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG09-170426-D	1,1,2-Trichlorotrifluoroethane	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-SG09-170426-D	1,1-Dichloroethane (1,1-DCA)	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG09-170426-D	1,1-Dichloroethene (1,1-DCE)	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-SG09-170426-D	1,2,4-Trichlorobenzene	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG09-170426-D	1,2,4-Trimethylbenzene	2.6		ug/m3	0.62	2.1	2.6	
WPP-SG09-170426-D	1,2-Dibromo 3-Chloropropane	2.1	U	ug/m3	0.41	2.1	2.1	U
WPP-SG09-170426-D	1,2-Dibromoethane	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG09-170426-D	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.1	U	ug/m3	0.79	2.1	2.1	U
WPP-SG09-170426-D	1,2-Dichlorobenzene	2.1	U	ug/m3	0.62	2.1	2.1	U
WPP-SG09-170426-D	1,2-Dichloroethane	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG09-170426-D	1,2-Dichloropropane	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG09-170426-D	1,3,5-Trimethylbenzene	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG09-170426-D	1,3-Butadiene	2.1	U	ug/m3	0.91	2.1	2.1	U
WPP-SG09-170426-D	1,3-Dichlorobenzene	24		ug/m3	0.62	2.1	24	
WPP-SG09-170426-D	1,4-Dichlorobenzene	2.1	U	ug/m3	0.58	2.1	2.1	U
WPP-SG09-170426-D	1,4-Dioxane	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG09-170426-D	2-Butanone (MEK)	21	U	ug/m3	0.87	21	21	U
WPP-SG09-170426-D	2-Hexanone	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG09-170426-D	2-Propanol (Isopropyl Alcohol)	25		ug/m3	1.7	21	25	
WPP-SG09-170426-D	3-Chloro-1-propene (Allyl Chloride)	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG09-170426-D	4-Ethyltoluene	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG09-170426-D	4-Methyl-2-pentanone	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG09-170426-D	Acetone	120		ug/m3	3.2	21	120	
WPP-SG09-170426-D	Acetonitrile	2.1	U	ug/m3	0.75	2.1	2.1	U
WPP-SG09-170426-D	Acrolein	8.3	U	ug/m3	0.71	8.3	8.3	U
WPP-SG09-170426-D	Acrylonitrile	2.1	U	ug/m3	0.71	2.1	2.1	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701990

Sample Number	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-SG09-170426-D	alpha-Pinene	6.6		ug/m3	0.58	2.1	6.6	
WPP-SG09-170426-D	Benzene	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG09-170426-D	Benzyl Chloride	2.1	U	ug/m3	0.46	2.1	2.1	U
WPP-SG09-170426-D	Bromodichloromethane	2.1	U	ug/m3	0.62	2.1	2.1	U
WPP-SG09-170426-D	Bromoform	2.1	U	ug/m3	0.62	2.1	2.1	U
WPP-SG09-170426-D	Bromomethane	2.1	U	ug/m3	0.79	2.1	2.1	U
WPP-SG09-170426-D	Carbon Disulfide	21	U	ug/m3	0.62	21	21	U
WPP-SG09-170426-D	Carbon Tetrachloride	2.1	U	ug/m3	0.62	2.1	2.1	U
WPP-SG09-170426-D	Chlorobenzene	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG09-170426-D	Chloroethane	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-SG09-170426-D	Chloroform	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-SG09-170426-D	Chloromethane	2.1	U	ug/m3	0.62	2.1	2.1	U
WPP-SG09-170426-D	cis-1,2-Dichloroethene	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG09-170426-D	cis-1,3-Dichloropropene	2.1	U	ug/m3	0.58	2.1	2.1	U
WPP-SG09-170426-D	Cyclohexane	4.2	U	ug/m3	1.2	4.2	4.2	U
WPP-SG09-170426-D	Dibromochloromethane	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG09-170426-D	Dichlorodifluoromethane (CFC 12)	2.6		ug/m3	0.71	2.1	2.6	
WPP-SG09-170426-D	Dichloromethane (Methylene Chloride)	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-SG09-170426-D	d-Limonene	4.6		ug/m3	0.58	2.1	4.6	
WPP-SG09-170426-D	Ethanol	41		ug/m3	3.3	21	41	
WPP-SG09-170426-D	Ethyl Acetate	7.4		ug/m3	1.5	4.2	7.4	
WPP-SG09-170426-D	Ethylbenzene	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG09-170426-D	Hexachlorobutadiene	2.1	U	ug/m3	0.58	2.1	2.1	U
WPP-SG09-170426-D	Isopropylbenzene (Cumene)	2.1	U	ug/m3	0.62	2.1	2.1	U
WPP-SG09-170426-D	m,p-Xylenes	4.4		ug/m3	1.2	4.2	4.4	
WPP-SG09-170426-D	Methyl Methacrylate	4.2	U	ug/m3	1.3	4.2	4.2	U
WPP-SG09-170426-D	Methyl tert-Butyl Ether	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-SG09-170426-D	Naphthalene	2.1	U	ug/m3	0.75	2.1	2.1	U
WPP-SG09-170426-D	n-Butyl Acetate	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG09-170426-D	n-Heptane	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-SG09-170426-D	n-Hexane	2.2		ug/m3	0.62	2.1	2.2	
WPP-SG09-170426-D	n-Nonane	2.1	U	ug/m3	0.62	2.1	2.1	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701990

Sample Number	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-SG09-170426-D	n-Octane	2.1	U	ug/m3	0.75	2.1	2.1	U
WPP-SG09-170426-D	n-Propylbenzene	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG09-170426-D	o-Xylene	2.1	U	ug/m3	0.62	2.1	2.1	U
WPP-SG09-170426-D	Propene	6.4		ug/m3	0.58	2.1	6.4	
WPP-SG09-170426-D	Styrene	2.1	U	ug/m3	0.62	2.1	2.1	U
WPP-SG09-170426-D	Tetrachloroethene	5.6		ug/m3	0.58	2.1	5.6	
WPP-SG09-170426-D	Tetrahydrofuran (THF)	2.1	U	ug/m3	0.83	2.1	2.1	U
WPP-SG09-170426-D	Toluene	9.3		ug/m3	0.71	2.1	9.3	
WPP-SG09-170426-D	trans-1,2-Dichloroethene	2.1	U	ug/m3	0.79	2.1	2.1	U
WPP-SG09-170426-D	trans-1,3-Dichloropropene	2.1	U	ug/m3	0.66	2.1	2.1	U
WPP-SG09-170426-D	Trichloroethene (TCE)	2.1	U	ug/m3	0.58	2.1	2.1	U
WPP-SG09-170426-D	Trichlorofluoromethane (CFC 11)	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-SG09-170426-D	Vinyl Acetate	21	U	ug/m3	2.7	21	21	U
WPP-SG09-170426-D	Vinyl Chloride	2.1	U	ug/m3	0.71	2.1	2.1	U
WPP-SG10-170426	1,1,1-Trichloroethane (TCA)	2.8		ug/m3	0.74	2.2	2.8	
WPP-SG10-170426	1,1,2,2-Tetrachloroethane	2.2	U	ug/m3	0.66	2.2	2.2	U
WPP-SG10-170426	1,1,2-Trichloroethane	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG10-170426	1,1,2-Trichlorotrifluoroethane	2.2	U	ug/m3	0.74	2.2	2.2	U
WPP-SG10-170426	1,1-Dichloroethane (1,1-DCA)	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG10-170426	1,1-Dichloroethene (1,1-DCE)	2.2	U	ug/m3	0.74	2.2	2.2	U
WPP-SG10-170426	1,2,4-Trichlorobenzene	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG10-170426	1,2,4-Trimethylbenzene	3.5		ug/m3	0.66	2.2	3.5	
WPP-SG10-170426	1,2-Dibromo 3-Chloropropane	2.2	U	ug/m3	0.43	2.2	2.2	U
WPP-SG10-170426	1,2-Dibromoethane	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG10-170426	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.2	U	ug/m3	0.83	2.2	2.2	U
WPP-SG10-170426	1,2-Dichlorobenzene	2.2	U	ug/m3	0.66	2.2	2.2	U
WPP-SG10-170426	1,2-Dichloroethane	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG10-170426	1,2-Dichloropropane	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG10-170426	1,3,5-Trimethylbenzene	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG10-170426	1,3-Butadiene	2.2	U	ug/m3	0.96	2.2	2.2	U
WPP-SG10-170426	1,3-Dichlorobenzene	34		ug/m3	0.66	2.2	34	
WPP-SG10-170426	1,4-Dichlorobenzene	2.2	U	ug/m3	0.61	2.2	2.2	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701990

Sample Number	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-SG10-170426	1,4-Dioxane	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG10-170426	2-Butanone (MEK)	22	U	ug/m3	0.92	22	22	U
WPP-SG10-170426	2-Hexanone	3.7		ug/m3	0.7	2.2	3.7	
WPP-SG10-170426	2-Propanol (Isopropyl Alcohol)	55		ug/m3	1.8	22	55	
WPP-SG10-170426	3-Chloro-1-propene (Allyl Chloride)	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG10-170426	4-Ethyltoluene	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG10-170426	4-Methyl-2-pentanone	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG10-170426	Acetone	380		ug/m3	3.4	22	380	
WPP-SG10-170426	Acetonitrile	2.2	U	ug/m3	0.79	2.2	2.2	U
WPP-SG10-170426	Acrolein	9.4		ug/m3	0.74	8.8	9.4	
WPP-SG10-170426	Acrylonitrile	2.2	U	ug/m3	0.74	2.2	2.2	U
WPP-SG10-170426	alpha-Pinene	16		ug/m3	0.61	2.2	16	
WPP-SG10-170426	Benzene	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG10-170426	Benzyl Chloride	2.2	U	ug/m3	0.48	2.2	2.2	U
WPP-SG10-170426	Bromodichloromethane	2.2	U	ug/m3	0.66	2.2	2.2	U
WPP-SG10-170426	Bromoform	2.2	U	ug/m3	0.66	2.2	2.2	U
WPP-SG10-170426	Bromomethane	2.2	U	ug/m3	0.83	2.2	2.2	U
WPP-SG10-170426	Carbon Disulfide	22	U	ug/m3	0.66	22	22	U
WPP-SG10-170426	Carbon Tetrachloride	2.2	U	ug/m3	0.66	2.2	2.2	U
WPP-SG10-170426	Chlorobenzene	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG10-170426	Chloroethane	2.2	U	ug/m3	0.74	2.2	2.2	U
WPP-SG10-170426	Chloroform	2.2	U	ug/m3	0.74	2.2	2.2	U
WPP-SG10-170426	Chloromethane	2.2	U	ug/m3	0.66	2.2	2.2	U
WPP-SG10-170426	cis-1,2-Dichloroethene	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG10-170426	cis-1,3-Dichloropropene	2.2	U	ug/m3	0.61	2.2	2.2	U
WPP-SG10-170426	Cyclohexane	4.4	U	ug/m3	1.3	4.4	4.4	U
WPP-SG10-170426	Dibromochloromethane	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG10-170426	Dichlorodifluoromethane (CFC 12)	2.5		ug/m3	0.74	2.2	2.5	
WPP-SG10-170426	Dichloromethane (Methylene Chloride)	2.2	U	ug/m3	0.74	2.2	2.2	U
WPP-SG10-170426	d-Limonene	7.7		ug/m3	0.61	2.2	7.7	
WPP-SG10-170426	Ethanol	62		ug/m3	3.5	22	62	
WPP-SG10-170426	Ethyl Acetate	17		ug/m3	1.5	4.4	17	

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701990

Sample Number	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-SG10-170426	Ethylbenzene	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG10-170426	Hexachlorobutadiene	2.2	U	ug/m3	0.61	2.2	2.2	U
WPP-SG10-170426	Isopropylbenzene (Cumene)	2.2	U	ug/m3	0.66	2.2	2.2	U
WPP-SG10-170426	m,p-Xylenes	5.6		ug/m3	1.3	4.4	5.6	
WPP-SG10-170426	Methyl Methacrylate	4.4	U	ug/m3	1.4	4.4	4.4	U
WPP-SG10-170426	Methyl tert-Butyl Ether	2.2	U	ug/m3	0.74	2.2	2.2	U
WPP-SG10-170426	Naphthalene	2.2	U	ug/m3	0.79	2.2	2.2	U
WPP-SG10-170426	n-Butyl Acetate	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG10-170426	n-Heptane	3		ug/m3	0.74	2.2	3	
WPP-SG10-170426	n-Hexane	4.5		ug/m3	0.66	2.2	4.5	
WPP-SG10-170426	n-Nonane	2.9		ug/m3	0.66	2.2	2.9	
WPP-SG10-170426	n-Octane	3.4		ug/m3	0.79	2.2	3.4	
WPP-SG10-170426	n-Propylbenzene	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG10-170426	o-Xylene	2.6		ug/m3	0.66	2.2	2.6	
WPP-SG10-170426	Propene	15		ug/m3	0.61	2.2	15	
WPP-SG10-170426	Styrene	2.2	U	ug/m3	0.66	2.2	2.2	U
WPP-SG10-170426	Tetrachloroethene	8.5		ug/m3	0.61	2.2	8.5	
WPP-SG10-170426	Tetrahydrofuran (THF)	2.2	U	ug/m3	0.88	2.2	2.2	U
WPP-SG10-170426	Toluene	13		ug/m3	0.74	2.2	13	
WPP-SG10-170426	trans-1,2-Dichloroethene	2.2	U	ug/m3	0.83	2.2	2.2	U
WPP-SG10-170426	trans-1,3-Dichloropropene	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG10-170426	Trichloroethene (TCE)	2.2	U	ug/m3	0.61	2.2	2.2	U
WPP-SG10-170426	Trichlorofluoromethane (CFC 11)	2.2	U	ug/m3	0.74	2.2	2.2	U
WPP-SG10-170426	Vinyl Acetate	22	U	ug/m3	2.8	22	22	U
WPP-SG10-170426	Vinyl Chloride	2.2	U	ug/m3	0.74	2.2	2.2	U
WPP-SG11-170426	1,1,1-Trichloroethane (TCA)	20		ug/m3	0.67	2	20	
WPP-SG11-170426	1,1,2,2-Tetrachloroethane	2	U	ug/m3	0.59	2	2	U
WPP-SG11-170426	1,1,2-Trichloroethane	2	U	ug/m3	0.63	2	2	U
WPP-SG11-170426	1,1,2-Trichlorotrifluoroethane	2	U	ug/m3	0.67	2	2	U
WPP-SG11-170426	1,1-Dichloroethane (1,1-DCA)	2	U	ug/m3	0.63	2	2	U
WPP-SG11-170426	1,1-Dichloroethene (1,1-DCE)	2	U	ug/m3	0.67	2	2	U
WPP-SG11-170426	1,2,4-Trichlorobenzene	2	U	ug/m3	0.63	2	2	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701990

Sample Number	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-SG11-170426	1,2,4-Trimethylbenzene	3.2		ug/m3	0.59	2	3.2	
WPP-SG11-170426	1,2-Dibromo 3-Chloropropane	2 U		ug/m3	0.39	2	2 U	
WPP-SG11-170426	1,2-Dibromoethane	2 U		ug/m3	0.63	2	2 U	
WPP-SG11-170426	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2 U		ug/m3	0.75	2	2 U	
WPP-SG11-170426	1,2-Dichlorobenzene	2 U		ug/m3	0.59	2	2 U	
WPP-SG11-170426	1,2-Dichloroethane	2 U		ug/m3	0.63	2	2 U	
WPP-SG11-170426	1,2-Dichloropropane	2 U		ug/m3	0.63	2	2 U	
WPP-SG11-170426	1,3,5-Trimethylbenzene	2 U		ug/m3	0.63	2	2 U	
WPP-SG11-170426	1,3-Butadiene	2 U		ug/m3	0.86	2	2 U	
WPP-SG11-170426	1,3-Dichlorobenzene	71		ug/m3	0.59	2	71	
WPP-SG11-170426	1,4-Dichlorobenzene	2 U		ug/m3	0.55	2	2 U	
WPP-SG11-170426	1,4-Dioxane	2 U		ug/m3	0.63	2	2 U	
WPP-SG11-170426	2-Butanone (MEK)	21		ug/m3	0.82	20	21	
WPP-SG11-170426	2-Hexanone	3.9		ug/m3	0.63	2	3.9	
WPP-SG11-170426	2-Propanol (Isopropyl Alcohol)	61		ug/m3	1.6	20	61	
WPP-SG11-170426	3-Chloro-1-propene (Allyl Chloride)	2 U		ug/m3	0.63	2	2 U	
WPP-SG11-170426	4-Ethyltoluene	2 U		ug/m3	0.63	2	2 U	
WPP-SG11-170426	4-Methyl-2-pentanone	2 U		ug/m3	0.63	2	2 U	
WPP-SG11-170426	Acetone	420		ug/m3	3	20	420	
WPP-SG11-170426	Acetonitrile	2 U		ug/m3	0.71	2	2 U	
WPP-SG11-170426	Acrolein	11		ug/m3	0.67	7.9	11	
WPP-SG11-170426	Acrylonitrile	2 U		ug/m3	0.67	2	2 U	
WPP-SG11-170426	alpha-Pinene	16		ug/m3	0.55	2	16	
WPP-SG11-170426	Benzene	3.2		ug/m3	0.63	2	3.2	
WPP-SG11-170426	Benzyl Chloride	2 U		ug/m3	0.43	2	2 U	
WPP-SG11-170426	Bromodichloromethane	2 U		ug/m3	0.59	2	2 U	
WPP-SG11-170426	Bromoform	2 U		ug/m3	0.59	2	2 U	
WPP-SG11-170426	Bromomethane	2 U		ug/m3	0.75	2	2 U	
WPP-SG11-170426	Carbon Disulfide	20 U		ug/m3	0.59	20	20 U	
WPP-SG11-170426	Carbon Tetrachloride	2.7		ug/m3	0.59	2	2.7	
WPP-SG11-170426	Chlorobenzene	2 U		ug/m3	0.63	2	2 U	
WPP-SG11-170426	Chloroethane	2 U		ug/m3	0.67	2	2 U	

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701990

Sample Number	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-SG11-170426	Chloroform	2	U	ug/m3	0.67	2	2	U
WPP-SG11-170426	Chloromethane	2	U	ug/m3	0.59	2	2	U
WPP-SG11-170426	cis-1,2-Dichloroethene	2	U	ug/m3	0.63	2	2	U
WPP-SG11-170426	cis-1,3-Dichloropropene	2	U	ug/m3	0.55	2	2	U
WPP-SG11-170426	Cyclohexane	4.8		ug/m3	1.1	3.9	4.8	
WPP-SG11-170426	Dibromochloromethane	2	U	ug/m3	0.63	2	2	U
WPP-SG11-170426	Dichlorodifluoromethane (CFC 12)	2.6		ug/m3	0.67	2	2.6	
WPP-SG11-170426	Dichloromethane (Methylene Chloride)	2	U	ug/m3	0.67	2	2	U
WPP-SG11-170426	d-Limonene	5.8		ug/m3	0.55	2	5.8	
WPP-SG11-170426	Ethanol	82		ug/m3	3.1	20	82	
WPP-SG11-170426	Ethyl Acetate	43		ug/m3	1.4	3.9	43	
WPP-SG11-170426	Ethylbenzene	2	U	ug/m3	0.63	2	2	U
WPP-SG11-170426	Hexachlorobutadiene	2	U	ug/m3	0.55	2	2	U
WPP-SG11-170426	Isopropylbenzene (Cumene)	2	U	ug/m3	0.59	2	2	U
WPP-SG11-170426	m,p-Xylenes	6		ug/m3	1.2	3.9	6	
WPP-SG11-170426	Methyl Methacrylate	3.9	U	ug/m3	1.2	3.9	3.9	U
WPP-SG11-170426	Methyl tert-Butyl Ether	2	U	ug/m3	0.67	2	2	U
WPP-SG11-170426	Naphthalene	2	U	ug/m3	0.71	2	2	U
WPP-SG11-170426	n-Butyl Acetate	2	U	ug/m3	0.63	2	2	U
WPP-SG11-170426	n-Heptane	4.9		ug/m3	0.67	2	4.9	
WPP-SG11-170426	n-Hexane	8.5		ug/m3	0.59	2	8.5	
WPP-SG11-170426	n-Nonane	2.1		ug/m3	0.59	2	2.1	
WPP-SG11-170426	n-Octane	3.3		ug/m3	0.71	2	3.3	
WPP-SG11-170426	n-Propylbenzene	2	U	ug/m3	0.63	2	2	U
WPP-SG11-170426	o-Xylene	2.6		ug/m3	0.59	2	2.6	
WPP-SG11-170426	Propene	15		ug/m3	0.55	2	15	
WPP-SG11-170426	Styrene	2	U	ug/m3	0.59	2	2	U
WPP-SG11-170426	Tetrachloroethene	4.7		ug/m3	0.55	2	4.7	
WPP-SG11-170426	Tetrahydrofuran (THF)	2	U	ug/m3	0.79	2	2	U
WPP-SG11-170426	Toluene	15		ug/m3	0.67	2	15	
WPP-SG11-170426	trans-1,2-Dichloroethene	2	U	ug/m3	0.75	2	2	U
WPP-SG11-170426	trans-1,3-Dichloropropene	2	U	ug/m3	0.63	2	2	U

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701990

Sample Number	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-SG11-170426	Trichloroethene (TCE)	61		ug/m3	0.55	2	61	
WPP-SG11-170426	Trichlorofluoromethane (CFC 11)	2 U		ug/m3	0.67	2	2 U	
WPP-SG11-170426	Vinyl Acetate	20 U		ug/m3	2.6	20	20 U	
WPP-SG11-170426	Vinyl Chloride	2 U		ug/m3	0.67	2	2 U	
WPP-SG12-170426	1,1,1-Trichloroethane (TCA)	30		ug/m3	0.75	2.2	30	
WPP-SG12-170426	1,1,2,2-Tetrachloroethane	2.2 U		ug/m3	0.66	2.2	2.2 U	
WPP-SG12-170426	1,1,2-Trichloroethane	2.2 U		ug/m3	0.7	2.2	2.2 U	
WPP-SG12-170426	1,1,2-Trichlorotrifluoroethane	2.2 U		ug/m3	0.75	2.2	2.2 U	
WPP-SG12-170426	1,1-Dichloroethane (1,1-DCA)	2.2 U		ug/m3	0.7	2.2	2.2 U	
WPP-SG12-170426	1,1-Dichloroethene (1,1-DCE)	2.2 U		ug/m3	0.75	2.2	2.2 U	
WPP-SG12-170426	1,2,4-Trichlorobenzene	2.2 U		ug/m3	0.7	2.2	2.2 U	
WPP-SG12-170426	1,2,4-Trimethylbenzene	8.8		ug/m3	0.66	2.2	8.8	
WPP-SG12-170426	1,2-Dibromo 3-Chloropropane	2.2 U		ug/m3	0.44	2.2	2.2 U	
WPP-SG12-170426	1,2-Dibromoethane	2.2 U		ug/m3	0.7	2.2	2.2 U	
WPP-SG12-170426	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.2 U		ug/m3	0.84	2.2	2.2 U	
WPP-SG12-170426	1,2-Dichlorobenzene	2.2 U		ug/m3	0.66	2.2	2.2 U	
WPP-SG12-170426	1,2-Dichloroethane	2.2 U		ug/m3	0.7	2.2	2.2 U	
WPP-SG12-170426	1,2-Dichloropropane	2.2 U		ug/m3	0.7	2.2	2.2 U	
WPP-SG12-170426	1,3,5-Trimethylbenzene	2.6		ug/m3	0.7	2.2	2.6	
WPP-SG12-170426	1,3-Butadiene	2.2 U		ug/m3	0.97	2.2	2.2 U	
WPP-SG12-170426	1,3-Dichlorobenzene	160		ug/m3	0.66	2.2	160	
WPP-SG12-170426	1,4-Dichlorobenzene	2.2 U		ug/m3	0.62	2.2	2.2 U	
WPP-SG12-170426	1,4-Dioxane	2.2 U		ug/m3	0.7	2.2	2.2 U	
WPP-SG12-170426	2-Butanone (MEK)	22 U		ug/m3	0.92	22	22 U	
WPP-SG12-170426	2-Hexanone	5.4		ug/m3	0.7	2.2	5.4	
WPP-SG12-170426	2-Propanol (Isopropyl Alcohol)	42		ug/m3	1.8	22	42	
WPP-SG12-170426	3-Chloro-1-propene (Allyl Chloride)	2.2 U		ug/m3	0.7	2.2	2.2 U	
WPP-SG12-170426	4-Ethyltoluene	2.2 U		ug/m3	0.7	2.2	2.2 U	
WPP-SG12-170426	4-Methyl-2-pentanone	19		ug/m3	0.7	2.2	19	
WPP-SG12-170426	Acetone	350		ug/m3	3.4	22	350	
WPP-SG12-170426	Acetonitrile	2.2 U		ug/m3	0.79	2.2	2.2 U	
WPP-SG12-170426	Acrolein	10		ug/m3	0.75	8.8	10	

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701990

Sample Number	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-SG12-170426	Acrylonitrile	2.2	U	ug/m3	0.75	2.2	2.2	U
WPP-SG12-170426	alpha-Pinene	29		ug/m3	0.62	2.2	29	
WPP-SG12-170426	Benzene	4		ug/m3	0.7	2.2	4	
WPP-SG12-170426	Benzyl Chloride	2.2	U	ug/m3	0.48	2.2	2.2	U
WPP-SG12-170426	Bromodichloromethane	2.2	U	ug/m3	0.66	2.2	2.2	U
WPP-SG12-170426	Bromoform	2.2	U	ug/m3	0.66	2.2	2.2	U
WPP-SG12-170426	Bromomethane	2.2	U	ug/m3	0.84	2.2	2.2	U
WPP-SG12-170426	Carbon Disulfide	22	U	ug/m3	0.66	22	22	U
WPP-SG12-170426	Carbon Tetrachloride	2.2	U	ug/m3	0.66	2.2	2.2	U
WPP-SG12-170426	Chlorobenzene	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG12-170426	Chloroethane	2.2	U	ug/m3	0.75	2.2	2.2	U
WPP-SG12-170426	Chloroform	2.2	U	ug/m3	0.75	2.2	2.2	U
WPP-SG12-170426	Chloromethane	2.2	U	ug/m3	0.66	2.2	2.2	U
WPP-SG12-170426	cis-1,2-Dichloroethene	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG12-170426	cis-1,3-Dichloropropene	2.2	U	ug/m3	0.62	2.2	2.2	U
WPP-SG12-170426	Cyclohexane	5		ug/m3	1.3	4.4	5	
WPP-SG12-170426	Dibromochloromethane	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG12-170426	Dichlorodifluoromethane (CFC 12)	2.2		ug/m3	0.75	2.2	2.2	
WPP-SG12-170426	Dichloromethane (Methylene Chloride)	2.2	U	ug/m3	0.75	2.2	2.2	U
WPP-SG12-170426	d-Limonene	23		ug/m3	0.62	2.2	23	
WPP-SG12-170426	Ethanol	52		ug/m3	3.5	22	52	
WPP-SG12-170426	Ethyl Acetate	19		ug/m3	1.5	4.4	19	
WPP-SG12-170426	Ethylbenzene	2.8		ug/m3	0.7	2.2	2.8	
WPP-SG12-170426	Hexachlorobutadiene	2.2	U	ug/m3	0.62	2.2	2.2	U
WPP-SG12-170426	Isopropylbenzene (Cumene)	2.2	U	ug/m3	0.66	2.2	2.2	U
WPP-SG12-170426	m,p-Xylenes	9.8		ug/m3	1.3	4.4	9.8	
WPP-SG12-170426	Methyl Methacrylate	4.4	U	ug/m3	1.4	4.4	4.4	U
WPP-SG12-170426	Methyl tert-Butyl Ether	2.2	U	ug/m3	0.75	2.2	2.2	U
WPP-SG12-170426	Naphthalene	2.3		ug/m3	0.79	2.2	2.3	
WPP-SG12-170426	n-Butyl Acetate	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG12-170426	n-Heptane	5		ug/m3	0.75	2.2	5	
WPP-SG12-170426	n-Hexane	6.6		ug/m3	0.66	2.2	6.6	

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701990

Sample Number	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-SG12-170426	n-Nonane	7.4		ug/m3	0.66	2.2	7.4	
WPP-SG12-170426	n-Octane	8		ug/m3	0.79	2.2	8	
WPP-SG12-170426	n-Propylbenzene	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG12-170426	o-Xylene	4.8		ug/m3	0.66	2.2	4.8	
WPP-SG12-170426	Propene	13		ug/m3	0.62	2.2	13	
WPP-SG12-170426	Styrene	2.3		ug/m3	0.66	2.2	2.3	
WPP-SG12-170426	Tetrachloroethene	2.2	U	ug/m3	0.62	2.2	2.2	U
WPP-SG12-170426	Tetrahydrofuran (THF)	2.2	U	ug/m3	0.88	2.2	2.2	U
WPP-SG12-170426	Toluene	17		ug/m3	0.75	2.2	17	
WPP-SG12-170426	trans-1,2-Dichloroethene	2.2	U	ug/m3	0.84	2.2	2.2	U
WPP-SG12-170426	trans-1,3-Dichloropropene	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG12-170426	Trichloroethene (TCE)	2.2	U	ug/m3	0.62	2.2	2.2	U
WPP-SG12-170426	Trichlorofluoromethane (CFC 11)	2.2	U	ug/m3	0.75	2.2	2.2	U
WPP-SG12-170426	Vinyl Acetate	22	U	ug/m3	2.9	22	22	U
WPP-SG12-170426	Vinyl Chloride	2.2	U	ug/m3	0.75	2.2	2.2	U
WPP-SG13-170426	1,1,1-Trichloroethane (TCA)	2.2	U	ug/m3	0.74	2.2	2.2	U
WPP-SG13-170426	1,1,2,2-Tetrachloroethane	2.2	U	ug/m3	0.66	2.2	2.2	U
WPP-SG13-170426	1,1,2-Trichloroethane	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG13-170426	1,1,2-Trichlorotrifluoroethane	2.2	U	ug/m3	0.74	2.2	2.2	U
WPP-SG13-170426	1,1-Dichloroethane (1,1-DCA)	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG13-170426	1,1-Dichloroethene (1,1-DCE)	2.2	U	ug/m3	0.74	2.2	2.2	U
WPP-SG13-170426	1,2,4-Trichlorobenzene	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG13-170426	1,2,4-Trimethylbenzene	4.9		ug/m3	0.66	2.2	4.9	
WPP-SG13-170426	1,2-Dibromo 3-Chloropropane	2.2	U	ug/m3	0.43	2.2	2.2	U
WPP-SG13-170426	1,2-Dibromoethane	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG13-170426	1,2-Dichloro-1,1,2,2-tetrafluoroethane (CFC 114)	2.2	U	ug/m3	0.83	2.2	2.2	U
WPP-SG13-170426	1,2-Dichlorobenzene	2.2	U	ug/m3	0.66	2.2	2.2	U
WPP-SG13-170426	1,2-Dichloroethane	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG13-170426	1,2-Dichloropropane	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG13-170426	1,3,5-Trimethylbenzene	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG13-170426	1,3-Butadiene	2.2	U	ug/m3	0.96	2.2	2.2	U
WPP-SG13-170426	1,3-Dichlorobenzene	52		ug/m3	0.66	2.2	52	

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701990

Sample Number	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-SG13-170426	1,4-Dichlorobenzene	2.2	U	ug/m3	0.61	2.2	2.2	U
WPP-SG13-170426	1,4-Dioxane	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG13-170426	2-Butanone (MEK)	22	U	ug/m3	0.92	22	22	U
WPP-SG13-170426	2-Hexanone	2.4		ug/m3	0.7	2.2	2.4	
WPP-SG13-170426	2-Propanol (Isopropyl Alcohol)	36		ug/m3	1.8	22	36	
WPP-SG13-170426	3-Chloro-1-propene (Allyl Chloride)	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG13-170426	4-Ethyltoluene	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG13-170426	4-Methyl-2-pentanone	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG13-170426	Acetone	250		ug/m3	3.4	22	250	
WPP-SG13-170426	Acetonitrile	2.2	U	ug/m3	0.79	2.2	2.2	U
WPP-SG13-170426	Acrolein	8.8	U	ug/m3	0.74	8.8	8.8	U
WPP-SG13-170426	Acrylonitrile	2.2	U	ug/m3	0.74	2.2	2.2	U
WPP-SG13-170426	alpha-Pinene	19		ug/m3	0.61	2.2	19	
WPP-SG13-170426	Benzene	5.7		ug/m3	0.7	2.2	5.7	
WPP-SG13-170426	Benzyl Chloride	2.2	U	ug/m3	0.48	2.2	2.2	U
WPP-SG13-170426	Bromodichloromethane	2.2	U	ug/m3	0.66	2.2	2.2	U
WPP-SG13-170426	Bromoform	2.2	U	ug/m3	0.66	2.2	2.2	U
WPP-SG13-170426	Bromomethane	2.2	U	ug/m3	0.83	2.2	2.2	U
WPP-SG13-170426	Carbon Disulfide	22	U	ug/m3	0.66	22	22	U
WPP-SG13-170426	Carbon Tetrachloride	2.2	U	ug/m3	0.66	2.2	2.2	U
WPP-SG13-170426	Chlorobenzene	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG13-170426	Chloroethane	2.2	U	ug/m3	0.74	2.2	2.2	U
WPP-SG13-170426	Chloroform	2.2	U	ug/m3	0.74	2.2	2.2	U
WPP-SG13-170426	Chloromethane	2.2	U	ug/m3	0.66	2.2	2.2	U
WPP-SG13-170426	cis-1,2-Dichloroethene	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG13-170426	cis-1,3-Dichloropropene	2.2	U	ug/m3	0.61	2.2	2.2	U
WPP-SG13-170426	Cyclohexane	7.6		ug/m3	1.3	4.4	7.6	
WPP-SG13-170426	Dibromochloromethane	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG13-170426	Dichlorodifluoromethane (CFC 12)	2.4		ug/m3	0.74	2.2	2.4	
WPP-SG13-170426	Dichloromethane (Methylene Chloride)	2.2	U	ug/m3	0.74	2.2	2.2	U
WPP-SG13-170426	d-Limonene	12		ug/m3	0.61	2.2	12	
WPP-SG13-170426	Ethanol	44		ug/m3	3.5	22	44	

Williamson Polishing Plating  
Soil Gas Sample Results  
ALS/P1701990

Sample Number	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-SG13-170426	Ethyl Acetate	18		ug/m3	1.5	4.4	18	
WPP-SG13-170426	Ethylbenzene	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG13-170426	Hexachlorobutadiene	2.2	U	ug/m3	0.61	2.2	2.2	U
WPP-SG13-170426	Isopropylbenzene (Cumene)	2.2	U	ug/m3	0.66	2.2	2.2	U
WPP-SG13-170426	m,p-Xylenes	6.7		ug/m3	1.3	4.4	6.7	
WPP-SG13-170426	Methyl Methacrylate	4.4	U	ug/m3	1.4	4.4	4.4	U
WPP-SG13-170426	Methyl tert-Butyl Ether	2.2	U	ug/m3	0.74	2.2	2.2	U
WPP-SG13-170426	Naphthalene	2.2	U	ug/m3	0.79	2.2	2.2	U
WPP-SG13-170426	n-Butyl Acetate	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG13-170426	n-Heptane	8.7		ug/m3	0.74	2.2	8.7	
WPP-SG13-170426	n-Hexane	13		ug/m3	0.66	2.2	13	
WPP-SG13-170426	n-Nonane	4.1		ug/m3	0.66	2.2	4.1	
WPP-SG13-170426	n-Octane	6.8		ug/m3	0.79	2.2	6.8	
WPP-SG13-170426	n-Propylbenzene	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG13-170426	o-Xylene	3.1		ug/m3	0.66	2.2	3.1	
WPP-SG13-170426	Propene	11		ug/m3	0.61	2.2	11	
WPP-SG13-170426	Styrene	2.2	U	ug/m3	0.66	2.2	2.2	U
WPP-SG13-170426	Tetrachloroethene	2.2	U	ug/m3	0.61	2.2	2.2	U
WPP-SG13-170426	Tetrahydrofuran (THF)	2.2	U	ug/m3	0.88	2.2	2.2	U
WPP-SG13-170426	Toluene	18		ug/m3	0.74	2.2	18	
WPP-SG13-170426	trans-1,2-Dichloroethene	2.2	U	ug/m3	0.83	2.2	2.2	U
WPP-SG13-170426	trans-1,3-Dichloropropene	2.2	U	ug/m3	0.7	2.2	2.2	U
WPP-SG13-170426	Trichloroethene (TCE)	2.2	U	ug/m3	0.61	2.2	2.2	U
WPP-SG13-170426	Trichlorofluoromethane (CFC 11)	2.2	U	ug/m3	0.74	2.2	2.2	U
WPP-SG13-170426	Vinyl Acetate	22	U	ug/m3	2.8	22	22	U
WPP-SG13-170426	Vinyl Chloride	2.2	U	ug/m3	0.74	2.2	2.2	U

**DATA VALIDATION CHECKLIST – STAGE 2A**  
**EPA REGION 5 START CONTRACT**

<b>Site Name</b>	Williamson Polishing & Plating RS	<b>TDD No.</b>	0001-1610-011
<b>Document Tracking No.</b>	1743B	<b>Technical Reviewer (signature and date)</b>	<i>Jessica A. Vickers</i> May 30, 2017
<b>Data Reviewer (signature and date)</b>	<i>Shanna Davis</i> May 24, 2017	<b>Laboratory</b>	CT Laboratories LLC/Baraboo, WI
<b>Laboratory Report No.</b>	127039		
<b>Analyses</b>	Volatile organic compounds (VOCs) by SW-846 Method 8260C		
<b>Samples and Matrix</b>	Fifteen groundwater samples (including two field duplicates and one trip blank)		
<b>Field Duplicate Pairs</b>	WPP-GW05-170427/WPP-GW05170427-D and WPP-GW06-170428/WPP-WG06-170428-D		
<b>Field Blanks</b>	Trip Blank		

**INTRODUCTION**

This checklist summarizes the Stage 2A validation performed on the subject laboratory report, in accordance with the U.S. Environmental Protection Agency (EPA) *Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use* (January 2009). Analytical data were evaluated in general accordance with the EPA *National Functional Guidelines (NFG) for Organic Superfund Methods Data Review* (January 2017).

**OVERALL EVALUATION**

No rejection or qualification of results was required for this data package. The results may be used as reported by the laboratory.

**Data completeness:**

Within Criteria	Exceedance/Notes
Y	

**Sample preservation, receipt, and holding times:**

Within Criteria	Exceedance/Notes
Y	



**DATA VALIDATION CHECKLIST – STAGE 2A  
EPA REGION 5 START CONTRACT**

**Method blanks:**

Within Criteria	Exceedance/Notes
N	Chloromethane was found in the method blank. No qualifications were required because chloromethane was not detected in associated samples.

**Field blanks:**

Within Criteria	Exceedance/Notes
Y	

**System monitoring compounds (surrogates and labeled compounds):**

Within Criteria	Exceedance/Notes
Y	

**MS/MSD:**

Within Criteria	Exceedance/Notes
Y	

**Laboratory duplicates:**

Within Criteria	Exceedance/Notes
NA	

**Field duplicates:**

Within Criteria	Exceedance/Notes
Y	



**DATA VALIDATION CHECKLIST – STAGE 2A  
EPA REGION 5 START CONTRACT**

**LCSs/LCSDs:**

Within Criteria	Exceedance/Notes
N	The recovery for 1,4-dioxane was below the lower control limit. No 1,4-dioxane was detected in the samples; therefore, no data were qualified.

**Sample dilutions:**

Within Criteria	Exceedance/Notes
NA	

**Re-extraction and reanalysis:**

Within Criteria	Exceedance/Notes
NA	

**MDLs/RLs:**

Within Criteria	Exceedance/Notes
Y	Detected results below the RL were qualified as estimated (flagged J) by the laboratory.

**Tentatively identified compounds:**

Within Criteria	Exceedance/Notes
NA	

**Other [specify]:**

Within Criteria	Exceedance/Notes
NA	



## DATA VALIDATION CHECKLIST – STAGE 2A EPA REGION 5 START CONTRACT

### Overall Qualifications:

See results summary pages attached for changes to the laboratory qualifiers based upon this validation. The following is a list of qualifiers and definitions that may be used for the validation of this data package:

J	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.
J-	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.
NJ	The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated value is the approximate concentration of the analyte in the sample.
R	The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.
U	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).
UJ	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.



Williamson Polishing Plating  
Groundwater Sample Results  
CT Laboratories LLC /127039

Sample Number	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
TRIP BLANK	WG	1,1,1-Trichloroethane	0.21	U	ug/L	0.21	0.5	0.5	U
TRIP BLANK	WG	1,1,2,2-Tetrachloroethane	0.19	U	ug/L	0.19	0.5	0.5	U
TRIP BLANK	WG	1,1,2-Trichloroethane	0.26	U	ug/L	0.26	1	1	U
TRIP BLANK	WG	1,1-Dichloroethane	0.2	U	ug/L	0.2	0.5	0.5	U
TRIP BLANK	WG	1,1-Dichloroethene	0.24	U	ug/L	0.24	0.5	0.5	U
TRIP BLANK	WG	1,2,3-Trichlorobenzene	0.3	U	ug/L	0.3	1	1	U
TRIP BLANK	WG	1,2,4-Trichlorobenzene	0.3	U	ug/L	0.3	1	1	U
TRIP BLANK	WG	1,2-Dibromo-3-chloropropane	0.4	U	ug/L	0.4	1	1	U
TRIP BLANK	WG	1,2-Dibromoethane	0.16	U	ug/L	0.16	0.5	0.5	U
TRIP BLANK	WG	1,2-Dichlorobenzene	0.23	U	ug/L	0.23	0.5	0.5	U
TRIP BLANK	WG	1,2-Dichloroethane	0.3	U	ug/L	0.3	1	1	U
TRIP BLANK	WG	1,2-Dichloropropane	0.22	U	ug/L	0.22	0.5	0.5	U
TRIP BLANK	WG	1,3-Dichlorobenzene	0.26	U	ug/L	0.26	1	1	U
TRIP BLANK	WG	1,4-Dichlorobenzene	0.23	U	ug/L	0.23	0.5	0.5	U
TRIP BLANK	WG	1,4-Dioxane	5	UZQ	ug/L	5	25	25	U
TRIP BLANK	WG	112Trichloro122trifluoroethane	0.5	U	ug/L	0.5	1	1	U
TRIP BLANK	WG	2-Butanone	2.4	U	ug/L	2.4	5	5	U
TRIP BLANK	WG	2-Hexanone	4	U	ug/L	4	10	10	U
TRIP BLANK	WG	4-Methyl-2-pentanone	3	U	ug/L	3	10	10	U
TRIP BLANK	WG	Acetone	5	U	ug/L	5	10	10	U
TRIP BLANK	WG	Benzene	0.19	U	ug/L	0.19	0.5	0.5	U
TRIP BLANK	WG	Bromochloromethane	0.19	U	ug/L	0.19	0.5	0.5	U
TRIP BLANK	WG	Bromodichloromethane	0.2	U	ug/L	0.2	0.5	0.5	U
TRIP BLANK	WG	Bromoform	0.22	U	ug/L	0.22	0.5	0.5	U
TRIP BLANK	WG	Bromomethane	0.5	U	ug/L	0.5	1	1	U
TRIP BLANK	WG	Carbon disulfide	0.5	U	ug/L	0.5	1	1	U
TRIP BLANK	WG	Carbon tetrachloride	0.23	U	ug/L	0.23	0.5	0.5	U
TRIP BLANK	WG	Chlorobenzene	0.24	U	ug/L	0.24	0.5	0.5	U
TRIP BLANK	WG	Chloroethane	0.4	U	ug/L	0.4	1	1	U
TRIP BLANK	WG	Chloroform	0.15	U	ug/L	0.15	0.5	0.5	U
TRIP BLANK	WG	Chloromethane	0.4	U	ug/L	0.4	1	1	U
TRIP BLANK	WG	cis-1,2-Dichloroethene	0.25	U	ug/L	0.25	0.5	0.5	U

Williamson Polishing Plating  
Groundwater Sample Results  
CT Laboratories LLC /127039

Sample Number	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
TRIP BLANK	WG	cis-1,3-Dichloropropene	0.19	U	ug/L	0.19	0.5	0.5	U
TRIP BLANK	WG	Cyclohexane	0.28	U	ug/L	0.28	1	1	U
TRIP BLANK	WG	Dibromochloromethane	0.19	U	ug/L	0.19	0.5	0.5	U
TRIP BLANK	WG	Dichlorodifluoromethane	0.26	U	ug/L	0.26	1	1	U
TRIP BLANK	WG	Ethylbenzene	0.22	U	ug/L	0.22	0.5	0.5	U
TRIP BLANK	WG	Isopropylbenzene	0.18	U	ug/L	0.18	0.5	0.5	U
TRIP BLANK	WG	m & p-Xylene	0.5	U	ug/L	0.5	1	1	U
TRIP BLANK	WG	Methyl acetate	0.3	U	ug/L	0.3	1	1	U
TRIP BLANK	WG	Methyl tert-butyl ether	0.29	U	ug/L	0.29	1	1	U
TRIP BLANK	WG	Methylcyclohexane	0.23	U	ug/L	0.23	0.5	0.5	U
TRIP BLANK	WG	Methylene chloride	0.4	U	ug/L	0.4	2	2	U
TRIP BLANK	WG	o-Xylene	0.24	U	ug/L	0.24	0.5	0.5	U
TRIP BLANK	WG	Styrene	0.2	U	ug/L	0.2	0.5	0.5	U
TRIP BLANK	WG	Tetrachloroethene	0.3	U	ug/L	0.3	1	1	U
TRIP BLANK	WG	Toluene	0.22	U	ug/L	0.22	0.5	0.5	U
TRIP BLANK	WG	trans-1,2-Dichloroethene	0.25	U	ug/L	0.25	0.5	0.5	U
TRIP BLANK	WG	trans-1,3-Dichloropropene	0.19	U	ug/L	0.19	0.5	0.5	U
TRIP BLANK	WG	Trichloroethene	0.21	U	ug/L	0.21	0.5	0.5	U
TRIP BLANK	WG	Trichlorofluoromethane	0.2	U	ug/L	0.2	0.5	0.5	U
TRIP BLANK	WG	Vinyl chloride	0.18	U	ug/L	0.18	0.5	0.5	U
WPP-GW02-170427	WG	1,1,1-Trichloroethane	0.21	U	ug/L	0.21	0.5	0.5	U
WPP-GW02-170427	WG	1,1,2,2-Tetrachloroethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW02-170427	WG	1,1,2-Trichloroethane	0.26	U	ug/L	0.26	1	1	U
WPP-GW02-170427	WG	1,1-Dichloroethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW02-170427	WG	1,1-Dichloroethene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW02-170427	WG	1,2,3-Trichlorobenzene	0.3	U	ug/L	0.3	1	1	U
WPP-GW02-170427	WG	1,2,4-Trichlorobenzene	0.3	U	ug/L	0.3	1	1	U
WPP-GW02-170427	WG	1,2-Dibromo-3-chloropropane	0.4	U	ug/L	0.4	1	1	U
WPP-GW02-170427	WG	1,2-Dibromoethane	0.16	U	ug/L	0.16	0.5	0.5	U
WPP-GW02-170427	WG	1,2-Dichlorobenzene	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW02-170427	WG	1,2-Dichloroethane	0.3	U	ug/L	0.3	1	1	U
WPP-GW02-170427	WG	1,2-Dichloropropane	0.22	U	ug/L	0.22	0.5	0.5	U

Williamson Polishing Plating  
Groundwater Sample Results  
CT Laboratories LLC /127039

Sample Number	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-GW02-170427	WG	1,3-Dichlorobenzene	0.26	U	ug/L	0.26	1	1	U
WPP-GW02-170427	WG	1,4-Dichlorobenzene	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW02-170427	WG	1,4-Dioxane	5	UZQ	ug/L	5	25	25	U
WPP-GW02-170427	WG	112Trichloro122trifluoroethane	0.5	U	ug/L	0.5	1	1	U
WPP-GW02-170427	WG	2-Butanone	2.4	U	ug/L	2.4	5	5	U
WPP-GW02-170427	WG	2-Hexanone	4	U	ug/L	4	10	10	U
WPP-GW02-170427	WG	4-Methyl-2-pentanone	3	U	ug/L	3	10	10	U
WPP-GW02-170427	WG	Acetone	5	U	ug/L	5	10	10	U
WPP-GW02-170427	WG	Benzene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW02-170427	WG	Bromochloromethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW02-170427	WG	Bromodichloromethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW02-170427	WG	Bromoform	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW02-170427	WG	Bromomethane	0.5	U	ug/L	0.5	1	1	U
WPP-GW02-170427	WG	Carbon disulfide	0.5	U	ug/L	0.5	1	1	U
WPP-GW02-170427	WG	Carbon tetrachloride	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW02-170427	WG	Chlorobenzene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW02-170427	WG	Chloroethane	0.4	U	ug/L	0.4	1	1	U
WPP-GW02-170427	WG	Chloroform	0.15	U	ug/L	0.15	0.5	0.5	U
WPP-GW02-170427	WG	Chloromethane	0.4	U	ug/L	0.4	1	1	U
WPP-GW02-170427	WG	cis-1,2-Dichloroethene	0.25	U	ug/L	0.25	0.5	0.5	U
WPP-GW02-170427	WG	cis-1,3-Dichloropropene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW02-170427	WG	Cyclohexane	0.28	U	ug/L	0.28	1	1	U
WPP-GW02-170427	WG	Dibromochloromethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW02-170427	WG	Dichlorodifluoromethane	0.26	U	ug/L	0.26	1	1	U
WPP-GW02-170427	WG	Ethylbenzene	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW02-170427	WG	Isopropylbenzene	0.18	U	ug/L	0.18	0.5	0.5	U
WPP-GW02-170427	WG	m & p-Xylene	0.5	U	ug/L	0.5	1	1	U
WPP-GW02-170427	WG	Methyl acetate	0.3	U	ug/L	0.3	1	1	U
WPP-GW02-170427	WG	Methyl tert-butyl ether	0.29	U	ug/L	0.29	1	1	U
WPP-GW02-170427	WG	Methylcyclohexane	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW02-170427	WG	Methylene chloride	0.4	U	ug/L	0.4	2	2	U
WPP-GW02-170427	WG	o-Xylene	0.24	U	ug/L	0.24	0.5	0.5	U

Williamson Polishing Plating  
Groundwater Sample Results  
CT Laboratories LLC /127039

Sample Number	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-GW02-170427	WG	Styrene	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW02-170427	WG	Tetrachloroethene	0.3	U	ug/L	0.3	1	1	U
WPP-GW02-170427	WG	Toluene	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW02-170427	WG	trans-1,2-Dichloroethene	0.25	U	ug/L	0.25	0.5	0.5	U
WPP-GW02-170427	WG	trans-1,3-Dichloropropene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW02-170427	WG	Trichloroethene	0.21	U	ug/L	0.21	0.5	0.5	U
WPP-GW02-170427	WG	Trichlorofluoromethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW02-170427	WG	Vinyl chloride	0.18	U	ug/L	0.18	0.5	0.5	U
WPP-GW03-170428	WG	1,1,1-Trichloroethane	0.21	U	ug/L	0.21	0.5	0.5	U
WPP-GW03-170428	WG	1,1,2,2-Tetrachloroethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW03-170428	WG	1,1,2-Trichloroethane	0.26	U	ug/L	0.26	1	1	U
WPP-GW03-170428	WG	1,1-Dichloroethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW03-170428	WG	1,1-Dichloroethene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW03-170428	WG	1,2,3-Trichlorobenzene	0.3	U	ug/L	0.3	1	1	U
WPP-GW03-170428	WG	1,2,4-Trichlorobenzene	0.3	U	ug/L	0.3	1	1	U
WPP-GW03-170428	WG	1,2-Dibromo-3-chloropropane	0.4	U	ug/L	0.4	1	1	U
WPP-GW03-170428	WG	1,2-Dibromoethane	0.16	U	ug/L	0.16	0.5	0.5	U
WPP-GW03-170428	WG	1,2-Dichlorobenzene	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW03-170428	WG	1,2-Dichloroethane	0.3	U	ug/L	0.3	1	1	U
WPP-GW03-170428	WG	1,2-Dichloropropane	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW03-170428	WG	1,3-Dichlorobenzene	0.26	U	ug/L	0.26	1	1	U
WPP-GW03-170428	WG	1,4-Dichlorobenzene	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW03-170428	WG	1,4-Dioxane	5	UZQ	ug/L	5	25	25	U
WPP-GW03-170428	WG	1,1,2,2-Tetrachloroethane	0.5	U	ug/L	0.5	1	1	U
WPP-GW03-170428	WG	2-Butanone	2.4	U	ug/L	2.4	5	5	U
WPP-GW03-170428	WG	2-Hexanone	4	U	ug/L	4	10	10	U
WPP-GW03-170428	WG	4-Methyl-2-pentanone	3	U	ug/L	3	10	10	U
WPP-GW03-170428	WG	Acetone	5	U	ug/L	5	10	10	U
WPP-GW03-170428	WG	Benzene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW03-170428	WG	Bromochloromethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW03-170428	WG	Bromodichloromethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW03-170428	WG	Bromoform	0.22	U	ug/L	0.22	0.5	0.5	U

Williamson Polishing Plating  
Groundwater Sample Results  
CT Laboratories LLC /127039

Sample Number	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-GW03-170428	WG	Bromomethane	0.5	U	ug/L	0.5	1	1	U
WPP-GW03-170428	WG	Carbon disulfide	0.5	U	ug/L	0.5	1	1	U
WPP-GW03-170428	WG	Carbon tetrachloride	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW03-170428	WG	Chlorobenzene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW03-170428	WG	Chloroethane	0.4	U	ug/L	0.4	1	1	U
WPP-GW03-170428	WG	Chloroform	0.15	U	ug/L	0.15	0.5	0.5	U
WPP-GW03-170428	WG	Chloromethane	0.4	U	ug/L	0.4	1	1	U
WPP-GW03-170428	WG	cis-1,2-Dichloroethene	0.25	U	ug/L	0.25	0.5	0.5	U
WPP-GW03-170428	WG	cis-1,3-Dichloropropene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW03-170428	WG	Cyclohexane	0.28	U	ug/L	0.28	1	1	U
WPP-GW03-170428	WG	Dibromochloromethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW03-170428	WG	Dichlorodifluoromethane	0.26	U	ug/L	0.26	1	1	U
WPP-GW03-170428	WG	Ethylbenzene	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW03-170428	WG	Isopropylbenzene	0.18	U	ug/L	0.18	0.5	0.5	U
WPP-GW03-170428	WG	m & p-Xylene	0.5	U	ug/L	0.5	1	1	U
WPP-GW03-170428	WG	Methyl acetate	0.3	U	ug/L	0.3	1	1	U
WPP-GW03-170428	WG	Methyl tert-butyl ether	0.29	U	ug/L	0.29	1	1	U
WPP-GW03-170428	WG	Methylcyclohexane	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW03-170428	WG	Methylene chloride	0.4	U	ug/L	0.4	2	2	U
WPP-GW03-170428	WG	o-Xylene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW03-170428	WG	Styrene	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW03-170428	WG	Tetrachloroethene	0.3	U	ug/L	0.3	1	1	U
WPP-GW03-170428	WG	Toluene	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW03-170428	WG	trans-1,2-Dichloroethene	0.25	U	ug/L	0.25	0.5	0.5	U
WPP-GW03-170428	WG	trans-1,3-Dichloropropene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW03-170428	WG	Trichloroethene	0.21	U	ug/L	0.21	0.5	0.5	U
WPP-GW03-170428	WG	Trichlorofluoromethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW03-170428	WG	Vinyl chloride	0.18	U	ug/L	0.18	0.5	0.5	U
WPP-GW04-170427	WG	1,1,1-Trichloroethane	0.21	U	ug/L	0.21	0.5	0.5	U
WPP-GW04-170427	WG	1,1,2,2-Tetrachloroethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW04-170427	WG	1,1,2-Trichloroethane	0.26	U	ug/L	0.26	1	1	U
WPP-GW04-170427	WG	1,1-Dichloroethane	0.2	U	ug/L	0.2	0.5	0.5	U

Williamson Polishing Plating  
Groundwater Sample Results  
CT Laboratories LLC /127039

Sample Number	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-GW04-170427	WG	1,1-Dichloroethene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW04-170427	WG	1,2,3-Trichlorobenzene	0.3	U	ug/L	0.3	1	1	U
WPP-GW04-170427	WG	1,2,4-Trichlorobenzene	0.3	U	ug/L	0.3	1	1	U
WPP-GW04-170427	WG	1,2-Dibromo-3-chloropropane	0.4	U	ug/L	0.4	1	1	U
WPP-GW04-170427	WG	1,2-Dibromoethane	0.16	U	ug/L	0.16	0.5	0.5	U
WPP-GW04-170427	WG	1,2-Dichlorobenzene	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW04-170427	WG	1,2-Dichloroethane	0.3	U	ug/L	0.3	1	1	U
WPP-GW04-170427	WG	1,2-Dichloropropane	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW04-170427	WG	1,3-Dichlorobenzene	0.26	U	ug/L	0.26	1	1	U
WPP-GW04-170427	WG	1,4-Dichlorobenzene	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW04-170427	WG	1,4-Dioxane	5	UZQ	ug/L	5	25	25	U
WPP-GW04-170427	WG	112Trichloro122trifluoroethane	0.5	U	ug/L	0.5	1	1	U
WPP-GW04-170427	WG	2-Butanone	2.4	U	ug/L	2.4	5	5	U
WPP-GW04-170427	WG	2-Hexanone	4	U	ug/L	4	10	10	U
WPP-GW04-170427	WG	4-Methyl-2-pentanone	3	U	ug/L	3	10	10	U
WPP-GW04-170427	WG	Acetone	5	U	ug/L	5	10	10	U
WPP-GW04-170427	WG	Benzene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW04-170427	WG	Bromochloromethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW04-170427	WG	Bromodichloromethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW04-170427	WG	Bromoform	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW04-170427	WG	Bromomethane	0.5	U	ug/L	0.5	1	1	U
WPP-GW04-170427	WG	Carbon disulfide	0.5	U	ug/L	0.5	1	1	U
WPP-GW04-170427	WG	Carbon tetrachloride	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW04-170427	WG	Chlorobenzene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW04-170427	WG	Chloroethane	0.4	U	ug/L	0.4	1	1	U
WPP-GW04-170427	WG	Chloroform	0.15	U	ug/L	0.15	0.5	0.5	U
WPP-GW04-170427	WG	Chloromethane	0.4	U	ug/L	0.4	1	1	U
WPP-GW04-170427	WG	cis-1,2-Dichloroethene	0.25	U	ug/L	0.25	0.5	0.5	U
WPP-GW04-170427	WG	cis-1,3-Dichloropropene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW04-170427	WG	Cyclohexane	0.28	U	ug/L	0.28	1	1	U
WPP-GW04-170427	WG	Dibromochloromethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW04-170427	WG	Dichlorodifluoromethane	0.26	U	ug/L	0.26	1	1	U

Williamson Polishing Plating  
Groundwater Sample Results  
CT Laboratories LLC /127039

Sample Number	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-GW04-170427	WG	Ethylbenzene	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW04-170427	WG	Isopropylbenzene	0.18	U	ug/L	0.18	0.5	0.5	U
WPP-GW04-170427	WG	m & p-Xylene	0.5	U	ug/L	0.5	1	1	U
WPP-GW04-170427	WG	Methyl acetate	0.3	U	ug/L	0.3	1	1	U
WPP-GW04-170427	WG	Methyl tert-butyl ether	0.29	U	ug/L	0.29	1	1	U
WPP-GW04-170427	WG	Methylcyclohexane	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW04-170427	WG	Methylene chloride	0.4	U	ug/L	0.4	2	2	U
WPP-GW04-170427	WG	o-Xylene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW04-170427	WG	Styrene	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW04-170427	WG	Tetrachloroethene	0.3	U	ug/L	0.3	1	1	U
WPP-GW04-170427	WG	Toluene	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW04-170427	WG	trans-1,2-Dichloroethene	0.25	U	ug/L	0.25	0.5	0.5	U
WPP-GW04-170427	WG	trans-1,3-Dichloropropene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW04-170427	WG	Trichloroethene	0.21	U	ug/L	0.21	0.5	0.5	U
WPP-GW04-170427	WG	Trichlorofluoromethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW04-170427	WG	Vinyl chloride	0.18	U	ug/L	0.18	0.5	0.5	U
WPP-GW05-170427	WG	1,1,1-Trichloroethane	1.2		ug/L	0.21	0.5	1.2	
WPP-GW05-170427	WG	1,1,2,2-Tetrachloroethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW05-170427	WG	1,1,2-Trichloroethane	0.26	U	ug/L	0.26	1	1	U
WPP-GW05-170427	WG	1,1-Dichloroethane	0.43	J	ug/L	0.2	0.5	0.43	J
WPP-GW05-170427	WG	1,1-Dichloroethene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW05-170427	WG	1,2,3-Trichlorobenzene	0.3	U	ug/L	0.3	1	1	U
WPP-GW05-170427	WG	1,2,4-Trichlorobenzene	0.3	U	ug/L	0.3	1	1	U
WPP-GW05-170427	WG	1,2-Dibromo-3-chloropropane	0.4	U	ug/L	0.4	1	1	U
WPP-GW05-170427	WG	1,2-Dibromoethane	0.16	U	ug/L	0.16	0.5	0.5	U
WPP-GW05-170427	WG	1,2-Dichlorobenzene	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW05-170427	WG	1,2-Dichloroethane	0.3	U	ug/L	0.3	1	1	U
WPP-GW05-170427	WG	1,2-Dichloropropane	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW05-170427	WG	1,3-Dichlorobenzene	0.26	U	ug/L	0.26	1	1	U
WPP-GW05-170427	WG	1,4-Dichlorobenzene	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW05-170427	WG	1,4-Dioxane	5	UZQ	ug/L	5	25	25	U
WPP-GW05-170427	WG	112Trichloro122trifluoroethane	0.5	U	ug/L	0.5	1	1	U

Williamson Polishing Plating  
Groundwater Sample Results  
CT Laboratories LLC /127039

Sample Number	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-GW05-170427	WG	2-Butanone	2.4	U	ug/L	2.4	5	5	U
WPP-GW05-170427	WG	2-Hexanone	4	U	ug/L	4	10	10	U
WPP-GW05-170427	WG	4-Methyl-2-pentanone	3	U	ug/L	3	10	10	U
WPP-GW05-170427	WG	Acetone	5	U	ug/L	5	10	10	U
WPP-GW05-170427	WG	Benzene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW05-170427	WG	Bromochloromethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW05-170427	WG	Bromodichloromethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW05-170427	WG	Bromoform	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW05-170427	WG	Bromomethane	0.5	U	ug/L	0.5	1	1	U
WPP-GW05-170427	WG	Carbon disulfide	0.5	U	ug/L	0.5	1	1	U
WPP-GW05-170427	WG	Carbon tetrachloride	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW05-170427	WG	Chlorobenzene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW05-170427	WG	Chloroethane	0.4	U	ug/L	0.4	1	1	U
WPP-GW05-170427	WG	Chloroform	0.15	U	ug/L	0.15	0.5	0.5	U
WPP-GW05-170427	WG	Chloromethane	0.4	U	ug/L	0.4	1	1	U
WPP-GW05-170427	WG	cis-1,2-Dichloroethene	13		ug/L	0.25	0.5	13	
WPP-GW05-170427	WG	cis-1,3-Dichloropropene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW05-170427	WG	Cyclohexane	0.28	U	ug/L	0.28	1	1	U
WPP-GW05-170427	WG	Dibromochloromethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW05-170427	WG	Dichlorodifluoromethane	0.26	U	ug/L	0.26	1	1	U
WPP-GW05-170427	WG	Ethylbenzene	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW05-170427	WG	Isopropylbenzene	0.18	U	ug/L	0.18	0.5	0.5	U
WPP-GW05-170427	WG	m & p-Xylene	0.5	U	ug/L	0.5	1	1	U
WPP-GW05-170427	WG	Methyl acetate	0.3	U	ug/L	0.3	1	1	U
WPP-GW05-170427	WG	Methyl tert-butyl ether	0.29	U	ug/L	0.29	1	1	U
WPP-GW05-170427	WG	Methylcyclohexane	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW05-170427	WG	Methylene chloride	0.4	U	ug/L	0.4	2	2	U
WPP-GW05-170427	WG	o-Xylene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW05-170427	WG	Styrene	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW05-170427	WG	Tetrachloroethene	0.3	U	ug/L	0.3	1	1	U
WPP-GW05-170427	WG	Toluene	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW05-170427	WG	trans-1,2-Dichloroethene	1.3		ug/L	0.25	0.5	1.3	

Williamson Polishing Plating  
Groundwater Sample Results  
CT Laboratories LLC /127039

Sample Number	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-GW05-170427	WG	trans-1,3-Dichloropropene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW05-170427	WG	Trichloroethene	40		ug/L	0.21	0.5	40	
WPP-GW05-170427	WG	Trichlorofluoromethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW05-170427	WG	Vinyl chloride	0.18	U	ug/L	0.18	0.5	0.5	U
WPP-GW05-170427-D	WG	1,1,1-Trichloroethane	1.1		ug/L	0.21	0.5	1.1	
WPP-GW05-170427-D	WG	1,1,2,2-Tetrachloroethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW05-170427-D	WG	1,1,2-Trichloroethane	0.26	U	ug/L	0.26	1	1	U
WPP-GW05-170427-D	WG	1,1-Dichloroethane	0.38	J	ug/L	0.2	0.5	0.38	J
WPP-GW05-170427-D	WG	1,1-Dichloroethene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW05-170427-D	WG	1,2,3-Trichlorobenzene	0.3	U	ug/L	0.3	1	1	U
WPP-GW05-170427-D	WG	1,2,4-Trichlorobenzene	0.3	U	ug/L	0.3	1	1	U
WPP-GW05-170427-D	WG	1,2-Dibromo-3-chloropropane	0.4	U	ug/L	0.4	1	1	U
WPP-GW05-170427-D	WG	1,2-Dibromoethane	0.16	U	ug/L	0.16	0.5	0.5	U
WPP-GW05-170427-D	WG	1,2-Dichlorobenzene	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW05-170427-D	WG	1,2-Dichloroethane	0.3	U	ug/L	0.3	1	1	U
WPP-GW05-170427-D	WG	1,2-Dichloropropane	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW05-170427-D	WG	1,3-Dichlorobenzene	0.26	U	ug/L	0.26	1	1	U
WPP-GW05-170427-D	WG	1,4-Dichlorobenzene	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW05-170427-D	WG	1,4-Dioxane	5	UZQ	ug/L	5	25	25	U
WPP-GW05-170427-D	WG	112Trichloro122trifluoroethane	0.5	U	ug/L	0.5	1	1	U
WPP-GW05-170427-D	WG	2-Butanone	2.4	U	ug/L	2.4	5	5	U
WPP-GW05-170427-D	WG	2-Hexanone	4	U	ug/L	4	10	10	U
WPP-GW05-170427-D	WG	4-Methyl-2-pentanone	3	U	ug/L	3	10	10	U
WPP-GW05-170427-D	WG	Acetone	5	U	ug/L	5	10	10	U
WPP-GW05-170427-D	WG	Benzene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW05-170427-D	WG	Bromochloromethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW05-170427-D	WG	Bromodichloromethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW05-170427-D	WG	Bromoform	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW05-170427-D	WG	Bromomethane	0.5	U	ug/L	0.5	1	1	U
WPP-GW05-170427-D	WG	Carbon disulfide	0.5	U	ug/L	0.5	1	1	U
WPP-GW05-170427-D	WG	Carbon tetrachloride	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW05-170427-D	WG	Chlorobenzene	0.24	U	ug/L	0.24	0.5	0.5	U

Williamson Polishing Plating  
Groundwater Sample Results  
CT Laboratories LLC /127039

Sample Number	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-GW05-170427-D	WG	Chloroethane	0.4	U	ug/L	0.4	1	1	U
WPP-GW05-170427-D	WG	Chloroform	0.15	U	ug/L	0.15	0.5	0.5	U
WPP-GW05-170427-D	WG	Chloromethane	0.4	U	ug/L	0.4	1	1	U
WPP-GW05-170427-D	WG	cis-1,2-Dichloroethene	13		ug/L	0.25	0.5	13	
WPP-GW05-170427-D	WG	cis-1,3-Dichloropropene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW05-170427-D	WG	Cyclohexane	0.28	U	ug/L	0.28	1	1	U
WPP-GW05-170427-D	WG	Dibromochloromethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW05-170427-D	WG	Dichlorodifluoromethane	0.26	U	ug/L	0.26	1	1	U
WPP-GW05-170427-D	WG	Ethylbenzene	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW05-170427-D	WG	Isopropylbenzene	0.18	U	ug/L	0.18	0.5	0.5	U
WPP-GW05-170427-D	WG	m & p-Xylene	0.5	U	ug/L	0.5	1	1	U
WPP-GW05-170427-D	WG	Methyl acetate	0.3	U	ug/L	0.3	1	1	U
WPP-GW05-170427-D	WG	Methyl tert-butyl ether	0.29	U	ug/L	0.29	1	1	U
WPP-GW05-170427-D	WG	Methylcyclohexane	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW05-170427-D	WG	Methylene chloride	0.4	U	ug/L	0.4	2	2	U
WPP-GW05-170427-D	WG	o-Xylene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW05-170427-D	WG	Styrene	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW05-170427-D	WG	Tetrachloroethene	0.3	U	ug/L	0.3	1	1	U
WPP-GW05-170427-D	WG	Toluene	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW05-170427-D	WG	trans-1,2-Dichloroethene	1.2		ug/L	0.25	0.5	1.2	
WPP-GW05-170427-D	WG	trans-1,3-Dichloropropene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW05-170427-D	WG	Trichloroethene	41		ug/L	0.21	0.5	41	
WPP-GW05-170427-D	WG	Trichlorofluoromethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW05-170427-D	WG	Vinyl chloride	0.18	U	ug/L	0.18	0.5	0.5	U
WPP-GW06-170428	WG	1,1,1-Trichloroethane	0.21	U	ug/L	0.21	0.5	0.5	U
WPP-GW06-170428	WG	1,1,2,2-Tetrachloroethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW06-170428	WG	1,1,2-Trichloroethane	0.26	U	ug/L	0.26	1	1	U
WPP-GW06-170428	WG	1,1-Dichloroethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW06-170428	WG	1,1-Dichloroethene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW06-170428	WG	1,2,3-Trichlorobenzene	0.3	U	ug/L	0.3	1	1	U
WPP-GW06-170428	WG	1,2,4-Trichlorobenzene	0.3	U	ug/L	0.3	1	1	U
WPP-GW06-170428	WG	1,2-Dibromo-3-chloropropane	0.4	U	ug/L	0.4	1	1	U

Williamson Polishing Plating  
Groundwater Sample Results  
CT Laboratories LLC /127039

Sample Number	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-GW06-170428	WG	1,2-Dibromoethane	0.16	U	ug/L	0.16	0.5	0.5	U
WPP-GW06-170428	WG	1,2-Dichlorobenzene	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW06-170428	WG	1,2-Dichloroethane	0.3	U	ug/L	0.3	1	1	U
WPP-GW06-170428	WG	1,2-Dichloropropane	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW06-170428	WG	1,3-Dichlorobenzene	0.26	U	ug/L	0.26	1	1	U
WPP-GW06-170428	WG	1,4-Dichlorobenzene	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW06-170428	WG	1,4-Dioxane	5	UZQ	ug/L	5	25	25	U
WPP-GW06-170428	WG	112Trichloro122trifluoroethane	0.5	U	ug/L	0.5	1	1	U
WPP-GW06-170428	WG	2-Butanone	2.4	U	ug/L	2.4	5	5	U
WPP-GW06-170428	WG	2-Hexanone	4	U	ug/L	4	10	10	U
WPP-GW06-170428	WG	4-Methyl-2-pentanone	3	U	ug/L	3	10	10	U
WPP-GW06-170428	WG	Acetone	5	U	ug/L	5	10	10	U
WPP-GW06-170428	WG	Benzene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW06-170428	WG	Bromochloromethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW06-170428	WG	Bromodichloromethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW06-170428	WG	Bromoform	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW06-170428	WG	Bromomethane	0.5	U	ug/L	0.5	1	1	U
WPP-GW06-170428	WG	Carbon disulfide	0.5	U	ug/L	0.5	1	1	U
WPP-GW06-170428	WG	Carbon tetrachloride	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW06-170428	WG	Chlorobenzene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW06-170428	WG	Chloroethane	0.4	U	ug/L	0.4	1	1	U
WPP-GW06-170428	WG	Chloroform	0.25	J	ug/L	0.15	0.5	0.25	J
WPP-GW06-170428	WG	Chloromethane	0.4	U	ug/L	0.4	1	1	U
WPP-GW06-170428	WG	cis-1,2-Dichloroethene	0.25	U	ug/L	0.25	0.5	0.5	U
WPP-GW06-170428	WG	cis-1,3-Dichloropropene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW06-170428	WG	Cyclohexane	0.28	U	ug/L	0.28	1	1	U
WPP-GW06-170428	WG	Dibromochloromethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW06-170428	WG	Dichlorodifluoromethane	0.26	U	ug/L	0.26	1	1	U
WPP-GW06-170428	WG	Ethylbenzene	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW06-170428	WG	Isopropylbenzene	0.18	U	ug/L	0.18	0.5	0.5	U
WPP-GW06-170428	WG	m & p-Xylene	0.5	U	ug/L	0.5	1	1	U
WPP-GW06-170428	WG	Methyl acetate	0.3	U	ug/L	0.3	1	1	U

Williamson Polishing Plating  
Groundwater Sample Results  
CT Laboratories LLC /127039

Sample Number	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-GW06-170428	WG	Methyl tert-butyl ether	0.29	U	ug/L	0.29	1	1	U
WPP-GW06-170428	WG	Methylcyclohexane	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW06-170428	WG	Methylene chloride	0.4	U	ug/L	0.4	2	2	U
WPP-GW06-170428	WG	o-Xylene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW06-170428	WG	Styrene	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW06-170428	WG	Tetrachloroethene	0.3	U	ug/L	0.3	1	1	U
WPP-GW06-170428	WG	Toluene	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW06-170428	WG	trans-1,2-Dichloroethene	0.25	U	ug/L	0.25	0.5	0.5	U
WPP-GW06-170428	WG	trans-1,3-Dichloropropene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW06-170428	WG	Trichloroethene	0.21	U	ug/L	0.21	0.5	0.5	U
WPP-GW06-170428	WG	Trichlorofluoromethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW06-170428	WG	Vinyl chloride	0.18	U	ug/L	0.18	0.5	0.5	U
WPP-GW06-170428-D	WG	1,1,1-Trichloroethane	0.21	U	ug/L	0.21	0.5	0.5	U
WPP-GW06-170428-D	WG	1,1,2,2-Tetrachloroethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW06-170428-D	WG	1,1,2-Trichloroethane	0.26	U	ug/L	0.26	1	1	U
WPP-GW06-170428-D	WG	1,1-Dichloroethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW06-170428-D	WG	1,1-Dichloroethene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW06-170428-D	WG	1,2,3-Trichlorobenzene	0.3	U	ug/L	0.3	1	1	U
WPP-GW06-170428-D	WG	1,2,4-Trichlorobenzene	0.3	U	ug/L	0.3	1	1	U
WPP-GW06-170428-D	WG	1,2-Dibromo-3-chloropropane	0.4	U	ug/L	0.4	1	1	U
WPP-GW06-170428-D	WG	1,2-Dibromoethane	0.16	U	ug/L	0.16	0.5	0.5	U
WPP-GW06-170428-D	WG	1,2-Dichlorobenzene	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW06-170428-D	WG	1,2-Dichloroethane	0.3	U	ug/L	0.3	1	1	U
WPP-GW06-170428-D	WG	1,2-Dichloropropane	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW06-170428-D	WG	1,3-Dichlorobenzene	0.26	U	ug/L	0.26	1	1	U
WPP-GW06-170428-D	WG	1,4-Dichlorobenzene	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW06-170428-D	WG	1,4-Dioxane	5	UZQ	ug/L	5	25	25	U
WPP-GW06-170428-D	WG	112Trichloro122trifluoroethane	0.5	U	ug/L	0.5	1	1	U
WPP-GW06-170428-D	WG	2-Butanone	2.4	U	ug/L	2.4	5	5	U
WPP-GW06-170428-D	WG	2-Hexanone	4	U	ug/L	4	10	10	U
WPP-GW06-170428-D	WG	4-Methyl-2-pentanone	3	U	ug/L	3	10	10	U
WPP-GW06-170428-D	WG	Acetone	5	U	ug/L	5	10	10	U

Williamson Polishing Plating  
Groundwater Sample Results  
CT Laboratories LLC /127039

Sample Number	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-GW06-170428-D	WG	Benzene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW06-170428-D	WG	Bromochloromethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW06-170428-D	WG	Bromodichloromethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW06-170428-D	WG	Bromoform	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW06-170428-D	WG	Bromomethane	0.5	U	ug/L	0.5	1	1	U
WPP-GW06-170428-D	WG	Carbon disulfide	0.5	U	ug/L	0.5	1	1	U
WPP-GW06-170428-D	WG	Carbon tetrachloride	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW06-170428-D	WG	Chlorobenzene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW06-170428-D	WG	Chloroethane	0.4	U	ug/L	0.4	1	1	U
WPP-GW06-170428-D	WG	Chloroform	0.29	J	ug/L	0.15	0.5	0.29	J
WPP-GW06-170428-D	WG	Chloromethane	0.4	U	ug/L	0.4	1	1	U
WPP-GW06-170428-D	WG	cis-1,2-Dichloroethene	0.25	U	ug/L	0.25	0.5	0.5	U
WPP-GW06-170428-D	WG	cis-1,3-Dichloropropene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW06-170428-D	WG	Cyclohexane	0.28	U	ug/L	0.28	1	1	U
WPP-GW06-170428-D	WG	Dibromochloromethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW06-170428-D	WG	Dichlorodifluoromethane	0.26	U	ug/L	0.26	1	1	U
WPP-GW06-170428-D	WG	Ethylbenzene	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW06-170428-D	WG	Isopropylbenzene	0.18	U	ug/L	0.18	0.5	0.5	U
WPP-GW06-170428-D	WG	m & p-Xylene	0.5	U	ug/L	0.5	1	1	U
WPP-GW06-170428-D	WG	Methyl acetate	0.3	U	ug/L	0.3	1	1	U
WPP-GW06-170428-D	WG	Methyl tert-butyl ether	0.29	U	ug/L	0.29	1	1	U
WPP-GW06-170428-D	WG	Methylcyclohexane	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW06-170428-D	WG	Methylene chloride	0.4	U	ug/L	0.4	2	2	U
WPP-GW06-170428-D	WG	o-Xylene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW06-170428-D	WG	Styrene	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW06-170428-D	WG	Tetrachloroethene	0.3	U	ug/L	0.3	1	1	U
WPP-GW06-170428-D	WG	Toluene	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW06-170428-D	WG	trans-1,2-Dichloroethene	0.25	U	ug/L	0.25	0.5	0.5	U
WPP-GW06-170428-D	WG	trans-1,3-Dichloropropene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW06-170428-D	WG	Trichloroethene	0.21	U	ug/L	0.21	0.5	0.5	U
WPP-GW06-170428-D	WG	Trichlorofluoromethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW06-170428-D	WG	Vinyl chloride	0.18	U	ug/L	0.18	0.5	0.5	U

Williamson Polishing Plating  
Groundwater Sample Results  
CT Laboratories LLC /127039

Sample Number	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-GW07-170427	WG	1,1,1-Trichloroethane	10		ug/L	0.21	0.5	10	
WPP-GW07-170427	WG	1,1,2,2-Tetrachloroethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW07-170427	WG	1,1,2-Trichloroethane	0.26	U	ug/L	0.26	1	1	U
WPP-GW07-170427	WG	1,1-Dichloroethane	0.52		ug/L	0.2	0.5	0.52	
WPP-GW07-170427	WG	1,1-Dichloroethene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW07-170427	WG	1,2,3-Trichlorobenzene	0.3	U	ug/L	0.3	1	1	U
WPP-GW07-170427	WG	1,2,4-Trichlorobenzene	0.3	U	ug/L	0.3	1	1	U
WPP-GW07-170427	WG	1,2-Dibromo-3-chloropropane	0.4	U	ug/L	0.4	1	1	U
WPP-GW07-170427	WG	1,2-Dibromoethane	0.16	U	ug/L	0.16	0.5	0.5	U
WPP-GW07-170427	WG	1,2-Dichlorobenzene	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW07-170427	WG	1,2-Dichloroethane	0.3	U	ug/L	0.3	1	1	U
WPP-GW07-170427	WG	1,2-Dichloropropane	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW07-170427	WG	1,3-Dichlorobenzene	0.26	U	ug/L	0.26	1	1	U
WPP-GW07-170427	WG	1,4-Dichlorobenzene	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW07-170427	WG	1,4-Dioxane	5	UZQ	ug/L	5	25	25	U
WPP-GW07-170427	WG	112Trichloro122trifluoroethane	0.5	U	ug/L	0.5	1	1	U
WPP-GW07-170427	WG	2-Butanone	2.4	U	ug/L	2.4	5	5	U
WPP-GW07-170427	WG	2-Hexanone	4	U	ug/L	4	10	10	U
WPP-GW07-170427	WG	4-Methyl-2-pentanone	3	U	ug/L	3	10	10	U
WPP-GW07-170427	WG	Acetone	5	U	ug/L	5	10	10	U
WPP-GW07-170427	WG	Benzene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW07-170427	WG	Bromochloromethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW07-170427	WG	Bromodichloromethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW07-170427	WG	Bromoform	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW07-170427	WG	Bromomethane	0.5	U	ug/L	0.5	1	1	U
WPP-GW07-170427	WG	Carbon disulfide	0.5	U	ug/L	0.5	1	1	U
WPP-GW07-170427	WG	Carbon tetrachloride	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW07-170427	WG	Chlorobenzene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW07-170427	WG	Chloroethane	0.4	U	ug/L	0.4	1	1	U
WPP-GW07-170427	WG	Chloroform	0.15	U	ug/L	0.15	0.5	0.5	U
WPP-GW07-170427	WG	Chloromethane	0.4	U	ug/L	0.4	1	1	U
WPP-GW07-170427	WG	cis-1,2-Dichloroethene	4.7		ug/L	0.25	0.5	4.7	

Williamson Polishing Plating  
Groundwater Sample Results  
CT Laboratories LLC /127039

Sample Number	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-GW07-170427	WG	cis-1,3-Dichloropropene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW07-170427	WG	Cyclohexane	0.28	U	ug/L	0.28	1	1	U
WPP-GW07-170427	WG	Dibromochloromethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW07-170427	WG	Dichlorodifluoromethane	0.26	U	ug/L	0.26	1	1	U
WPP-GW07-170427	WG	Ethylbenzene	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW07-170427	WG	Isopropylbenzene	0.18	U	ug/L	0.18	0.5	0.5	U
WPP-GW07-170427	WG	m & p-Xylene	0.5	U	ug/L	0.5	1	1	U
WPP-GW07-170427	WG	Methyl acetate	0.3	U	ug/L	0.3	1	1	U
WPP-GW07-170427	WG	Methyl tert-butyl ether	0.29	U	ug/L	0.29	1	1	U
WPP-GW07-170427	WG	Methylcyclohexane	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW07-170427	WG	Methylene chloride	0.4	U	ug/L	0.4	2	2	U
WPP-GW07-170427	WG	o-Xylene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW07-170427	WG	Styrene	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW07-170427	WG	Tetrachloroethene	0.3	U	ug/L	0.3	1	1	U
WPP-GW07-170427	WG	Toluene	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW07-170427	WG	trans-1,2-Dichloroethene	1		ug/L	0.25	0.5	1	
WPP-GW07-170427	WG	trans-1,3-Dichloropropene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW07-170427	WG	Trichloroethene	25		ug/L	0.21	0.5	25	
WPP-GW07-170427	WG	Trichlorofluoromethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW07-170427	WG	Vinyl chloride	0.18	U	ug/L	0.18	0.5	0.5	U
WPP-GW08-170428	WG	1,1,1-Trichloroethane	0.21	U	ug/L	0.21	0.5	0.5	U
WPP-GW08-170428	WG	1,1,2,2-Tetrachloroethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW08-170428	WG	1,1,2-Trichloroethane	0.26	U	ug/L	0.26	1	1	U
WPP-GW08-170428	WG	1,1-Dichloroethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW08-170428	WG	1,1-Dichloroethene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW08-170428	WG	1,2,3-Trichlorobenzene	0.3	U	ug/L	0.3	1	1	U
WPP-GW08-170428	WG	1,2,4-Trichlorobenzene	0.3	U	ug/L	0.3	1	1	U
WPP-GW08-170428	WG	1,2-Dibromo-3-chloropropane	0.4	U	ug/L	0.4	1	1	U
WPP-GW08-170428	WG	1,2-Dibromoethane	0.16	U	ug/L	0.16	0.5	0.5	U
WPP-GW08-170428	WG	1,2-Dichlorobenzene	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW08-170428	WG	1,2-Dichloroethane	0.3	U	ug/L	0.3	1	1	U
WPP-GW08-170428	WG	1,2-Dichloropropane	0.22	U	ug/L	0.22	0.5	0.5	U

Williamson Polishing Plating  
Groundwater Sample Results  
CT Laboratories LLC /127039

Sample Number	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-GW08-170428	WG	1,3-Dichlorobenzene	0.26	U	ug/L	0.26	1	1	U
WPP-GW08-170428	WG	1,4-Dichlorobenzene	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW08-170428	WG	1,4-Dioxane	5	U	ug/L	5	25	25	U
WPP-GW08-170428	WG	112Trichloro122trifluoroethane	0.5	U	ug/L	0.5	1	1	U
WPP-GW08-170428	WG	2-Butanone	2.4	U	ug/L	2.4	5	5	U
WPP-GW08-170428	WG	2-Hexanone	4	U	ug/L	4	10	10	U
WPP-GW08-170428	WG	4-Methyl-2-pentanone	3	U	ug/L	3	10	10	U
WPP-GW08-170428	WG	Acetone	5	U	ug/L	5	10	10	U
WPP-GW08-170428	WG	Benzene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW08-170428	WG	Bromochloromethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW08-170428	WG	Bromodichloromethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW08-170428	WG	Bromoform	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW08-170428	WG	Bromomethane	0.5	U	ug/L	0.5	1	1	U
WPP-GW08-170428	WG	Carbon disulfide	0.5	U	ug/L	0.5	1	1	U
WPP-GW08-170428	WG	Carbon tetrachloride	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW08-170428	WG	Chlorobenzene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW08-170428	WG	Chloroethane	0.4	U	ug/L	0.4	1	1	U
WPP-GW08-170428	WG	Chloroform	0.15	U	ug/L	0.15	0.5	0.5	U
WPP-GW08-170428	WG	Chloromethane	0.4	U	ug/L	0.4	1	1	U
WPP-GW08-170428	WG	cis-1,2-Dichloroethene	0.25	U	ug/L	0.25	0.5	0.5	U
WPP-GW08-170428	WG	cis-1,3-Dichloropropene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW08-170428	WG	Cyclohexane	0.28	U	ug/L	0.28	1	1	U
WPP-GW08-170428	WG	Dibromochloromethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW08-170428	WG	Dichlorodifluoromethane	0.26	U	ug/L	0.26	1	1	U
WPP-GW08-170428	WG	Ethylbenzene	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW08-170428	WG	Isopropylbenzene	0.18	U	ug/L	0.18	0.5	0.5	U
WPP-GW08-170428	WG	m & p-Xylene	0.5	U	ug/L	0.5	1	1	U
WPP-GW08-170428	WG	Methyl acetate	0.3	U	ug/L	0.3	1	1	U
WPP-GW08-170428	WG	Methyl tert-butyl ether	0.29	U	ug/L	0.29	1	1	U
WPP-GW08-170428	WG	Methylcyclohexane	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW08-170428	WG	Methylene chloride	0.4	U	ug/L	0.4	2	2	U
WPP-GW08-170428	WG	o-Xylene	0.24	U	ug/L	0.24	0.5	0.5	U

Williamson Polishing Plating  
Groundwater Sample Results  
CT Laboratories LLC /127039

Sample Number	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-GW08-170428	WG	Styrene	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW08-170428	WG	Tetrachloroethene	0.3	U	ug/L	0.3	1	1	U
WPP-GW08-170428	WG	Toluene	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW08-170428	WG	trans-1,2-Dichloroethene	0.25	U	ug/L	0.25	0.5	0.5	U
WPP-GW08-170428	WG	trans-1,3-Dichloropropene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW08-170428	WG	Trichloroethene	0.21	U	ug/L	0.21	0.5	0.5	U
WPP-GW08-170428	WG	Trichlorofluoromethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW08-170428	WG	Vinyl chloride	0.18	U	ug/L	0.18	0.5	0.5	U
WPP-GW09-170427	WG	1,1,1-Trichloroethane	0.64		ug/L	0.21	0.5	0.64	
WPP-GW09-170427	WG	1,1,2,2-Tetrachloroethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW09-170427	WG	1,1,2-Trichloroethane	0.26	U	ug/L	0.26	1	1	U
WPP-GW09-170427	WG	1,1-Dichloroethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW09-170427	WG	1,1-Dichloroethene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW09-170427	WG	1,2,3-Trichlorobenzene	0.3	U	ug/L	0.3	1	1	U
WPP-GW09-170427	WG	1,2,4-Trichlorobenzene	0.3	U	ug/L	0.3	1	1	U
WPP-GW09-170427	WG	1,2-Dibromo-3-chloropropane	0.4	U	ug/L	0.4	1	1	U
WPP-GW09-170427	WG	1,2-Dibromoethane	0.16	U	ug/L	0.16	0.5	0.5	U
WPP-GW09-170427	WG	1,2-Dichlorobenzene	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW09-170427	WG	1,2-Dichloroethane	0.3	U	ug/L	0.3	1	1	U
WPP-GW09-170427	WG	1,2-Dichloropropane	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW09-170427	WG	1,3-Dichlorobenzene	0.26	U	ug/L	0.26	1	1	U
WPP-GW09-170427	WG	1,4-Dichlorobenzene	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW09-170427	WG	1,4-Dioxane	5	UZQ	ug/L	5	25	25	U
WPP-GW09-170427	WG	1,1,2,2-Tetrachloro-1,1,2,2-trifluoroethane	0.5	U	ug/L	0.5	1	1	U
WPP-GW09-170427	WG	2-Butanone	2.4	U	ug/L	2.4	5	5	U
WPP-GW09-170427	WG	2-Hexanone	4	U	ug/L	4	10	10	U
WPP-GW09-170427	WG	4-Methyl-2-pentanone	3	U	ug/L	3	10	10	U
WPP-GW09-170427	WG	Acetone	5	U	ug/L	5	10	10	U
WPP-GW09-170427	WG	Benzene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW09-170427	WG	Bromochloromethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW09-170427	WG	Bromodichloromethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW09-170427	WG	Bromoform	0.22	U	ug/L	0.22	0.5	0.5	U

Williamson Polishing Plating  
Groundwater Sample Results  
CT Laboratories LLC /127039

Sample Number	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-GW09-170427	WG	Bromomethane	0.5	U	ug/L	0.5	1	1	U
WPP-GW09-170427	WG	Carbon disulfide	0.5	U	ug/L	0.5	1	1	U
WPP-GW09-170427	WG	Carbon tetrachloride	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW09-170427	WG	Chlorobenzene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW09-170427	WG	Chloroethane	0.4	U	ug/L	0.4	1	1	U
WPP-GW09-170427	WG	Chloroform	0.15	U	ug/L	0.15	0.5	0.5	U
WPP-GW09-170427	WG	Chloromethane	0.4	U	ug/L	0.4	1	1	U
WPP-GW09-170427	WG	cis-1,2-Dichloroethene	13		ug/L	0.25	0.5	13	
WPP-GW09-170427	WG	cis-1,3-Dichloropropene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW09-170427	WG	Cyclohexane	0.28	U	ug/L	0.28	1	1	U
WPP-GW09-170427	WG	Dibromochloromethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW09-170427	WG	Dichlorodifluoromethane	0.26	U	ug/L	0.26	1	1	U
WPP-GW09-170427	WG	Ethylbenzene	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW09-170427	WG	Isopropylbenzene	0.18	U	ug/L	0.18	0.5	0.5	U
WPP-GW09-170427	WG	m & p-Xylene	0.5	U	ug/L	0.5	1	1	U
WPP-GW09-170427	WG	Methyl acetate	0.3	U	ug/L	0.3	1	1	U
WPP-GW09-170427	WG	Methyl tert-butyl ether	0.29	U	ug/L	0.29	1	1	U
WPP-GW09-170427	WG	Methylcyclohexane	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW09-170427	WG	Methylene chloride	0.4	U	ug/L	0.4	2	2	U
WPP-GW09-170427	WG	o-Xylene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW09-170427	WG	Styrene	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW09-170427	WG	Tetrachloroethene	0.3	U	ug/L	0.3	1	1	U
WPP-GW09-170427	WG	Toluene	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW09-170427	WG	trans-1,2-Dichloroethene	2.1		ug/L	0.25	0.5	2.1	
WPP-GW09-170427	WG	trans-1,3-Dichloropropene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW09-170427	WG	Trichloroethene	0.21	U	ug/L	0.21	0.5	0.5	U
WPP-GW09-170427	WG	Trichlorofluoromethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW09-170427	WG	Vinyl chloride	0.18	U	ug/L	0.18	0.5	0.5	U
WPP-GW10-170428	WG	1,1,1-Trichloroethane	0.21	U	ug/L	0.21	0.5	0.5	U
WPP-GW10-170428	WG	1,1,2,2-Tetrachloroethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW10-170428	WG	1,1,2-Trichloroethane	0.26	U	ug/L	0.26	1	1	U
WPP-GW10-170428	WG	1,1-Dichloroethane	0.2	U	ug/L	0.2	0.5	0.5	U

Williamson Polishing Plating  
Groundwater Sample Results  
CT Laboratories LLC /127039

Sample Number	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-GW10-170428	WG	1,1-Dichloroethene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW10-170428	WG	1,2,3-Trichlorobenzene	0.3	U	ug/L	0.3	1	1	U
WPP-GW10-170428	WG	1,2,4-Trichlorobenzene	0.3	U	ug/L	0.3	1	1	U
WPP-GW10-170428	WG	1,2-Dibromo-3-chloropropane	0.4	U	ug/L	0.4	1	1	U
WPP-GW10-170428	WG	1,2-Dibromoethane	0.16	U	ug/L	0.16	0.5	0.5	U
WPP-GW10-170428	WG	1,2-Dichlorobenzene	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW10-170428	WG	1,2-Dichloroethane	0.3	U	ug/L	0.3	1	1	U
WPP-GW10-170428	WG	1,2-Dichloropropane	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW10-170428	WG	1,3-Dichlorobenzene	0.26	U	ug/L	0.26	1	1	U
WPP-GW10-170428	WG	1,4-Dichlorobenzene	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW10-170428	WG	1,4-Dioxane	5	UZQ	ug/L	5	25	25	U
WPP-GW10-170428	WG	112Trichloro122trifluoroethane	0.5	U	ug/L	0.5	1	1	U
WPP-GW10-170428	WG	2-Butanone	2.4	U	ug/L	2.4	5	5	U
WPP-GW10-170428	WG	2-Hexanone	4	U	ug/L	4	10	10	U
WPP-GW10-170428	WG	4-Methyl-2-pentanone	3	U	ug/L	3	10	10	U
WPP-GW10-170428	WG	Acetone	5	U	ug/L	5	10	10	U
WPP-GW10-170428	WG	Benzene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW10-170428	WG	Bromochloromethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW10-170428	WG	Bromodichloromethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW10-170428	WG	Bromoform	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW10-170428	WG	Bromomethane	0.5	U	ug/L	0.5	1	1	U
WPP-GW10-170428	WG	Carbon disulfide	0.5	U	ug/L	0.5	1	1	U
WPP-GW10-170428	WG	Carbon tetrachloride	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW10-170428	WG	Chlorobenzene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW10-170428	WG	Chloroethane	0.4	U	ug/L	0.4	1	1	U
WPP-GW10-170428	WG	Chloroform	0.15	U	ug/L	0.15	0.5	0.5	U
WPP-GW10-170428	WG	Chloromethane	0.4	U	ug/L	0.4	1	1	U
WPP-GW10-170428	WG	cis-1,2-Dichloroethene	2.1		ug/L	0.25	0.5	2.1	
WPP-GW10-170428	WG	cis-1,3-Dichloropropene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW10-170428	WG	Cyclohexane	0.28	U	ug/L	0.28	1	1	U
WPP-GW10-170428	WG	Dibromochloromethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW10-170428	WG	Dichlorodifluoromethane	0.26	U	ug/L	0.26	1	1	U

Williamson Polishing Plating  
Groundwater Sample Results  
CT Laboratories LLC /127039

Sample Number	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-GW10-170428	WG	Ethylbenzene	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW10-170428	WG	Isopropylbenzene	0.18	U	ug/L	0.18	0.5	0.5	U
WPP-GW10-170428	WG	m & p-Xylene	0.5	U	ug/L	0.5	1	1	U
WPP-GW10-170428	WG	Methyl acetate	0.3	U	ug/L	0.3	1	1	U
WPP-GW10-170428	WG	Methyl tert-butyl ether	0.29	U	ug/L	0.29	1	1	U
WPP-GW10-170428	WG	Methylcyclohexane	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW10-170428	WG	Methylene chloride	0.4	U	ug/L	0.4	2	2	U
WPP-GW10-170428	WG	o-Xylene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW10-170428	WG	Styrene	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW10-170428	WG	Tetrachloroethene	0.3	U	ug/L	0.3	1	1	U
WPP-GW10-170428	WG	Toluene	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW10-170428	WG	trans-1,2-Dichloroethene	1.4		ug/L	0.25	0.5	1.4	
WPP-GW10-170428	WG	trans-1,3-Dichloropropene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW10-170428	WG	Trichloroethene	0.21	U	ug/L	0.21	0.5	0.5	U
WPP-GW10-170428	WG	Trichlorofluoromethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW10-170428	WG	Vinyl chloride	0.18	U	ug/L	0.18	0.5	0.5	U
WPP-GW11-170428	WG	1,1,1-Trichloroethane	0.55		ug/L	0.21	0.5	0.55	
WPP-GW11-170428	WG	1,1,2,2-Tetrachloroethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW11-170428	WG	1,1,2-Trichloroethane	0.26	U	ug/L	0.26	1	1	U
WPP-GW11-170428	WG	1,1-Dichloroethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW11-170428	WG	1,1-Dichloroethene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW11-170428	WG	1,2,3-Trichlorobenzene	0.3	U	ug/L	0.3	1	1	U
WPP-GW11-170428	WG	1,2,4-Trichlorobenzene	0.3	U	ug/L	0.3	1	1	U
WPP-GW11-170428	WG	1,2-Dibromo-3-chloropropane	0.4	U	ug/L	0.4	1	1	U
WPP-GW11-170428	WG	1,2-Dibromoethane	0.16	U	ug/L	0.16	0.5	0.5	U
WPP-GW11-170428	WG	1,2-Dichlorobenzene	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW11-170428	WG	1,2-Dichloroethane	0.3	U	ug/L	0.3	1	1	U
WPP-GW11-170428	WG	1,2-Dichloropropane	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW11-170428	WG	1,3-Dichlorobenzene	0.26	U	ug/L	0.26	1	1	U
WPP-GW11-170428	WG	1,4-Dichlorobenzene	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW11-170428	WG	1,4-Dioxane	5	UZQ	ug/L	5	25	25	U
WPP-GW11-170428	WG	112Trichloro122trifluoroethane	0.5	U	ug/L	0.5	1	1	U

Williamson Polishing Plating  
Groundwater Sample Results  
CT Laboratories LLC /127039

Sample Number	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-GW11-170428	WG	2-Butanone	2.4	U	ug/L	2.4	5	5	U
WPP-GW11-170428	WG	2-Hexanone	4	U	ug/L	4	10	10	U
WPP-GW11-170428	WG	4-Methyl-2-pentanone	3	U	ug/L	3	10	10	U
WPP-GW11-170428	WG	Acetone	5	U	ug/L	5	10	10	U
WPP-GW11-170428	WG	Benzene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW11-170428	WG	Bromochloromethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW11-170428	WG	Bromodichloromethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW11-170428	WG	Bromoform	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW11-170428	WG	Bromomethane	0.5	U	ug/L	0.5	1	1	U
WPP-GW11-170428	WG	Carbon disulfide	0.5	U	ug/L	0.5	1	1	U
WPP-GW11-170428	WG	Carbon tetrachloride	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW11-170428	WG	Chlorobenzene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW11-170428	WG	Chloroethane	0.4	U	ug/L	0.4	1	1	U
WPP-GW11-170428	WG	Chloroform	2.1		ug/L	0.15	0.5	2.1	
WPP-GW11-170428	WG	Chloromethane	0.4	U	ug/L	0.4	1	1	U
WPP-GW11-170428	WG	cis-1,2-Dichloroethene	0.7		ug/L	0.25	0.5	0.7	
WPP-GW11-170428	WG	cis-1,3-Dichloropropene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW11-170428	WG	Cyclohexane	0.28	U	ug/L	0.28	1	1	U
WPP-GW11-170428	WG	Dibromochloromethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW11-170428	WG	Dichlorodifluoromethane	0.26	U	ug/L	0.26	1	1	U
WPP-GW11-170428	WG	Ethylbenzene	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW11-170428	WG	Isopropylbenzene	0.18	U	ug/L	0.18	0.5	0.5	U
WPP-GW11-170428	WG	m & p-Xylene	0.5	U	ug/L	0.5	1	1	U
WPP-GW11-170428	WG	Methyl acetate	0.3	U	ug/L	0.3	1	1	U
WPP-GW11-170428	WG	Methyl tert-butyl ether	0.29	U	ug/L	0.29	1	1	U
WPP-GW11-170428	WG	Methylcyclohexane	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW11-170428	WG	Methylene chloride	0.4	U	ug/L	0.4	2	2	U
WPP-GW11-170428	WG	o-Xylene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW11-170428	WG	Styrene	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW11-170428	WG	Tetrachloroethene	0.3	U	ug/L	0.3	1	1	U
WPP-GW11-170428	WG	Toluene	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW11-170428	WG	trans-1,2-Dichloroethene	3.5		ug/L	0.25	0.5	3.5	

Williamson Polishing Plating  
Groundwater Sample Results  
CT Laboratories LLC /127039

Sample Number	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-GW11-170428	WG	trans-1,3-Dichloropropene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW11-170428	WG	Trichloroethene	39		ug/L	0.21	0.5	39	
WPP-GW11-170428	WG	Trichlorofluoromethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW11-170428	WG	Vinyl chloride	0.18	U	ug/L	0.18	0.5	0.5	U
WPP-GW12-170427	WG	1,1,1-Trichloroethane	0.22	J	ug/L	0.21	0.5	0.22	J
WPP-GW12-170427	WG	1,1,2,2-Tetrachloroethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW12-170427	WG	1,1,2-Trichloroethane	0.26	U	ug/L	0.26	1	1	U
WPP-GW12-170427	WG	1,1-Dichloroethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW12-170427	WG	1,1-Dichloroethene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW12-170427	WG	1,2,3-Trichlorobenzene	0.3	U	ug/L	0.3	1	1	U
WPP-GW12-170427	WG	1,2,4-Trichlorobenzene	0.3	U	ug/L	0.3	1	1	U
WPP-GW12-170427	WG	1,2-Dibromo-3-chloropropane	0.4	U	ug/L	0.4	1	1	U
WPP-GW12-170427	WG	1,2-Dibromoethane	0.16	U	ug/L	0.16	0.5	0.5	U
WPP-GW12-170427	WG	1,2-Dichlorobenzene	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW12-170427	WG	1,2-Dichloroethane	0.3	U	ug/L	0.3	1	1	U
WPP-GW12-170427	WG	1,2-Dichloropropane	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW12-170427	WG	1,3-Dichlorobenzene	0.26	U	ug/L	0.26	1	1	U
WPP-GW12-170427	WG	1,4-Dichlorobenzene	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW12-170427	WG	1,4-Dioxane	5	UZQ	ug/L	5	25	25	U
WPP-GW12-170427	WG	112Trichloro122trifluoroethane	0.5	U	ug/L	0.5	1	1	U
WPP-GW12-170427	WG	2-Butanone	2.4	U	ug/L	2.4	5	5	U
WPP-GW12-170427	WG	2-Hexanone	4	U	ug/L	4	10	10	U
WPP-GW12-170427	WG	4-Methyl-2-pentanone	3	U	ug/L	3	10	10	U
WPP-GW12-170427	WG	Acetone	5	U	ug/L	5	10	10	U
WPP-GW12-170427	WG	Benzene	0.27	J	ug/L	0.19	0.5	0.27	J
WPP-GW12-170427	WG	Bromochloromethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW12-170427	WG	Bromodichloromethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW12-170427	WG	Bromoform	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW12-170427	WG	Bromomethane	0.5	U	ug/L	0.5	1	1	U
WPP-GW12-170427	WG	Carbon disulfide	0.5	U	ug/L	0.5	1	1	U
WPP-GW12-170427	WG	Carbon tetrachloride	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW12-170427	WG	Chlorobenzene	0.24	U	ug/L	0.24	0.5	0.5	U

Williamson Polishing Plating  
Groundwater Sample Results  
CT Laboratories LLC /127039

Sample Number	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-GW12-170427	WG	Chloroethane	0.4	U	ug/L	0.4	1	1	U
WPP-GW12-170427	WG	Chloroform	0.17	J	ug/L	0.15	0.5	0.17	J
WPP-GW12-170427	WG	Chloromethane	0.4	U	ug/L	0.4	1	1	U
WPP-GW12-170427	WG	cis-1,2-Dichloroethene	0.42	J	ug/L	0.25	0.5	0.42	J
WPP-GW12-170427	WG	cis-1,3-Dichloropropene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW12-170427	WG	Cyclohexane	0.28	U	ug/L	0.28	1	1	U
WPP-GW12-170427	WG	Dibromochloromethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW12-170427	WG	Dichlorodifluoromethane	0.26	U	ug/L	0.26	1	1	U
WPP-GW12-170427	WG	Ethylbenzene	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW12-170427	WG	Isopropylbenzene	0.18	U	ug/L	0.18	0.5	0.5	U
WPP-GW12-170427	WG	m & p-Xylene	0.5	U	ug/L	0.5	1	1	U
WPP-GW12-170427	WG	Methyl acetate	0.3	U	ug/L	0.3	1	1	U
WPP-GW12-170427	WG	Methyl tert-butyl ether	0.29	U	ug/L	0.29	1	1	U
WPP-GW12-170427	WG	Methylcyclohexane	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW12-170427	WG	Methylene chloride	0.4	U	ug/L	0.4	2	2	U
WPP-GW12-170427	WG	o-Xylene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW12-170427	WG	Styrene	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW12-170427	WG	Tetrachloroethene	0.3	U	ug/L	0.3	1	1	U
WPP-GW12-170427	WG	Toluene	0.46	J	ug/L	0.22	0.5	0.46	J
WPP-GW12-170427	WG	trans-1,2-Dichloroethene	0.99		ug/L	0.25	0.5	0.99	
WPP-GW12-170427	WG	trans-1,3-Dichloropropene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW12-170427	WG	Trichloroethene	0.21	U	ug/L	0.21	0.5	0.5	U
WPP-GW12-170427	WG	Trichlorofluoromethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW12-170427	WG	Vinyl chloride	0.18	U	ug/L	0.18	0.5	0.5	U
WPP-GW13-170427	WG	1,1,1-Trichloroethane	0.21	U	ug/L	0.21	0.5	0.5	U
WPP-GW13-170427	WG	1,1,2,2-Tetrachloroethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW13-170427	WG	1,1,2-Trichloroethane	0.26	U	ug/L	0.26	1	1	U
WPP-GW13-170427	WG	1,1-Dichloroethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW13-170427	WG	1,1-Dichloroethene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW13-170427	WG	1,2,3-Trichlorobenzene	0.3	U	ug/L	0.3	1	1	U
WPP-GW13-170427	WG	1,2,4-Trichlorobenzene	0.3	U	ug/L	0.3	1	1	U
WPP-GW13-170427	WG	1,2-Dibromo-3-chloropropane	0.4	U	ug/L	0.4	1	1	U

Williamson Polishing Plating  
Groundwater Sample Results  
CT Laboratories LLC /127039

Sample Number	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-GW13-170427	WG	1,2-Dibromoethane	0.16	U	ug/L	0.16	0.5	0.5	U
WPP-GW13-170427	WG	1,2-Dichlorobenzene	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW13-170427	WG	1,2-Dichloroethane	0.3	U	ug/L	0.3	1	1	U
WPP-GW13-170427	WG	1,2-Dichloropropane	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW13-170427	WG	1,3-Dichlorobenzene	0.26	U	ug/L	0.26	1	1	U
WPP-GW13-170427	WG	1,4-Dichlorobenzene	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW13-170427	WG	1,4-Dioxane	5	UZQ	ug/L	5	25	25	U
WPP-GW13-170427	WG	112Trichloro122trifluoroethane	0.5	U	ug/L	0.5	1	1	U
WPP-GW13-170427	WG	2-Butanone	2.4	U	ug/L	2.4	5	5	U
WPP-GW13-170427	WG	2-Hexanone	4	U	ug/L	4	10	10	U
WPP-GW13-170427	WG	4-Methyl-2-pentanone	3	U	ug/L	3	10	10	U
WPP-GW13-170427	WG	Acetone	5	U	ug/L	5	10	10	U
WPP-GW13-170427	WG	Benzene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW13-170427	WG	Bromochloromethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW13-170427	WG	Bromodichloromethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW13-170427	WG	Bromoform	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW13-170427	WG	Bromomethane	0.5	U	ug/L	0.5	1	1	U
WPP-GW13-170427	WG	Carbon disulfide	0.5	U	ug/L	0.5	1	1	U
WPP-GW13-170427	WG	Carbon tetrachloride	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW13-170427	WG	Chlorobenzene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW13-170427	WG	Chloroethane	0.4	U	ug/L	0.4	1	1	U
WPP-GW13-170427	WG	Chloroform	0.15	U	ug/L	0.15	0.5	0.5	U
WPP-GW13-170427	WG	Chloromethane	0.4	U	ug/L	0.4	1	1	U
WPP-GW13-170427	WG	cis-1,2-Dichloroethene	0.25	U	ug/L	0.25	0.5	0.5	U
WPP-GW13-170427	WG	cis-1,3-Dichloropropene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW13-170427	WG	Cyclohexane	0.28	U	ug/L	0.28	1	1	U
WPP-GW13-170427	WG	Dibromochloromethane	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW13-170427	WG	Dichlorodifluoromethane	0.26	U	ug/L	0.26	1	1	U
WPP-GW13-170427	WG	Ethylbenzene	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW13-170427	WG	Isopropylbenzene	0.18	U	ug/L	0.18	0.5	0.5	U
WPP-GW13-170427	WG	m & p-Xylene	0.5	U	ug/L	0.5	1	1	U
WPP-GW13-170427	WG	Methyl acetate	0.3	U	ug/L	0.3	1	1	U

Williamson Polishing Plating  
Groundwater Sample Results  
CT Laboratories LLC /127039

Sample Number	Matrix	Analyte	Result	Lab Qualifier	Units	MDL	RL	Final Result	Final Qualifier
WPP-GW13-170427	WG	Methyl tert-butyl ether	0.29	U	ug/L	0.29	1	1	U
WPP-GW13-170427	WG	Methylcyclohexane	0.23	U	ug/L	0.23	0.5	0.5	U
WPP-GW13-170427	WG	Methylene chloride	0.4	U	ug/L	0.4	2	2	U
WPP-GW13-170427	WG	o-Xylene	0.24	U	ug/L	0.24	0.5	0.5	U
WPP-GW13-170427	WG	Styrene	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW13-170427	WG	Tetrachloroethene	0.3	U	ug/L	0.3	1	1	U
WPP-GW13-170427	WG	Toluene	0.22	U	ug/L	0.22	0.5	0.5	U
WPP-GW13-170427	WG	trans-1,2-Dichloroethene	0.25	U	ug/L	0.25	0.5	0.5	U
WPP-GW13-170427	WG	trans-1,3-Dichloropropene	0.19	U	ug/L	0.19	0.5	0.5	U
WPP-GW13-170427	WG	Trichloroethene	0.21	U	ug/L	0.21	0.5	0.5	U
WPP-GW13-170427	WG	Trichlorofluoromethane	0.2	U	ug/L	0.2	0.5	0.5	U
WPP-GW13-170427	WG	Vinyl chloride	0.18	U	ug/L	0.18	0.5	0.5	U