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**PERJURY STATEMENT**

Subject: Fuel Lake Case No. Ro0002981 and Geotracker Clobal ID T1000000416, Red Hanger Cleaners, 6335-6339 College Ave., Oakland, CA 94618

“ I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.”



**Ted Cleveland**

Vice President – Eastern Region  
EFI Global, Inc.

# **P&D ENVIRONMENTAL, INC.**

55 Santa Clara Ave, Suite 240  
Oakland, CA 94610  
(510) 658-6916

November 3, 2015  
Report 0461.R2

Mr. Gary Bates  
EFI Global, Inc.  
11000 Richmond Avenue, Suite 250  
Houston, TX 77042

**SUBJECT: INDOOR AIR INVESTIGATION AND MITIGATION REPORT**  
ACEH Case # RO2981  
Red Hanger Kleanners  
6239 College Avenue  
Oakland, California

Dear Mr. Bates:

P&D Environmental, Inc. (P&D) has prepared this indoor air investigation and mitigation report for activities performed during August, September and October 2015 on behalf of the property owner Ronald Elvidge and EFI Global, Inc. (EFI) at the subject site. The objective of the work was to investigate and mitigate indoor air tetrachloroethene (PCE) and trichloroethene (TCE) concentrations previously identified in a July 27, 2015 report prepared by Youngdahl Consulting Group, Inc. (Youngdahl). Based on air sample result revision by the laboratory, the Youngdahl report was subsequently re-issued on August 25, 2015. This work was performed in consultation with the Alameda County Environmental Health Department (ACDEH) following the initial review of the July 27, 2015 Youngdahl report.

A Site Location Map is attached as Figure 1, a Site Vicinity Aerial Photograph Detail showing the subject site property boundary and the locations of nearby buildings is attached as Figure 2, a Site Plan showing first floor parking and storage areas is attached as Figure 3, and Site Plans showing air sample collection locations for the first floor, second floor, third floor and roof are attached as Figures 4, 5, 6 and 7 respectively. All work was performed under the direct supervision of an appropriately registered professional.

## **BACKGROUND**

It is P&D's understanding that the former Red Hanger Kleanners store (also identified in various reports as Red Hanger Cleaners) occupied the ground floor of the subject site building at 6235–6239 College Avenue in Oakland, California from 1987 until 2015 (approximately 28 years), and that the Red Hanger Kleanners business vacated the premises in 2015. The second building to the north at 6251-6255 College Avenue (located at the corner of College Avenue and 63rd Street, see Figures 2 and 3) was reported to have been occupied by dry cleaner stores from 1953 to 1987 (approximately 34 years) with Red Hanger Kleanners identified at this location from either 1970 or 1982 to 1987. It is unknown when the dry cleaning operations began utilizing tetrachloroethene (PCE) as the dry cleaning solvent. However, it is P&D's understanding that review of Hazardous

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Materials Business Plans for 6239 College Avenue from April 1991 through March 2007 identified the presence of PCE at the site as early as April 1991 and as late as March 2007.

Review of Figure 3 shows that the first floor of 6239 College Avenue consists of the former Red Hanger Kleaners store occupying the southern portion of the building, with open parking and storage located immediately to the north of the west end of the former Red Hanger Kleaners store. Review of Figures 5 and 6 show that the second and third floor of the building above the first floor parking and storage areas are occupied by offices, bathrooms and stairwells. The first floor tenant space is presently vacant.

Historical investigations at the subject site have detected PCE in soil, groundwater, soil gas, and indoor air. Trichloroethene (TCE) has only been detected in indoor air at the site. A complete discussion of the historical dry cleaner operations and historical investigations of the property is provided in the July 27, 2015 Youngdahl Phase II Environmental Site Assessment Soil Gas Investigation Report for the subject site (identified in the report title as located at 6335-6339 College Avenue). A site conceptual model is also provided in the October 21, 2014 Youngdahl Phase II Environmental Site Assessment Soil Gas Investigation Work Plan for the subject site. A summary of historical subsurface investigations at the site and the site geology and hydrogeology are also provided in P&D's October 16, 2015 Soil Gas Investigation Work Plan (document 0461.W1).

### FIELD ACTIVITIES

Review of Appendix E of the Youngdahl July 27, 2015 report identified air sample results in the subject site building of 88 micrograms per cubic meter ( $\text{ug}/\text{m}^3$ ) TCE in the hallway on the second floor near the elevator in sample IA-4 and  $66 \text{ ug}/\text{m}^3$  TCE in a bathroom on the third floor in sample IA-5. The laboratory was requested to review the laboratory reports and initially reported that the results were accurate. The laboratory was requested to review the reports again and subsequently verified on August 12, 2015 that the initial results were incorrect and that the correct TCE IA-4 and IA-5 values were 8.8 and  $6.6 \text{ ug}/\text{m}^3$ , respectively. The correct values are provided in the summary of indoor and ambient air sample laboratory analytical results attached with this report (Table 1).

On August 3, 2015 a site visit to the building was performed to evaluate accessibility for performing a chemical inventory in tenant spaces and to evaluate accessibility to the plumbing in the bathrooms. Based on the limited accessibility to tenant spaces identified during the site visit and the absence of building drawings showing the locations of pipes associated with the building plumbing, building floor plans were obtained from the property manager and a plumber was scheduled to identify the locations of plumbing pipes in the building. In addition, air sampling media was requested from the laboratory that had performed the air sample analysis for the air sample results (Eurofins/ Air Toxics) that were documented in the Youngdahl July 27, 2015 report.

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On August 5, 2015 the plumbing layout in the building was evaluated by a plumber, and the following conditions were identified.

- The first floor bathroom and floor drains were identified as an independent set of drain pipes connected to a single roof vent pipe and the site sanitary sewer lateral,
- The second and third floor bathroom sinks and floor drains were identified as an independent set of drain pipes connected to a single roof vent pipe and the site sanitary sewer lateral,
- The second and third floor bathroom toilets were identified as an independent set of drain pipes connected to a single roof vent pipe and the site sanitary sewer lateral,

In addition, during the August 5, 2015 evaluation of plumbing a vertical duct was identified in the former dry cleaning space that extended to an exhaust fan on the roof. Visual inspection of the duct identified the presence of substantial amounts of lint lining the interior of the duct. A sample of the lint was collected on August 12, 2015 into unpreserved 40-milliliter Volatile Organic Analysis (VOA) vials by scraping the interior of the duct with a dust pan that was attached to an extension pole for the interval of approximately 15 to 25 feet above the first floor surface and transferring the lint from the dust pan into the VOA vials. Chain of custody procedures were observed for all sample handling.

Beginning on August 6, 2015 periodic telephone meetings were held with the ACDEH regarding sampling events, tenant notifications, and mitigation measures. Tenant notifications regarding site conditions including efforts to reduce indoor air Halogenated Volatile Organic Compound (HVOC) concentrations, and sample results were provided on August 20, September 22, October 16, and November 2, 2015. The initial tenant notifications included recommendations that pregnant women or women who suspected that they might be pregnant not enter the building until TCE concentrations were reduced. This recommendation of not entering the building was removed in the November 2, 2015 notification which communicated the reduced indoor air TCE and PCE concentrations in the post-mitigation confirmation air samples that were collected on October 20 to 21, 2015.

In addition, Material Data Sheets for the building carpet cleaning chemicals were obtained from the building carpet cleaning contractor and were verified to not contain PCE, TCE, or other HVOCs.

#### Indoor Air and Ambient Air Sampling

Indoor and ambient outdoor air sampling events of approximately 24 hours in duration using SIM-certified 6-liter Summa canisters and SIM-certified 24-hour flow controllers with SIM-certified sampling canes (with inlets at a height of approximately five feet above the ground surface) and duplicate tees were performed as follows:

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- August 6, 2015 to August 7, 2015 starting at approximately 7:30 a.m. and ending at approximately 9:30 a.m. at locations designated as IA4 (2nd Floor), IA5 Men's Room (3rd Floor), Elevator Pit, 1st Floor Exhaust, Sewer Vent, and BG-2 Ambient.
- August 12, 2015 to August 13, 2015 starting at approximately 1:00 p.m. and ending at approximately 2:30 p.m. at locations designated as IA4 (2nd Floor Hallway), IA5 (Men's Room 3rd Floor), IA6 (201 Health Center), IA7 (203 CPA), IA8 (Suite 204), IA9 (301 Kumon), IA10 (Suite 302), IA11 (Suite 303), BG-2 Ambient, and two duplicate indoor air samples (designated as IA6-DUP and IA11-DUP).
- September 3, 2015 to September 4, 2015 starting at approximately 1:30 p.m. and ending at approximately 2:00 p.m. at locations designated as IA4 (Hallway), IA5 Men's Room (3rd Floor), and BG2 Ambient.
- October 12, 2015 to October 13, 2015 starting at approximately 9:00 a.m. and ending at approximately 8:30 a.m. at locations designated as IA4 Hallway, IA5 Men's Room (3rd Floor), and BG2 Ambient.
- October 20, 2015 to October 21, 2015 starting at approximately 7:00 a.m. and ending at approximately 8:00 a.m. at locations designated as IA5 Men's Room (3rd Floor), IA6 (201 Health Center), IA7 (203 CPA), IA8 (Suite 204), IA9 (301 Kumon), IA12 (Suite 304), Elevator Pit, and BG-2 Ambient.

During the August 6 to August 7, 2015 air sampling event, in addition to evaluating air quality in the building on the first, second and third floors to verify if TCE Accelerated Response Action Level (ARAL) or Urgent Response Action Level (URAL) conditions had been detected in the building, additional air samples designated as Elevator Pit, 1<sup>st</sup> Floor Exhaust (roof), and Sewer Vent (roof) were collected in an effort to identify potential conduits for HVOCs to be entering the building.

During the August 12 to August 13, 2015 air sampling event, in addition to evaluating air quality on the second and third floors to verify that ARAL conditions had been detected in building common areas, additional air samples were collected to evaluate air quality in tenant spaces on the second and third floors.

During the September 3 to September 4, 2015 air sampling event a limited number of Summa canisters were available from the laboratory, and selected locations where ARAL conditions had been detected were sampled to verify if mitigation efforts performed in August 2015 (shampooing the carpet, sealing cracks in the floor of the first floor concrete slab and a gap in the elevator pit

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floor between the elevator piston sleeve and the pit floor, and sealing of sewer pipes following a smoke test) had been effective in reducing indoor air HVOC concentrations.

During the October 12, 2015 to October 13, 2015 air sampling event a limited number of Summa canisters were used for interim post-mitigation sampling to verify if mitigation efforts performed on September 23, 2015 (installation of air filters to portions of the building where atmospheric ventilation could not be performed) and in October (adjustment of ventilation systems to increase atmospheric ventilation to tenant spaces) had been effective. The valve for the duplicate Summa canister did not open, and for this reason a duplicate sample was not collected.

During the October 20, 2015 to October 21, 2015 air sampling event common areas and tenant spaces were evaluated to confirm that the air filtration and ventilation mitigation measures had been effective. In addition, the elevator pit was also sampled. The valves for the Summa canisters for the samples on the first floor in the former dry cleaner space and in the second floor hallway near the elevator (at location IA4) did not open, and for this reason air samples were not collected at these locations. In addition, the location of IA7 was moved to a location adjacent to the elevator shaft, in accordance with a request from the tenant in suite 203, and sample IA12 was collected in suite 304 in accordance with a request from the tenant in suite 304.

Chain of custody procedures were observed for all sample handling.

#### Indoor Air Mitigation Measures

Following the August 12 to 13, 2015 air sampling event verification of the presence of ARAL conditions in common areas but not in tenant spaces at the site, mitigation measures were performed as follows.

- The carpet on the second and third floors and in the stairwells was shampooed on August 22, 2015 in an effort to remove any potential HVOC source areas from the carpet.
- The cracks in the floor of the first floor former dry cleaner space were sealed with caulk in an effort to prevent vapor intrusion.
- A gap in the elevator pit floor between the elevator piston sleeve and the elevator pit floor was sealed.
- A smoke test was performed on August 26, 2015 to identify locations where sewer pipes could be visually identified to be causing vapors to enter the building. The following areas were identified and mitigated during the smoke test:
  - The seal for the toilet in both the men's room and women's bathroom on both the second and third floor.
  - The pea traps were dry and were filled with water for the floor drains in both the men's room and women's bathroom on both the second and third floor.

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- An uncapped sewer pipe was capped in the space above the first floor bathroom.
- A sewer clean out in the floor of the first floor tenant space that had been partially filled with dirt was cleaned out and capped.
- A dry pea trap was identified in the Symmetry Health Center (suite 201) and was filled with water.

Following verification of the presence of ARAL conditions in the common areas following implementation of the August mitigation measures, the following additional mitigation measures were performed:

- Installation of filtration units on September 23, 2015 in portions of the building where increased atmospheric ventilation is not possible based on the existing building ventilation system.
- Modification of the existing roof-mounted Heating Ventilation and Air Conditioning (HVAC) units to allow increased atmosphere air into the building.
- Placement of locking covers on the thermostats to prevent the HVAC fans from being turned off.

#### WEATHER

Weather data, including precipitation and barometric pressure for all of the days of indoor and ambient air sample collection (August 6, 2015 through October 21, 2015) are provided in Appendix B. In addition, weather data for the two weeks preceding August 6, 2015 sampling event and for the eleven days after the October 21, 2015 sampling event are also provided in Appendix B.

The weather station is located at on the north side of Prince Street immediately east of the intersection of Prince Street and College Avenue in Berkeley at an elevation of 253 feet above sea level, approximately 0.4 miles to the north-northeast of the subject site. The subject site is located at an elevation of approximately 210 feet above sea level. An internet link to the weather station information is provided in Appendix B.

#### LABORATORY ANALYSIS

All of the air samples were analyzed at Eurofins/ Air Toxics Ltd. of Folsom, California with the exception of the air samples that were collected on September 4, 2015 which were analyzed at K-Prime of Santa Rosa, California. All of the samples were analyzed for Volatile Organic Compounds (VOCs) using EPA Method TO-15. The lint sample collected from the first floor exhaust vent was analyzed at McCampbell Analytical, Inc. of Pittsburg, California for VOCs using EPA Method 8260.

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The air sample results are summarized in Table 1, the lint sample results are summarized in Table 2, and copies of the laboratory analytical reports and chain of custody documentation are attached with this report as Appendix C.

## DISCUSSION AND RECOMMENDATIONS

Following verification that URAL conditions were not present at the site, mitigation measures and post-mitigation sampling were performed. Initial mitigation measures were not successful in reducing indoor air HVOC concentrations to below ARAL concentrations in common areas, however, mitigation measures consisting of air filtration and HVAC modification to allow increased atmospheric ventilation were demonstrated to be effective in reducing TCE and PCE air concentrations in common areas and tenant spaces to concentrations below to below TCE commercial trigger concentrations and to below commercial indoor air December 2013 San Francisco Bay Regional Water Quality Control Board (SFRWQCB) Environmental Screening Level (ESL) air concentrations. Other chemicals detected in the indoor air samples are at concentrations that are consistent with the concentrations detected in the ambient outdoor air samples, and for this reason are not considered to be related to the building.

Based on discussions with the following Department of Toxic Substances Control (DTSC) toxicologists:

- Uta Hellmann-Blumberg (formerly at the SFRWQCB and now a toxicologist at the DTSC) and the primary author of the SFRWQCB October 16, 2014 Draft Interim Framework for Assessment of Vapor Intrusion at TCE-Contaminated Sites in the San Francisco Bay Region,
- Kimberly Gettmann, Department of Toxic Substances Control toxicologist who is identified as the primary point of contact regarding DTSC Human and Ecological Risk Office (HERO) Human Health Risk Assessment (HHRA) Note Number 5, and
- Claudio Sorrentino, the chief DTSC HERO toxicologist,

The notifications, mitigation measures, and timeliness of the notifications and actions to mitigate indoor air quality were determined to be reasonable and prudent.

P&D recommends that the following on-going mitigation measures be performed until it is determined that indoor air mitigation is no longer necessary.

- Verify that pea traps are routinely filled with water.
- Verify that the air filters operate continuously.
- Verify that the HVAC fans operate continuously.
- Perform periodic indoor air testing to verify that the mitigation measures remain effective.



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- Provide periodic notification to tenants of site conditions.

Review of Table 1 shows that the only location where elevated PCE and TCE air concentrations were detected in the post-mitigation air sample collected on October 21, 2015 was in the elevator pit. Based on the detected elevated PCE and TCE air concentrations in the elevator pit, P&D recommends that subsurface investigation be performed to complete the delineation of the extent of elevated concentrations of PCE and development of a remedial solution.

### DISTRIBUTION

Copies of this report should be uploaded to the county ftp site and to GeoTracker.

### LIMITATIONS

This report was prepared solely for the use of Ron Elvidge and EFI Global, Inc. The content and conclusions provided by P&D in this assessment are based on information collected during our investigation, which may include, but not be limited to, visual site inspections; interviews with the site owner, regulatory agencies and other pertinent individuals; review of available public documents; subsurface exploration and our professional judgment based on said information at the time of preparation of this document. Any subsurface sample results and observations presented herein are considered to be representative of the area of investigation; however, geological conditions may vary between borings and may not necessarily apply to the general site as a whole. If future subsurface or other conditions are revealed which vary from these findings, the newly revealed conditions must be evaluated and may invalidate the findings of this report.

This report is issued with the understanding that it is the responsibility of the owner, or his representative, to ensure that the information contained herein is brought to the attention of the appropriate regulatory agencies, where required by law. Additionally, it is the sole responsibility of the owner to properly dispose of any hazardous materials or hazardous wastes left onsite, in accordance with existing laws and regulations.

This report has been prepared in accordance with generally accepted practices using standards of care and diligence normally practiced by recognized consulting firms performing services of a similar nature. P&D is not responsible for the accuracy or completeness of information provided by other individuals or entities which is used in this report. This report presents our professional judgment based upon data and findings identified in this report and interpretation of such data based upon our experience and background, and no warranty, either express or implied, is made. The conclusions presented are based upon the current regulatory climate and may require revision if future regulatory changes occur.

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Should you have any questions, please do not hesitate to contact us at (510) 658-6916.

Sincerely,

P&D Environmental, Inc.



Paul H. King  
California Professional Geologist #5901  
Expires: 12/31/15



Attachments:

Table 1 - Summary of Indoor and Ambient Air Sample Laboratory Analytical Results

Table 2 - Summary of Lint Sample Laboratory Analytical Results

Figure 1 - Site Location Map

Figure 2 - Site Vicinity Aerial Photograph Detail

Figure 3 - Site Plan Showing First Floor Parking and Storage Areas

Figure 4 - Site Plan Showing Air Sample Collection Locations – First Floor

Figure 5 - Site Plan Showing Air Sample Collection Locations – Second Floor

Figure 6 - Site Plan Showing Air Sample Collection Locations – Third Floor

Figure 7 - Site Plan Showing Air Sample Collection Locations – Roof

Appendix A - Air Sampling Data Sheets

Appendix B - Weather Information

Appendix C - Laboratory Analytical Reports and Chain of Custody Documentation

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# **TABLES**

Table 1  
Summary of Indoor and Ambient Air Sample Laboratory Analytical Results

Sample Location/ID	Sample Date	Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	Carbon Tetrachloride	Chloroform	Chloromethane	Dichlorodifluoromethane (Freon 12)	1,2-DCA	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride
IA-1	5/29/2015	0.62	1.6	0.31	0.87	0.29	0.50	0.32	1.3	2.5	ND<0.13	3.5	ND<0.17	ND<0.12	ND<0.63	ND<0.040
IA-2	5/29/2015	0.61	1.7	0.37	1.2	0.46	0.54	0.34	1.2	2.6	ND<0.13	3.3	ND<0.17	ND<0.12	ND<0.62	ND<0.040
IA2 (1st Floor)	8/6/2015	0.38	1.2	0.22	0.67	0.23	0.54, a	0.28	0.89	2.1	ND<0.13	4.2	0.40	ND<0.13	ND<0.64	ND<0.041
IA-3	5/29/2015	ND<0.86	2.0	ND<0.47	ND<0.94	ND<0.47	ND<0.68	1.8	1.4	3.0	0.43, a	3.5	5.1	ND<0.43	ND<2.1	ND<0.14
IA-4*	5/29/2015	0.43	1.9	0.30	0.87	0.34	0.51	3.3	1.6	2.7	0.25	4.0	8.8	ND<0.13	ND<0.63	ND<0.041
IA4 (2nd Floor)	8/6/2015	0.42	2.4	0.41	1.0	0.46	0.52, a	5.4	1.0	2.2	0.24	3.6	8.1	ND<0.12	ND<0.63	ND<0.040
IA4 (Hallway)	8/13/2015	0.28	1.6	6.8	6.0	1.7	0.41	3.8	0.82	1.7	0.32	3.7	5.6	ND<0.10	ND<0.53	ND<0.034
IA4 (Hallway)	9/4/2015	0.432	3.19	1.24	2.07	0.765	0.634	4.17	1.12	2.82	0.365	7.15	8.09	ND<0.0397	ND<0.0396	ND<0.0256
IA4 Hallway	10/13/2015	ND<0.28	0.52	ND<0.15	0.33	ND<0.15	ND<0.22	0.70	1.1	2.4	ND<0.27	0.24	0.34	ND<0.14	ND<0.69	ND<0.045
IA-5*	5/29/2015	0.40	1.6	0.25	0.74	0.35	0.48	3.2	1.5	2.8	0.14	4.1	6.6	ND<0.12	ND<0.63	ND<0.040
IA5 Men's Room (3rd Floor)	8/6/2015	0.43	2.6	0.47	1.1	0.42	0.42, a	6.6	1.1	2.1	0.20	4.7	6.5	ND<0.13	ND<0.63	ND<0.041
IA5 (Men's Room)	8/13/2015	0.44	2.7	4.1	3.9	1.1	0.69	7.6	1.4	2.3	0.25	5.5	8.1	ND<0.13	ND<0.66	ND<0.042
IA5 Men's Room (3rd Floor)	9/4/2015	0.462	2.88	0.871	1.64	0.568	0.542	6.72	1.15	2.60	0.234	8.01	8.98	ND<0.0397	ND<0.0396	ND<0.0256
IA5 Men's Room (3rd Floor)	10/13/2015	0.32	1.1	0.24	0.67	0.26	ND<0.22	2.0	1.2	2.3	ND<0.14	0.80	0.27	ND<0.14	ND<0.69	ND<0.045
IA5 Men's Room (3rd Floor)	10/21/2015	0.32	1.0	0.23	0.57	0.24	ND<0.22	1.8	1.0	2.2	ND<0.14	0.88	0.33	ND<0.14	ND<0.70	ND<0.045
IA6 (201 Health Center)	8/13/2015	0.34	2.0	12	11	2.9	0.63	3.3	1.2	2.6	0.63	5.4	4.5	ND<0.13	ND<0.66	ND<0.043
IA6 (201 Health Center)	10/21/2015	0.69	3.8	0.57	1.8	0.72	ND<0.32	0.44	1.2	2.1	0.49	1.3	0.52	ND<0.20	ND<1.0	ND<0.064
IA6 DUP (201 Health Center)	8/13/2015	0.28	2.1	12	11	2.9	0.61	3.3	1.2	2.4	0.63	5.2	4.4	ND<0.13	ND<0.66	ND<0.042
IA6 DUP (201 Health Center)	10/21/2015	0.51	2.1	0.42	1.2	0.51	0.26	0.44	1.1	2.2	0.47	1.3	0.48	ND<0.15	ND<0.77	ND<0.050
IA7 (203 CPA)	8/13/2015	ND<0.69	2.4	2.8	2.7	1.0	ND<0.55	1.4	1.2	2.3	ND<0.35	3.3	1.9	ND<0.34	ND<1.7	ND<0.11
IA7 (203 CPA)	10/21/2015	0.58	1.9	0.36	1.1	0.40	0.38	0.27	1.2	2.2	ND<0.15	0.43	ND<0.20	ND<0.14	ND<0.73	ND<0.047
IA8 (Suite 204)	8/13/2015	ND<0.29	1.1	0.62	0.82	0.40	0.65	1.1	1.1	2.3	ND<0.15	1.3	1.6	ND<0.14	ND<0.73	ND<0.047
IA9 (301 Kumon)	8/13/2015	0.47	4.9	4.6	4.5	1.4	0.66	2.0	1.4	2.5	0.31	4.7	2.8	ND<0.18	ND<0.90	ND<0.058
IA9 (301 Kumon)	10/21/2015	0.62	2.6	0.48	1.3	0.47	0.31	0.36	1.3	2.2	ND<0.15	1.5	0.26	ND<0.15	ND<0.74	ND<0.048
IA10 (Suite 302)	8/13/2015	0.42	2.4	2.3	2.3	0.80	0.64	2.5	1.2	2.4	0.22	4.8	3.5	ND<0.14	ND<0.70	ND<0.045
IA11 (Suite 303)	8/13/2015	ND<0.26	1.0	0.70	0.73	0.26	0.66	0.69	1.1	2.5	0.63	0.96	0.90	ND<0.13	ND<0.66	ND<0.042
IA11 DUP (Suite 303)	8/13/2015	ND<0.25	0.95	0.62	0.70	0.27	0.57	0.61	1.2	2.4	0.59	0.89	0.85	ND<0.12	ND<0.62	ND<0.040

Table 1  
Summary of Indoor and Ambient Air Sample Laboratory Analytical Results

Sample Location/ID	Sample Date	Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	Carbon Tetrachloride	Chloroform	Chloromethane	Dichlorodifluoromethane (Freon 12)	1,2-DCA	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride
IA12 (Suite 304)	10/21/2015	<b>0.55</b>	1.4	0.27	0.92	0.35	<b>0.33</b>	0.30	1.1	2.3	ND<0.14	0.32	ND<0.18	ND<0.14	ND<0.68	ND<0.044
Elevator Pit	8/6/2015	<b>0.50</b>	1.4	0.24	0.79	0.29	0.55, a	0.98	0.89	2.0	ND<0.11	43	1.3	ND<0.11	ND<0.55	ND<0.036
Elevator Pit	10/21/2015	<b>1.2</b>	3.7	0.68	2.3	0.86	<b>0.44</b>	2.4	3.1	2.2	ND<0.13	<b>44</b>	<b>3.4</b>	ND<0.13	ND<0.64	ND<0.041
1st Floor Exhaust	8/6/2015	ND<2.6	11	1.5	3.7	1.4	ND<2.0	ND<1.6	ND<1.7	2.7	ND<1.3	<b>13</b>	ND<1.7	ND<1.3	ND<6.4	ND<0.41
Sewer Vent	8/6/2015	ND<2.2	7.1	1.3	2.6	ND<1.2	ND<1.7	<b>150</b>	1.7	2.1	ND<1.1	<b>19</b>	2.3	ND<1.1	ND<5.5	ND<0.36
BG-1	5/29/2015	0.40	0.91	0.18	0.61	0.23	<b>0.48</b>	0.16	1.3	2.5	ND<0.13	ND<0.21	ND<0.17	ND<0.12	ND<0.62	ND<0.040
BG-2	5/29/2015	<b>0.66</b>	1.4	0.26	0.99	0.43	<b>0.51</b>	ND<0.15	1.3	2.5	ND<0.13	ND<0.21	ND<0.17	ND<0.12	ND<0.62	ND<0.040
BG-2 Ambient	8/6/2015	0.30	1.5	0.19	0.59	0.22	<b>0.48, a</b>	ND<0.15	0.91	2.3	ND<0.12	ND<0.21	ND<0.17	ND<0.12	ND<0.61	ND<0.040
BG-2 Ambient	8/13/2015	ND<0.25	0.68	0.14	0.37	0.21	<b>0.60</b>	ND<0.15	1.1	2.5	ND<0.13	ND<0.21	ND<0.17	ND<0.12	ND<0.62	ND<0.040
BG2 Ambient	9/4/2015	0.319	1.54	0.229	0.848	0.319	<b>0.653</b>	ND<0.0488	1.22	2.91	0.0596	0.213	ND<0.0537	ND<0.0397	ND<0.0396	ND<0.0256
BG2 Ambient	10/13/2015	<b>0.98</b>	3.0	0.59	2.0	0.72	<b>0.39</b>	0.27	1.1	2.3	ND<0.12	ND<0.20	ND<0.16	ND<0.12	ND<0.59	ND<0.038
BG2 Ambient	10/21/2015	<b>0.77</b>	2.1	0.42	1.4	0.51	<b>0.36</b>	0.22	1.1	2.3	ND<0.13	ND<0.21	ND<0.17	ND<0.12	ND<0.62	ND<0.040
ESL		0.42	1,300	4.9	440 Combined		0.29	2.3	390	No Value	0.58	2.1	3.0	31	260	0.16
<b>NOTES:</b>																
1,2-DCA = 1,2-Dichloroethane																
PCE = Tetrachloroethene																
TCE = Trichloroethene																
cis-1,2-DCE = cis-1,2-Dichloroethene																
trans-1,2-DCE = trans-1,2-Dichloroethene																
ND = Not Detected.																
a = Laboratory note: Estimated value.																
* = Results reported in revised lab report reissued on 08/13/2015.																
ESL = Environmental Screening Level, by San Francisco Bay Regional Water Quality Control Board, Updated December 2013, from Table E-3 - Ambient and Indoor Air Screening Levels for Commercial/Industrial Land Use.																
<b>Results in BOLD exceed their respective ESL value.</b>																
Results and ESLs in micrograms per cubic meter (ug/m <sup>3</sup> ), unless otherwise noted.																

Table 2  
Summary of Lint Sample Laboratory Analytical Results

Sample Location/ID	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Carbon Tetrachloride	Chloroform	Chloromethane	Dichlorofluoromethane (Freon 12)	1,2-DCA	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride
1st Floor Exhaust Lint	8/6/2015	ND<0.050	ND<0.050	ND<0.050	ND<0.050	ND<0.050	ND<0.050	ND<0.050	ND<0.050	ND<0.040	ND<0.050	ND<0.050	ND<0.050	ND<0.050	ND<0.050
<b>NOTES:</b>															
1,2-DCA = 1,2-Dichloroethane															
PCE = Tetrachloroethene															
TCE = Trichloroethene															
cis-1,2-DCE = cis-1,2-Dichloroethene															
trans-1,2-DCE = trans-1,2-Dichloroethene															
ND = Not Detected.															
Results in milligrams per kilogram (mg/kg), unless otherwise noted.															

# **FIGURES**

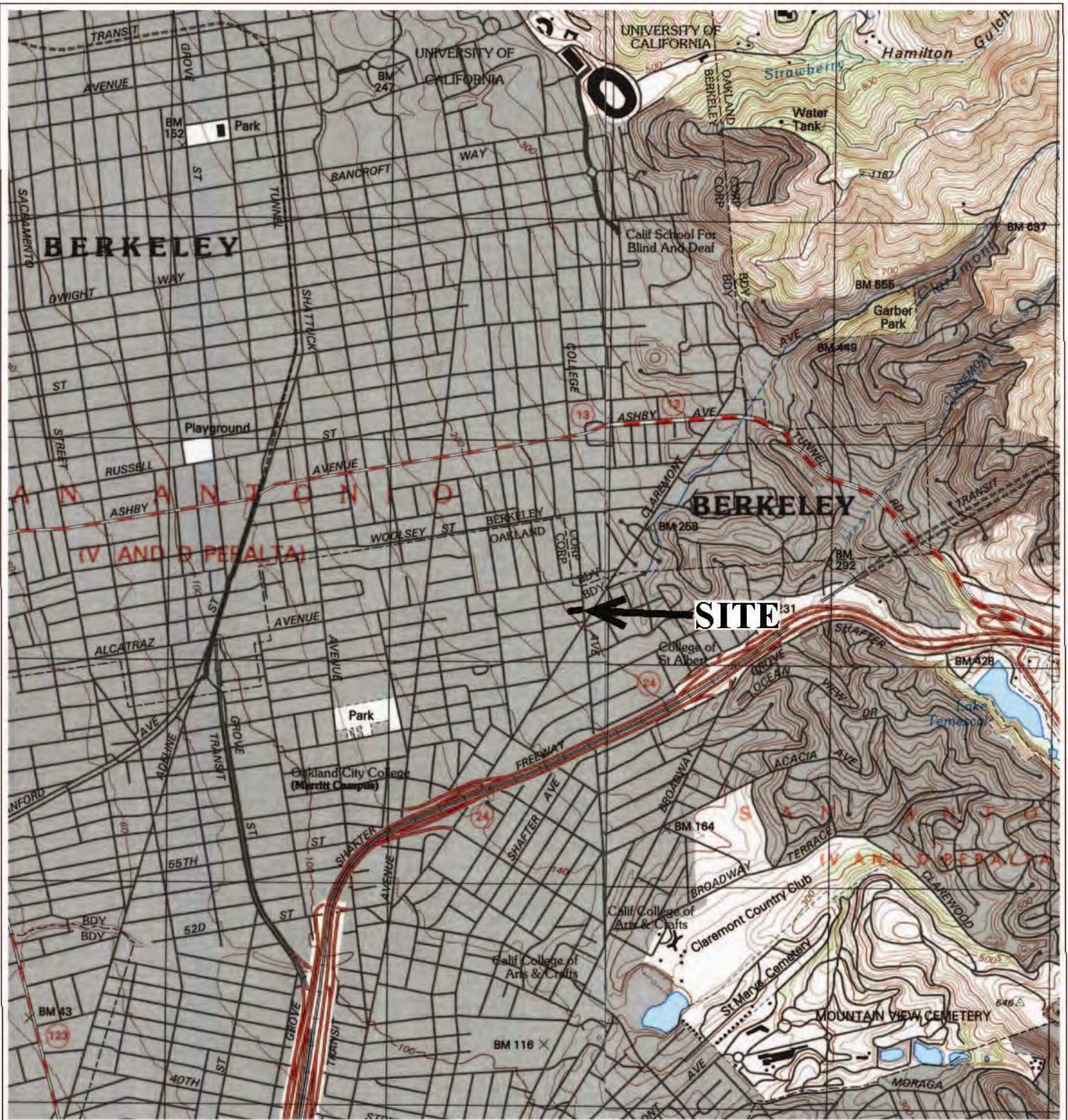


Figure 1  
 Site Location Map  
 Red Hanger Kleaners  
 6239 College Avenue  
 Oakland, California

Base Map From:  
 U.S. Geologic Survey 7.5 Minute Quadrangles  
 Oakland East, and Oakland West, both maps  
 edited 1996.

P&D Environmental, Inc.  
 55 Santa Clara Avenue, Suite 240  
 Oakland CA 94610

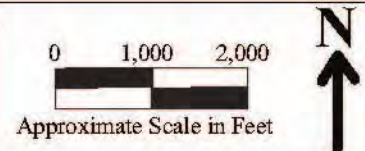


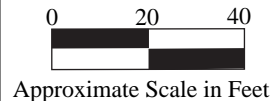




Figure 2  
 Site Vicinity Aerial Photograph Detail  
 Red Hanger Kleaners  
 6239 College Avenue  
 Oakland, California

Base Map From:  
 Google Earth, 2015

P&D Environmental, Inc.  
 55 Santa Clara Ave., Suite 240  
 Oakland, CA 94610



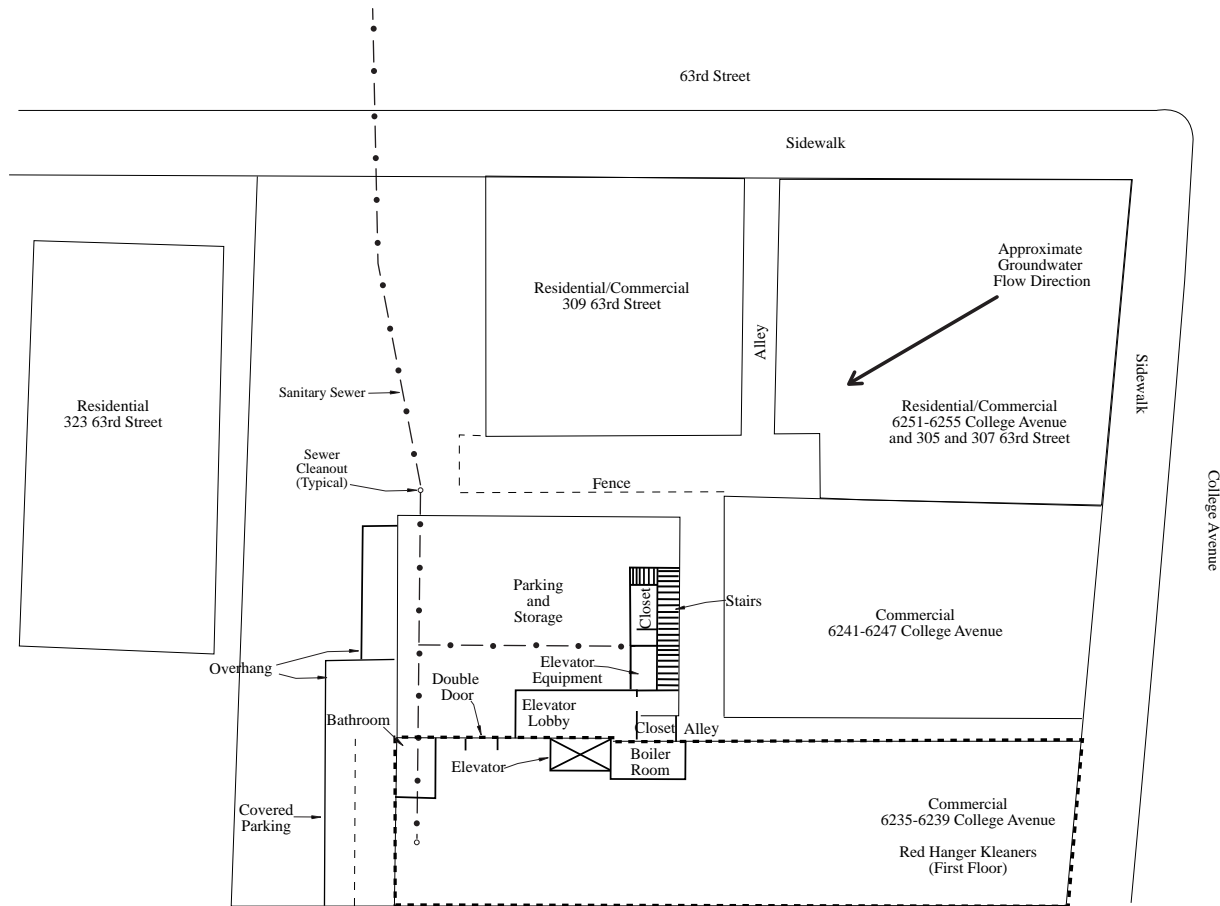


Figure 3  
 Site Plan Showing First-Floor Parking and Storage Areas  
 Red Hanger Kleaners  
 6239 College Avenue  
 Oakland, California

Base Map from:  
 Gordon Building, July 30, 2007, Alameda  
 County Assessor's Map, Revised June 15, 1989,  
 and Google Earth, 2015

P&D Environmental, Inc.  
 55 Santa Clara Ave., Suite 240  
 Oakland, CA 94610

0 15 30  
 Approximate Scale in Feet



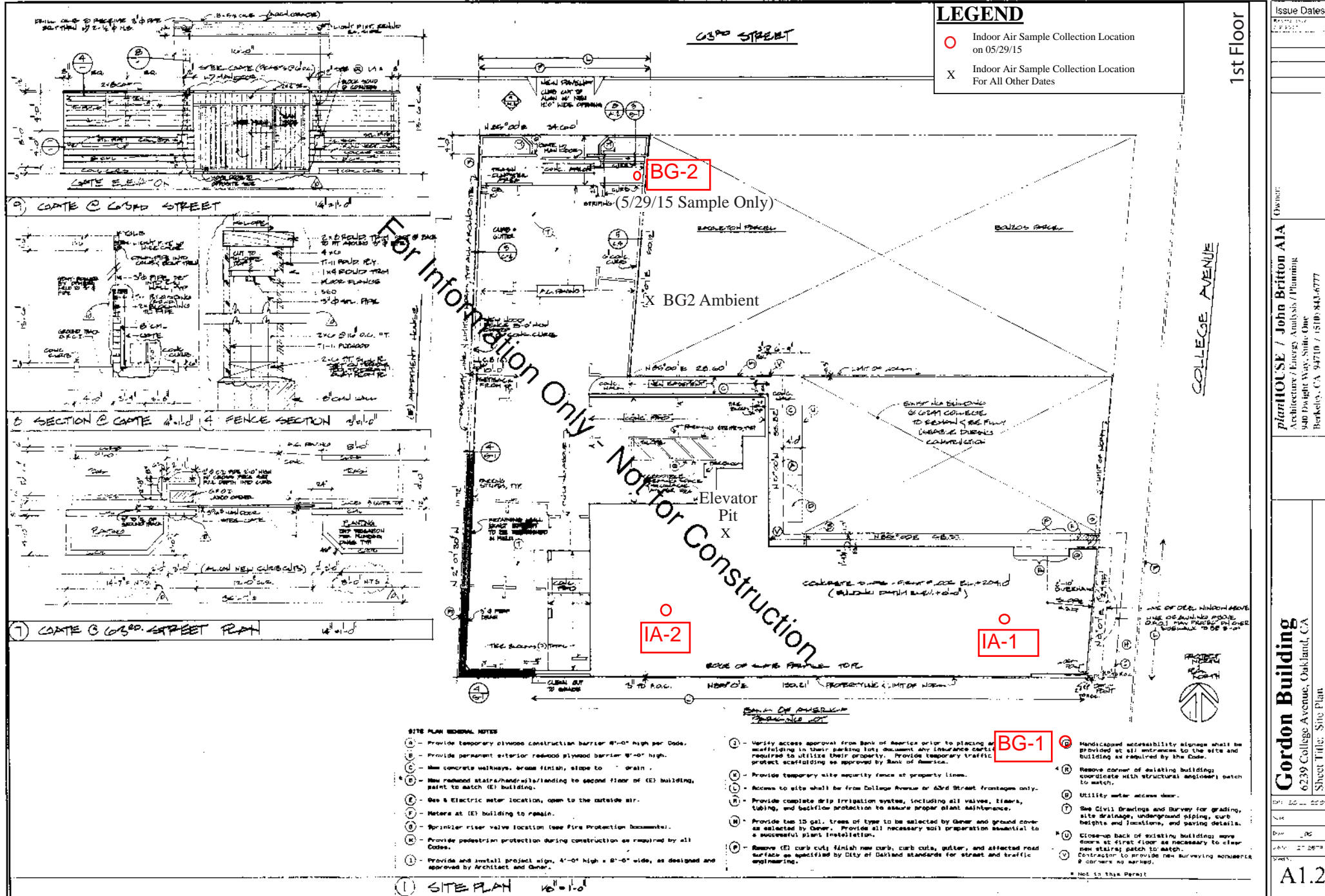


Figure 4  
 Site Plan Showing Air Sample Locations - First Floor

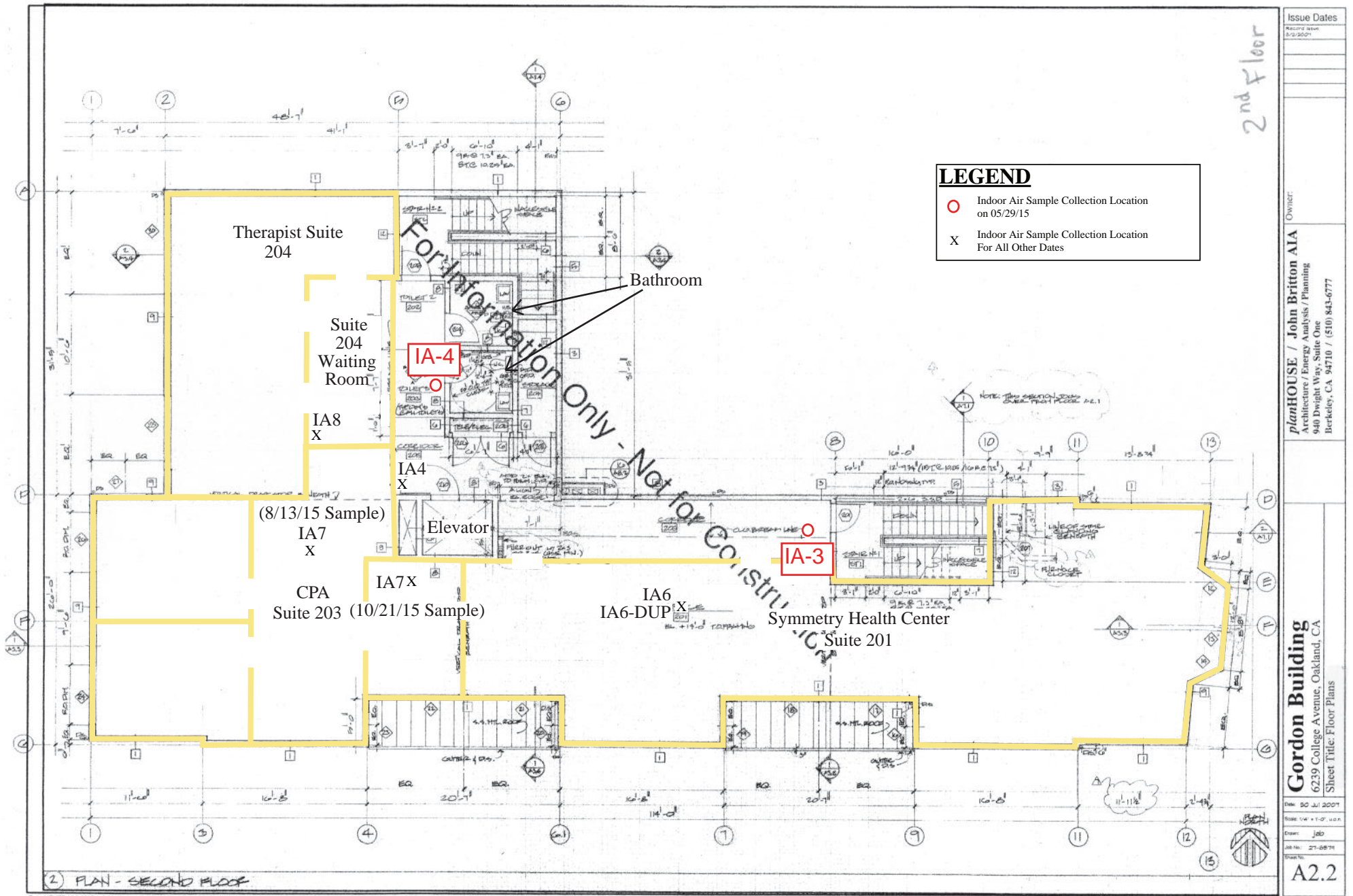
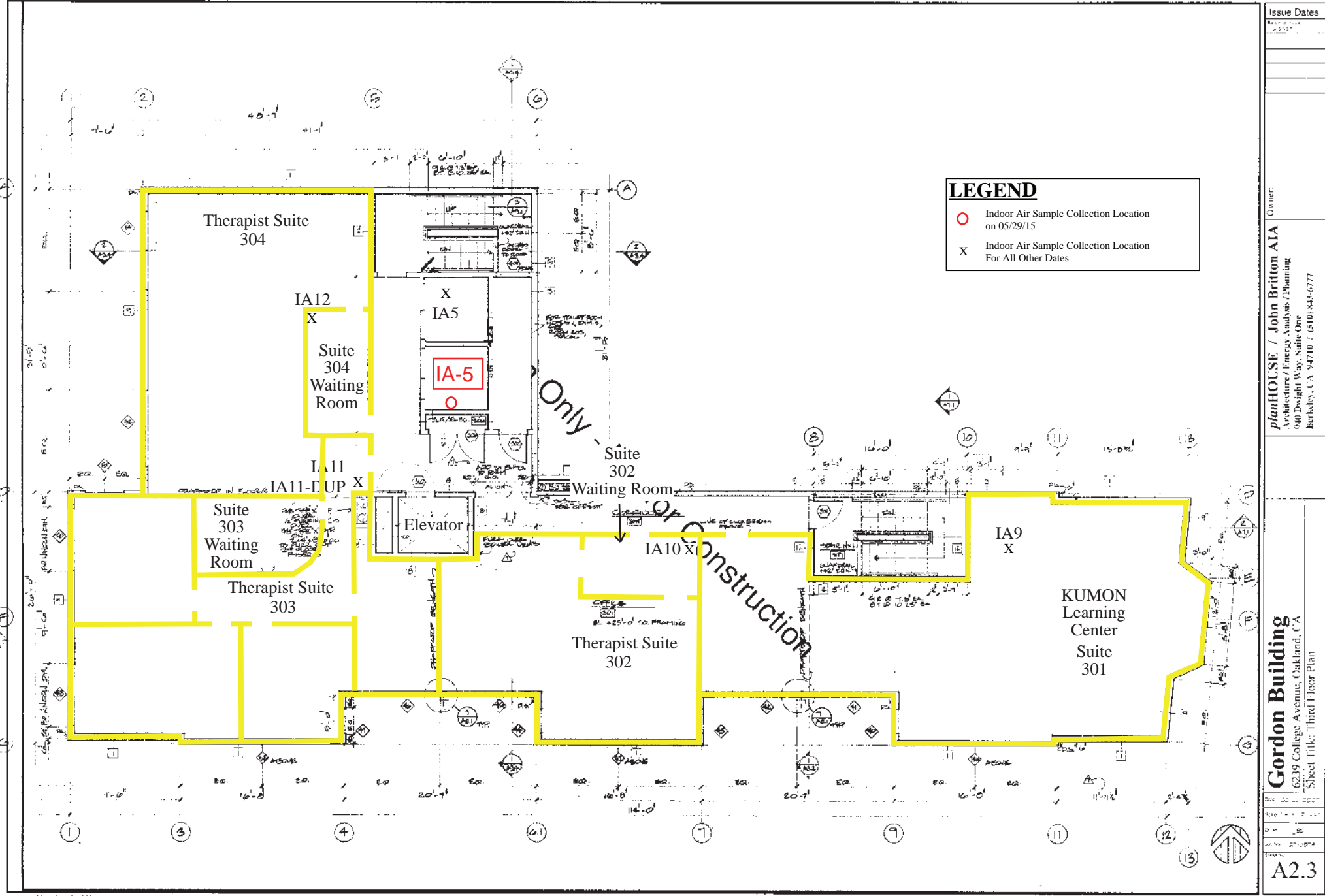


Figure 5  
Site Plan Showing Air Sample Locations - Second Floor



Issue Dates

Owner:  
**planHOUSE / John Britton AIA**  
 Architecture / Energy Analysis / Planning  
 940 Dwight Way, Suite One  
 Berkeley, CA 94710 / (510) 844-6777

**Gordon Building**  
 6239 College Avenue, Oakland, CA  
 Sheet Title: Third Floor Plan


A2.3

Figure 6  
 Site Plan Showing Air Sample Locations - Third Floor

LEGEND	
X	Air Sample (Indoor Air, Ambient Air) Collection Location

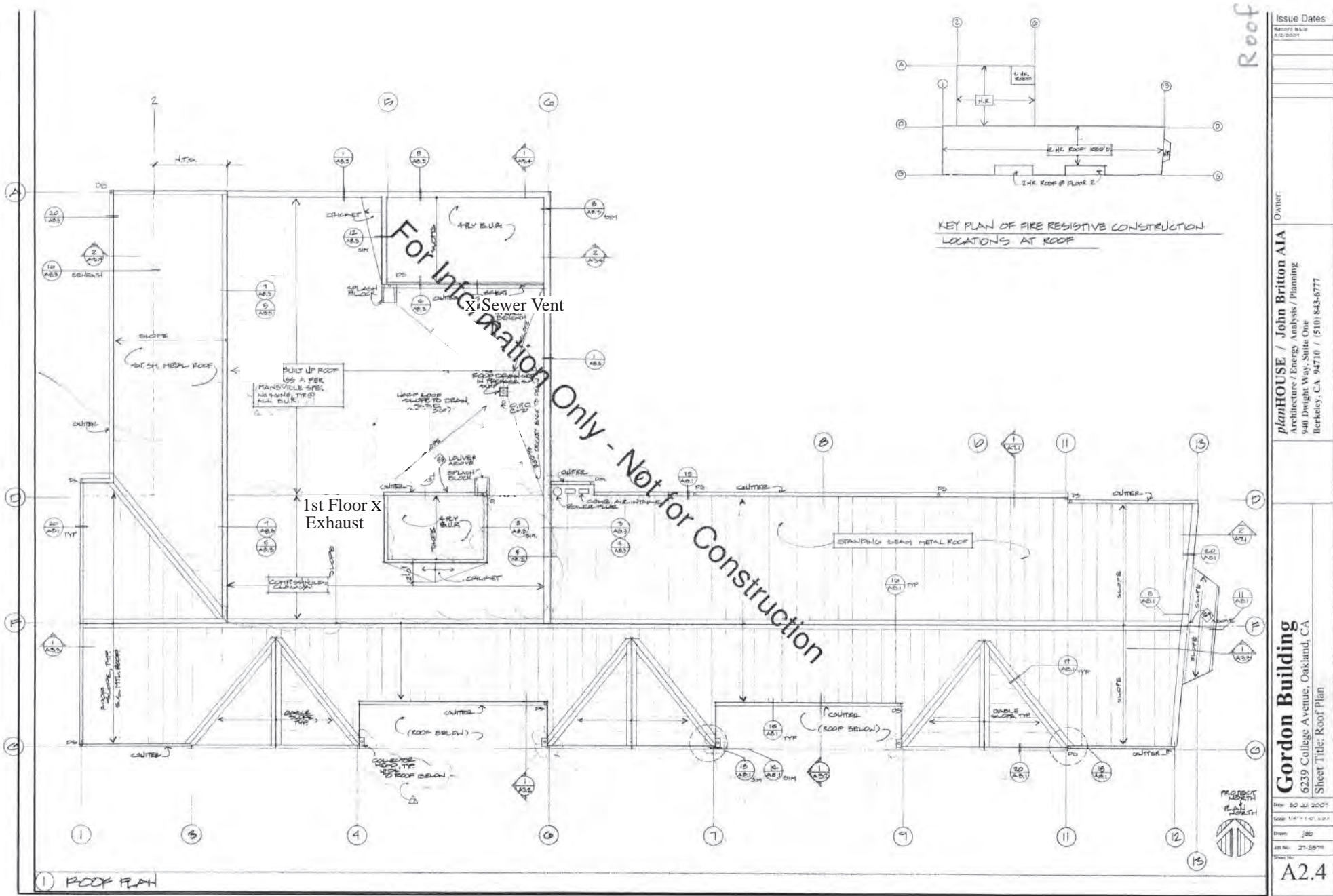


Figure 7  
Site Plan Showing Air Sample Locations - Roof

# **APPENDIX A**

## **Air Sampling Data Sheets**

AIR SAMPLING DATA SHEET **RED HANGER KLEANERS**  
 Address **6239 COLLEGE AVE. CARLAND, CA**  
 Job # **076/15**  
 Date **8/6/15**  
 Sampler Name **MLBD/JM**

8/6/15      8/7/15

Sample Location Designation	Canister #	Start pump flow rate (cc/min) and time	End pump flow rate (cc/min) and time	Sample Canister Initial Vacuum Check (In. Hg) and time	Begin sample collection vacuum (In. Hg) and time	End sample collection vacuum (In. Hg) and time	NOTES
ELEVATOR P.T	35289	flow time	flow time	vac -30 time 0725	vac -30 time 074110	vac -5 time 080500	
IA5 MEN'S ROOM (3 <sup>rd</sup> floor)	94943	flow time	flow time	vac -30 time 0727	vac -30 time 084947	vac -5.0 time 091500	24-hr SIM CERTIFIED FLOW RESTRICTORS
IA2	22503	flow time	flow time	vac -30 time 0729	vac -30 time 075131	vac -5.0 time 082500	
1 <sup>st</sup> FLOOR EXHAUST	35170	flow 54/min time 092615	flow 54/min time 092715	vac -30 time 0730	vac -30 time 092917	vac -5.5 time <del>093000</del> 093300	
IA4 (2 <sup>nd</sup> floor)	34493	flow time	flow time	vac -30 time 0731	vac -30 time 074744	vac -5.0 time 081200	
SEWER VENT	34415	flow time	flow time	vac -30 time 0732	vac -30 time 082120	vac -1.50 time 083500	
BG2 AMBIENT	5624	flow time	flow time	vac -30 time 0724	vac -30 time 073828	vac -5.0 time 093800	
		flow time	flow time	vac time	vac time	vac time	
		flow time	flow time	vac time	vac time	vac time	
		flow time	flow time	vac time	vac time	vac time	
		flow time	flow time	vac time	vac time	vac time	
		flow time	flow time	vac time	vac time	vac time	
		flow time	flow time	vac time	vac time	vac time	

NOTES



AIR SAMPLING DATA SHEET **RED HANGER CLEANERS**

Address **6239 COLLEGE AVE. OAKLAND**  
 Job # **046**  
 Date **8/12/15**  
 Sampler Name **MLBD**

Sample Location Designation	Canister #	Start pump flow rate (cc/min) and time	End pump flow rate (cc/min) and time	Sample Canister Initial Vacuum Check (In. Hg) and time	8/12/15	8/13/15	NOTES
					Begin sample collection vacuum (In. Hg) and time	End sample collection vacuum (In. Hg) and time	
IA4 2nd Floor Hallway	33583	flow time	flow time	vac -30 time 1230	vac -30 time 132814	vac -7.5 time 132834	
IA5 MEN'S ROOM	11882	flow time	flow time	vac -30 time 1233	vac -30 time 134140	vac -6 time 134512	24-Hour SIM CERTIFIED FLOW CONTROLLERS
IA6 (201 Health Ctr)	901	flow time	flow time	vac -30 time 1228	vac -30 time 133010	vac -7 time 133117	
IA6-DUP (201 Health Ctr)	13065	flow time	flow time	vac -30 time 1250	vac -30 time 133010	vac -7 time 132117	
IA7 (203 CBA)	34218	flow time	flow time	vac -30 time 1243	vac -30 time 133252	vac -7 time 133424	
IA8 (Suite 204)	33884	flow time	flow time	vac -30 time 1237	vac -30 time 133430	vac -8 time 134028	
IA9 (301 Kuman)	33877	flow time	flow time	vac -30 time 1235	vac -30 time 134335	vac -12.5 time 134432	
IA10 (Suite 302)	61262	flow time	flow time	vac -30 time 1234	vac -30 time 134238	vac -8 time 134314	
IA11 (Suite 303)	25301	flow time	flow time	vac -30 time 1234	vac -30 time 134650	vac -6.5 time 142640	
IA11-DUP (Suite 303)	33554	flow time	flow time	vac -30 time 1232	vac -30 time 134650	vac -6 time 142640	
BG2 AMBIENT	12955	flow time	flow time	vac -30 time 1236	vac -30 time 130818	vac -4.5 time 143112	
		flow time	flow time	vac time	vac time	vac time	
		flow time	flow time	vac time	vac time	vac time	

NOTES





AIR SAMPLING DATA SHEET

Address 6239 COLLEGE AVE GARLAND, CA  
 Job # 0461  
 Date 10/20/15  
 Sampler Name MLB/JHU

Sample Location Designation	Canister #	Start pump flow rate (cc/min) and time	End pump flow rate (cc/min) and time	Sample Canister Initial Vacuum Check (In. Hg) and time	10/20/15 Begin sample collection vacuum (In. Hg) and time	10/21/15 End sample collection vacuum (In. Hg) and time	NOTES
IA2 (1 <sup>st</sup> FLOOR)	33871	flow time	flow time	vac -30 time 0650	vac -30 time 0738	vac 0 time	SAMPLE WAS NOT <del>STARTED</del> RECOVERED
IA4 (HALLWAY)	03536	flow time	flow time	vac -30 time 0710	vac -30 time 0742	vac 0 time	SAMPLE WAS NOT <del>STARTED</del> RECOVERED
WLS'S ROOM IAS (3 <sup>rd</sup> FLOOR)	6L0067	flow time	flow time	vac -30 time 0703	vac -30 time 0757	vac -7.5 time 0741	
(201 HEALTH CTR) IA6	96100	flow time	flow time	vac -30 time 0705	vac -30 time 0747	vac -15 time 0733	FLOW CONTROLLER 24-HOUR (SIM CERTIFIED)
(201 HEALTH CTR) IA6-DUP	24491	flow time	flow time	vac -30 time -0707	vac -30 time 0747	vac -9 time 0733	
IA7 (203 CPA)	1055	flow time	flow time	vac -30 time 0809	vac -30 time 1009	vac -10 time 0755	
IA9 (301 KUNEN)	35560	flow time	flow time	vac -30 time 0701	vac -30 time 0755	vac -9 time 0745	
IA12 (SUITE 304)	5626	flow time	flow time	vac -30 time 0657	vac -30 time 0721	vac -5.5 time 0714	
ELEVATOR PIT	34394	flow time	flow time	vac -30 time 0655	vac -30 time 0702	vac -6.5 time 0655	
BG2- AMBIENT	33777	flow time	flow time	vac -30 time 0652	vac -30 time 0700	vac -5 time 0801	
		flow time	flow time	vac time	vac time	vac time	
		flow time	flow time	vac time	vac time	vac time	
		flow time	flow time	vac time	vac time	vac time	

NOTES

# **APPENDIX B**

## **Weather Information**

About This Weather Station

**Weather Station ID: KCABERKE41**

Station Name: Elmwood

Latitude / Longitude: N 37 ° 51 ' 18 " , W 122 ° 15 ' 5 "

Elevation: 253

City: Berkeley

State: CA

Hardware: AcuRite Pro Weather Center

Software: Acu-link.com

**Weather History Table**  
**July 23, 2015 - November 1, 2015**

2015	Temperature			Dew Point			Humidity			Speed			Pressure			Precip. Accum.
Jul	High	Avg	Low	High	Avg	Low	High	Avg	Low	High	Avg	Gust	High	Avg	Low	Sum
23	83.5 °F	65.6 °F	59.4 °F	57.6 °F	55.6 °F	54.3 °F	86 %	72 %	41 %	5 mph	1 mph	0 mph	29.81 in	29.73 in	29.65 in	0 in
24	86.2 °F	67.3 °F	56.3 °F	58.9 °F	55.9 °F	53.5 °F	92 %	70 %	38 %	4 mph	1 mph	0 mph	29.9 in	29.85 in	29.81 in	0 in
25	84 °F	66.2 °F	55.2 °F	59.7 °F	56.8 °F	52.9 °F	93 %	74 %	44 %	4 mph	1 mph	0 mph	29.88 in	29.81 in	29.75 in	0 in
26	84.9 °F	67.6 °F	58.1 °F	59.1 °F	56.7 °F	53.9 °F	90 %	71 %	40 %	4 mph	1 mph	0 mph	29.75 in	29.71 in	29.67 in	0 in
27	92.7 °F	68.5 °F	52.3 °F	60.1 °F	54.8 °F	50.9 °F	96 %	67 %	28 %	5 mph	1 mph	0 mph	29.73 in	29.68 in	29.64 in	0 in
28	97.7 °F	71.1 °F	52 °F	61.6 °F	55.3 °F	49.7 °F	93 %	64 %	27 %	5 mph	1 mph	0 mph	29.67 in	29.63 in	29.59 in	0 in
29	84.6 °F	67.7 °F	56.7 °F	61.2 °F	59 °F	54.4 °F	99 %	77 %	45 %	6 mph	2 mph	0 mph	29.74 in	29.68 in	29.62 in	0 in
30	86.7 °F	68.3 °F	60.4 °F	62.2 °F	59.6 °F	57.7 °F	93 %	76 %	43 %	5 mph	1 mph	0 mph	29.82 in	29.77 in	29.73 in	0 in
31	84.2 °F	67.4 °F	60.4 °F	61.2 °F	58.7 °F	56.7 °F	89 %	75 %	46 %	6 mph	1 mph	0 mph	29.81 in	29.77 in	29.73 in	0 in

2015	Temperature			Dew Point			Humidity			Speed			Pressure			Precip. Accum.
Aug	High	Avg	Low	High	Avg	Low	High	Avg	Low	High	Avg	Gust	High	Avg	Low	Sum
1	87.4 °F	69.6 °F	61.5 °F	60.8 °F	58.9 °F	56.9 °F	86 %	71 %	41 %	5 mph	1 mph	0 mph	29.8 in	29.74 in	29.69 in	0 in
2	86.4 °F	67.5 °F	59.4 °F	59.9 °F	58.1 °F	56.3 °F	93 %	74 %	41 %	6 mph	1 mph	0 mph	29.76 in	29.71 in	29.66 in	0 in
3	85.8 °F	69 °F	61.2 °F	59 °F	56.9 °F	55.1 °F	92 %	68 %	39 %	4 mph	1 mph	0 mph	29.75 in	29.72 in	29.68 in	0 in
4	81.3 °F	65.6 °F	54.5 °F	59 °F	55.4 °F	53.1 °F	98 %	73 %	41 %	4 mph	1 mph	0 mph	29.78 in	29.75 in	29.72 in	0 in
5	87.8 °F	67.7 °F	54.1 °F	61.3 °F	57.6 °F	52.7 °F	98 %	74 %	40 %	6 mph	1 mph	0 mph	29.82 in	29.74 in	29.66 in	0 in
6	78.8 °F	65 °F	54.9 °F	60.8 °F	57.9 °F	55.5 °F	99 %	80 %	54 %	4 mph	1 mph	0 mph	29.69 in	29.64 in	29.58 in	0 in
7	82.6 °F	67.5 °F	59.5 °F	60.4 °F	58.1 °F	56.5 °F	91 %	74 %	46 %	5 mph	1 mph	0 mph	29.68 in	29.64 in	29.59 in	0 in
8	80.6 °F	66.3 °F	60.6 °F	59.1 °F	57.2 °F	55.7 °F	88 %	74 %	47 %	4 mph	1 mph	0 mph	29.73 in	29.69 in	29.66 in	0 in
9	90.5 °F	69 °F	59.4 °F	62.3 °F	58.9 °F	56.5 °F	93 %	73 %	38 %	5 mph	1 mph	0 mph	29.72 in	29.68 in	29.64 in	0 in
10	84.4 °F	67 °F	59.2 °F	62.5 °F	58.8 °F	55.5 °F	89 %	76 %	48 %	5 mph	1 mph	0 mph	29.73 in	29.69 in	29.65 in	0 in
11	83.3 °F	67.1 °F	58.1 °F	61.1 °F	58.1 °F	54.5 °F	93 %	75 %	46 %	6 mph	1 mph	0 mph	29.74 in	29.7 in	29.66 in	0 in
12	87.8 °F	68.3 °F	52.3 °F	62.1 °F	57.3 °F	51 °F	99 %	73 %	34 %	5 mph	1 mph	0 mph	29.84 in	29.79 in	29.74 in	0 in
13	85.6 °F	69.7 °F	62.2 °F	61.9 °F	60.3 °F	58 °F	93 %	75 %	42 %	5 mph	1 mph	0 mph	29.83 in	29.79 in	29.75 in	0 in
14	92.5 °F	71.3 °F	60.1 °F	61.8 °F	59.3 °F	54.6 °F	92 %	70 %	35 %	5 mph	1 mph	0 mph	29.84 in	29.78 in	29.73 in	0 in
15	100.8 °F	72.9 °F	55 °F	64 °F	57.3 °F	52.7 °F	94 %	65 %	24 %	4 mph	1 mph	0 mph	29.77 in	29.7 in	29.63 in	0 in
16	104.5 °F	74.8 °F	57 °F	64 °F	57.7 °F	51.4 °F	97 %	62 %	25 %	3 mph	1 mph	0 mph	29.68 in	29.61 in	29.55 in	0 in
17	88.9 °F	68.1 °F	58.3 °F	62 °F	59.1 °F	56.6 °F	98 %	76 %	40 %	5 mph	1 mph	0 mph	29.68 in	29.63 in	29.58 in	0 in
18	82.2 °F	66.6 °F	60.3 °F	60.5 °F	58 °F	56.5 °F	90 %	76 %	48 %	6 mph	2 mph	0 mph	29.72 in	29.68 in	29.64 in	0 in
19	82.2 °F	66.5 °F	61.5 °F	59.9 °F	57.4 °F	55.6 °F	83 %	74 %	46 %	6 mph	1 mph	0 mph	29.73 in	29.7 in	29.67 in	0 in
20	80.8 °F	65 °F	61 °F	58.4 °F	56.8 °F	55.1 °F	88 %	76 %	46 %	5 mph	1 mph	0 mph	29.71 in	29.67 in	29.63 in	0 in
21	81.7 °F	65.3 °F	60.3 °F	59.5 °F	57.2 °F	55.8 °F	90 %	77 %	45 %	4 mph	1 mph	0 mph	29.68 in	29.65 in	29.62 in	0 in
22	82.9 °F	67.3 °F	60.8 °F	61.1 °F	57.4 °F	55.6 °F	85 %	72 %	45 %	5 mph	1 mph	0 mph	29.72 in	29.68 in	29.65 in	0 in
23	82 °F	66.9 °F	59.9 °F	58.5 °F	56.7 °F	55.3 °F	88 %	71 %	45 %	4 mph	1 mph	0 mph	29.8 in	29.75 in	29.71 in	0 in
24	86.7 °F	67.6 °F	57.6 °F	59.4 °F	56.8 °F	54.6 °F	91 %	71 %	39 %	4 mph	1 mph	0 mph	29.83 in	29.78 in	29.73 in	0 in
25	87.1 °F	67.2 °F	58.3 °F	60.6 °F	57.4 °F	55 °F	93 %	74 %	39 %	5 mph	1 mph	0 mph	29.79 in	29.75 in	29.7 in	0 in
26	89.8 °F	68.2 °F	53.6 °F	61.6 °F	56.9 °F	51.6 °F	96 %	71 %	39 %	4 mph	1 mph	0 mph	29.81 in	29.77 in	29.73 in	0 in
27	99.3 °F	72.4 °F	55 °F	63.4 °F	55.1 °F	47.1 °F	83 %	58 %	29 %	3 mph	0 mph	0 mph	29.83 in	29.76 in	29.69 in	0 in
28	103.1 °F	74.4 °F	60.1 °F	63.8 °F	58.9 °F	53.7 °F	90 %	64 %	22 %	5 mph	1 mph	0 mph	29.72 in	29.67 in	29.61 in	0 in
29	84.9 °F	69.1 °F	58.8 °F	66 °F	61.6 °F	55.2 °F	95 %	79 %	46 %	5 mph	1 mph	0 mph	29.77 in	29.73 in	29.68 in	0 in
30	92.8 °F	69.8 °F	56.8 °F	62.4 °F	58.5 °F	52.9 °F	98 %	71 %	35 %	3 mph	0 mph	0 mph	29.82 in	29.76 in	29.69 in	0 in
31	89.2 °F	67.3 °F	55.6 °F	61.9 °F	57.1 °F	53 °F	95 %	73 %	39 %	5 mph	1 mph	0 mph	29.71 in	29.66 in	29.61 in	0 in

2015	Temperature			Dew Point			Humidity			Speed			Pressure			Precip. Accum.
Sep	High	Avg	Low	High	Avg	Low	High	Avg	Low	High	Avg	Gust	High	Avg	Low	Sum
1	89.6 °F	67.8 °F	56.5 °F	60.1 °F	57.5 °F	54.4 °F	96 %	73 %	36 %	5 mph	1 mph	0 mph	29.69 in	29.65 in	29.61 in	0 in
2	83.1 °F	66.8 °F	59 °F	60.8 °F	57.8 °F	55.8 °F	90 %	75 %	43 %	5 mph	1 mph	0 mph	29.73 in	29.69 in	29.66 in	0 in
3	83.3 °F	65.1 °F	56.3 °F	57.2 °F	54.5 °F	52 °F	96 %	72 %	35 %	5 mph	1 mph	0 mph	29.7 in	29.65 in	29.59 in	0 in
4	90.7 °F	64 °F	51.8 °F	53 °F	51.2 °F	47.9 °F	96 %	69 %	26 %	3 mph	1 mph	0 mph	29.66 in	29.63 in	29.6 in	0 in
5	88.7 °F	65.3 °F	49.1 °F	54.5 °F	48.9 °F	39.5 °F	93 %	61 %	25 %	4 mph	1 mph	0 mph	29.77 in	29.72 in	29.66 in	0 in
6	98.4 °F	68 °F	51.4 °F	55.7 °F	45.2 °F	39 °F	78 %	48 %	17 %	4 mph	1 mph	0 mph	29.77 in	29.72 in	29.66 in	0 in
7	108.5 °F	72.8 °F	51.4 °F	52.3 °F	42.6 °F	36.2 °F	60 %	38 %	13 %	3 mph	0 mph	0 mph	29.71 in	29.65 in	29.59 in	0 in
8	111.4 °F	76 °F	56.7 °F	54.5 °F	44.3 °F	38.7 °F	57 %	36 %	12 %	3 mph	0 mph	0 mph	29.67 in	29.6 in	29.53 in	0 in
9	104.9 °F	75.3 °F	58.3 °F	57.8 °F	49.1 °F	37.6 °F	85 %	44 %	18 %	4 mph	1 mph	0 mph	29.64 in	29.58 in	29.53 in	0 in

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10	98.8 °F	71.5 °F	57 °F	60.7 °F	56.8 °F	49.7 °F	95 %	67 %	23 %	5 mph	1 mph	0 mph	29.66 in	29.62 in	29.58 in	0 in
11	91.8 °F	68.8 °F	57.2 °F	61.3 °F	57.7 °F	54.3 °F	97 %	72 %	34 %	5 mph	1 mph	0 mph	29.71 in	29.65 in	29.59 in	0 in
12	79.7 °F	64.7 °F	57.2 °F	58.8 °F	56.2 °F	49.4 °F	92 %	76 %	36 %	4 mph	1 mph	0 mph	29.76 in	29.68 in	29.6 in	0 in
13	80.4 °F	65.5 °F	59.2 °F	61.7 °F	58.4 °F	56.5 °F	94 %	80 %	50 %	4 mph	1 mph	0 mph	29.7 in	29.6 in	29.5 in	0 in
14	82.6 °F	64.6 °F	59.7 °F	61.5 °F	58.2 °F	55.5 °F	92 %	81 %	48 %	7 mph	1 mph	0 mph	29.57 in	29.52 in	29.48 in	0 in
15	82.8 °F	63.8 °F	55.6 °F	56 °F	53 °F	46.6 °F	94 %	71 %	33 %	5 mph	1 mph	0 mph	29.69 in	29.64 in	29.58 in	0 in
16	79.7 °F	62.6 °F	52.7 °F	59.8 °F	54.9 °F	51.3 °F	98 %	78 %	42 %	3 mph	1 mph	0 mph	29.8 in	29.74 in	29.68 in	0.14 in
17	82 °F	64.8 °F	55.8 °F	59.7 °F	57.3 °F	52.4 °F	98 %	79 %	45 %	5 mph	1 mph	0 mph	29.86 in	29.8 in	29.74 in	0.01 in
18	91.6 °F	65.7 °F	51.6 °F	60.6 °F	53.9 °F	48.1 °F	98 %	71 %	30 %	5 mph	1 mph	0 mph	29.75 in	29.69 in	29.62 in	0 in
19	102 °F	68.7 °F	50.9 °F	61.3 °F	53.2 °F	47.8 °F	93 %	64 %	24 %	3 mph	0 mph	0 mph	29.65 in	29.58 in	29.52 in	0 in
20	109 °F	74.5 °F	55.4 °F	59.6 °F	51.4 °F	46.8 °F	77 %	50 %	17 %	3 mph	0 mph	0 mph	29.64 in	29.58 in	29.52 in	0 in
21	104.9 °F	74.3 °F	59.2 °F	59.8 °F	52.6 °F	44.6 °F	86 %	51 %	21 %	5 mph	1 mph	0 mph	29.56 in	29.5 in	29.44 in	0 in
22	77.5 °F	62.3 °F	55.9 °F	55.9 °F	54.1 °F	52.2 °F	92 %	76 %	46 %	4 mph	1 mph	0 mph	29.75 in	29.64 in	29.53 in	0 in
23	89.4 °F	64.4 °F	50 °F	58.8 °F	52.7 °F	48.6 °F	97 %	70 %	34 %	3 mph	0 mph	0 mph	29.8 in	29.74 in	29.67 in	0 in
24	102.9 °F	74.8 °F	55.2 °F	59.7 °F	53.3 °F	48.7 °F	84 %	60 %	21 %	5 mph	1 mph	0 mph	29.75 in	29.67 in	29.6 in	0 in
25	89.8 °F	67.1 °F	53.1 °F	60.8 °F	54.6 °F	48.4 °F	94 %	67 %	36 %	4 mph	0 mph	0 mph	29.7 in	29.67 in	29.63 in	0 in
26	89.2 °F	65.3 °F	54.5 °F	59.9 °F	55.6 °F	51.1 °F	96 %	74 %	37 %	3 mph	1 mph	0 mph	29.71 in	29.65 in	29.58 in	0 in
27	83.7 °F	63 °F	52 °F	60.7 °F	55.6 °F	50.6 °F	98 %	79 %	45 %	3 mph	1 mph	0 mph	29.62 in	29.58 in	29.55 in	0 in
28	79.5 °F	61.8 °F	53.4 °F	55.5 °F	51.4 °F	48.1 °F	99 %	82 %	48 %	4 mph	0 mph	0 mph	29.69 in	29.65 in	29.6 in	0 in
29	78.6 °F	63.1 °F	56.3 °F	54.8 °F	53.4 °F	51.9 °F	89 %	73 %	44 %	5 mph	1 mph	0 mph	29.78 in	29.74 in	29.69 in	0 in
30	68.2 °F	59.5 °F	54.3 °F	61.4 °F	55.7 °F	51.4 °F	93 %	88 %	77 %	3 mph	0 mph	0 mph	29.79 in	29.74 in	29.68 in	0.07 in

2015	Temperature			Dew Point			Humidity			Speed			Pressure			Precip. Accum.
Oct	High	Avg	Low	High	Avg	Low	High	Avg	Low	High	Avg	Gust	High	Avg	Low	Sum
1	84.6 °F	65.1 °F	55.9 °F	62.2 °F	57.5 °F	53.9 °F	96 %	79 %	44 %	5 mph	0 mph	0 mph	29.81 in	29.74 in	29.67 in	0 in
2	89.8 °F	64 °F	52.2 °F	61.1 °F	55.3 °F	51.5 °F	99 %	78 %	38 %	5 mph	0 mph	0 mph	29.82 in	29.71 in	29.6 in	0 in
3	84.2 °F	60.7 °F	50.7 °F	59.8 °F	52.5 °F	49.5 °F	98 %	78 %	39 %	4 mph	1 mph	0 mph	29.6 in	29.4 in	29.21 in	0 in
4	84 °F	62.3 °F	50.5 °F	57.3 °F	51.6 °F	47.4 °F	91 %	71 %	35 %	4 mph	1 mph	0 mph	29.46 in	29.34 in	29.22 in	0 in
5	85.8 °F	64 °F	52.5 °F	59.4 °F	55.2 °F	48.6 °F	98 %	76 %	41 %	4 mph	1 mph	0 mph	29.75 in	29.6 in	29.46 in	0 in
6	85.8 °F	64.8 °F	55.6 °F	59.8 °F	57.4 °F	53.8 °F	98 %	80 %	41 %	4 mph	1 mph	0 mph	29.89 in	29.82 in	29.75 in	0 in
7	86.2 °F	65.1 °F	54.5 °F	60.6 °F	56.6 °F	52.4 °F	96 %	77 %	42 %	4 mph	1 mph	0 mph	29.91 in	29.88 in	29.84 in	0 in
8	93.7 °F	67.2 °F	52.3 °F	62.2 °F	55.8 °F	48.1 °F	92 %	71 %	31 %	4 mph	0 mph	0 mph	29.87 in	29.83 in	29.79 in	0 in
9	93.4 °F	65.7 °F	50.9 °F	59.5 °F	55.2 °F	49.5 °F	96 %	74 %	29 %	3 mph	0 mph	0 mph	29.87 in	29.81 in	29.74 in	0 in
10	88.9 °F	66.7 °F	55.9 °F	64.4 °F	59.9 °F	54.2 °F	98 %	82 %	43 %	4 mph	0 mph	0 mph	29.82 in	29.77 in	29.72 in	0 in
11	89.2 °F	64.2 °F	53.8 °F	63.1 °F	56.9 °F	51.9 °F	99 %	80 %	39 %	4 mph	1 mph	0 mph	29.8 in	29.74 in	29.69 in	0 in
12	99 °F	67.4 °F	51.4 °F	62.8 °F	56.1 °F	49.6 °F	98 %	73 %	30 %	4 mph	0 mph	0 mph	29.76 in	29.7 in	29.65 in	0 in
13	103.1 °F	71.9 °F	56.7 °F	61.8 °F	55.2 °F	51.4 °F	89 %	61 %	23 %	4 mph	1 mph	0 mph	29.77 in	29.73 in	29.68 in	0 in
14	88.5 °F	68.5 °F	58.3 °F	59.6 °F	55.5 °F	49.5 °F	90 %	66 %	37 %	4 mph	1 mph	0 mph	29.76 in	29.71 in	29.66 in	0 in
15	85.5 °F	65.2 °F	57.7 °F	61.7 °F	58.1 °F	54.6 °F	95 %	80 %	41 %	4 mph	0 mph	0 mph	29.72 in	29.69 in	29.66 in	0 in
16	88.5 °F	65.2 °F	56.5 °F	60.7 °F	57.3 °F	54.2 °F	94 %	78 %	39 %	6 mph	1 mph	0 mph	29.72 in	29.67 in	29.62 in	0 in
17	72.3 °F	63.8 °F	58.3 °F	62.1 °F	57.1 °F	53.7 °F	92 %	79 %	65 %	3 mph	0 mph	0 mph	29.76 in	29.73 in	29.69 in	0 in
18	80.4 °F	62.3 °F	52.5 °F	60.7 °F	56.2 °F	51.6 °F	98 %	82 %	49 %	5 mph	1 mph	0 mph	29.77 in	29.74 in	29.71 in	0 in
19	86.4 °F	66 °F	56.5 °F	59.5 °F	56.6 °F	53.6 °F	90 %	74 %	40 %	4 mph	1 mph	0 mph	29.81 in	29.76 in	29.71 in	0 in
20	89.1 °F	62.7 °F	51.1 °F	58.6 °F	53.9 °F	49.9 °F	98 %	77 %	31 %	5 mph	0 mph	0 mph	29.77 in	29.72 in	29.66 in	0 in
21	87.8 °F	61.3 °F	49.8 °F	60.4 °F	53.2 °F	48.4 °F	97 %	79 %	33 %	4 mph	0 mph	0 mph	29.74 in	29.7 in	29.66 in	0 in
22	83.5 °F	62 °F	50.7 °F	59.6 °F	54.7 °F	49.3 °F	98 %	80 %	43 %	3 mph	1 mph	0 mph	29.74 in	29.69 in	29.65 in	0 in
23	84.4 °F	61.2 °F	50.5 °F	59.7 °F	54.4 °F	49.1 °F	97 %	81 %	36 %	4 mph	0 mph	0 mph	29.81 in	29.77 in	29.73 in	0 in
24	81.1 °F	61.4 °F	51.1 °F	60.4 °F	54.8 °F	49.7 °F	98 %	81 %	48 %	3 mph	0 mph	0 mph	29.8 in	29.74 in	29.69 in	0 in
25	83.5 °F	61.8 °F	52.3 °F	62.2 °F	55.5 °F	50 °F	95 %	82 %	48 %	3 mph	0 mph	0 mph	29.79 in	29.75 in	29.7 in	0 in
26	90 °F	63.5 °F	52 °F	61.7 °F	56.1 °F	50.9 °F	98 %	80 %	37 %	3 mph	0 mph	0 mph	29.79 in	29.73 in	29.67 in	0 in
27	72.7 °F	61 °F	54.3 °F	57.2 °F	53.2 °F	47.6 °F	93 %	77 %	41 %	3 mph	0 mph	0 mph	29.83 in	29.77 in	29.71 in	0 in
28	82.4 °F	63.2 °F	54.5 °F	61.1 °F	54.9 °F	50.4 °F	93 %	76 %	46 %	4 mph	1 mph	0 mph	29.82 in	29.78 in	29.75 in	0 in
29	87.3 °F	63.7 °F	50.5 °F	53.9 °F	50.1 °F	47.7 °F	90 %	64 %	31 %	4 mph	1 mph	0 mph	29.8 in	29.75 in	29.7 in	0 in
30	90.3 °F	62.2 °F	48 °F	54.7 °F	48.8 °F	44 °F	91 %	66 %	27 %	3 mph	0 mph	0 mph	29.83 in	29.78 in	29.73 in	0 in
31	86.9 °F	62.9 °F	51.1 °F	60.8 °F	54.4 °F	48.6 °F	93 %	77 %	39 %	3 mph	0 mph	0 mph	29.89 in	29.84 in	29.8 in	0 in

2015	Temperature			Dew Point			Humidity			Speed			Pressure			Precip. Accum.
Nov	High	Avg	Low	High	Avg	Low	High	Avg	Low	High	Avg	Gust	High	Avg	Low	Sum
1	83.3 °F	63.6 °F	54 °F	61.6 °F	58.1 °F	52.3 °F	96 %	84 %	47 %	5 mph	1 mph	0 mph	29.92 in	29.81 in	29.7 in	0.37 in

## **APPENDIX C**

### **Laboratory Analytical Reports and Chain of Custody Documentation**

#### **Air Samples**

- **Air Toxics Workorder # 1508074 - August 6, 2015 Indoor and Ambient Air Samples**
- **Air Toxics Workorder # 1508200 - August 13, 2015 Indoor and Ambient Air Samples**
- **K Prime Workorder # 136577-136579 - September 4, 2015 Indoor and Ambient Air Samples**
- **Air Toxics Workorder # 1510220 - October 13, 2015 Indoor and Ambient Air Samples**
- **Air Toxics Workorder # 1510465 - August 21, 2015 Indoor and Ambient Air Samples**

#### **Lint Sample**

- **McC Campbell Workorder # 1508164 - August 6, 2015 1<sup>st</sup> Floor Exhaust Lint Sample**



8/10/2015

Mr. Paul King  
P & D Environmental  
55 Santa Clara  
Suite 240  
Oakland CA 94610

Project Name: RED HANGER KLEANERS 6239 COLLEGE AVE.

Project #: 0461

Workorder #: 1508074

Dear Mr. Paul King

The following report includes the data for the above referenced project for sample(s) received on 8/7/2015 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 SIM are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kyle Vagadori at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Kyle Vagadori  
Project Manager

**WORK ORDER #: 1508074**

Work Order Summary

<b>CLIENT:</b>	Mr. Paul King P & D Environmental 55 Santa Clara Suite 240 Oakland, CA 94610	<b>BILL TO:</b>	Mr. Paul King P & D Environmental 55 Santa Clara Suite 240 Oakland, CA 94610
<b>PHONE:</b>	510-658-6916	<b>P.O. #</b>	
<b>FAX:</b>	510-834-0772	<b>PROJECT #</b>	0461 RED HANGER KLEANERS 6239
<b>DATE RECEIVED:</b>	08/07/2015	<b>CONTACT:</b>	COLLEGE AVE. Kyle Vagadori
<b>DATE COMPLETED:</b>	08/10/2015		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	IA2 (1ST FLOOR)	Modified TO-15 SIM	5.1 "Hg	5 psi
02A	IA4 (2ND FLOOR)	Modified TO-15 SIM	4.7 "Hg	4.9 psi
03A	IA5 MEN'S ROOM (3RD FLOOR)	Modified TO-15 SIM	4.7 "Hg	5 psi
04A	ELEVATOR PIT	Modified TO-15 SIM	1.2 "Hg	4.9 psi
05A	1ST FLOOR EXHAUST	Modified TO-15 SIM	5.1 "Hg	5.1 psi
06A	SEWER VENT	Modified TO-15 SIM	1 "Hg	5.1 psi
07A	BG-2 AMBIENT	Modified TO-15 SIM	4.1 "Hg	5 psi
08A	Lab Blank	Modified TO-15 SIM	NA	NA
08B	Lab Blank	Modified TO-15 SIM	NA	NA
09A	CCV	Modified TO-15 SIM	NA	NA
09B	CCV	Modified TO-15 SIM	NA	NA
10A	LCS	Modified TO-15 SIM	NA	NA
10AA	LCSD	Modified TO-15 SIM	NA	NA
10B	LCS	Modified TO-15 SIM	NA	NA
10BB	LCSD	Modified TO-15 SIM	NA	NA

CERTIFIED BY: 

DATE: 08/10/15

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,  
TX NELAP - T104704343-14-7, UT NELAP CA009332014-5, VA NELAP - 460197, WA NELAP - C935  
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)  
Accreditation number: CA300005, Effective date: 10/18/2014, Expiration date: 10/17/2015.

Eurofins Air Toxics Inc. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 9563  
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

**LABORATORY NARRATIVE**  
**Modified TO-15 SIM**  
**P & D Environmental**  
**Workorder# 1508074**

Seven 6 Liter Summa Canister (SIM Certified) samples were received on August 07, 2015. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the SIM acquisition mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

<i>Requirement</i>	<i>TO-15</i>	<i>ATL Modifications</i>
ICAL %RSD acceptance criteria	<math>\leq 30\%</math> RSD with 2 compounds allowed out to <math>< 40\%</math> RSD	Project specific; default criteria is <math>\leq 30\%</math> RSD with 10% of compounds allowed out to <math>< 40\%</math> RSD
Daily Calibration	+/- 30% Difference	Project specific; default criteria is <math>\leq 30\%</math> Difference with 10% of compounds allowed out up to <math>\leq 40\%</math>; flag and narrate outliers
Blank and standards	Zero air	Nitrogen
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

**Receiving Notes**

There were no receiving discrepancies.

**Analytical Notes**

All Quality Control Limit exceedances and affected sample results are noted by flags. Each flag is defined at the bottom of this Case Narrative and on each Sample Result Summary page. Target compound non-detects in the samples that are associated with high bias in QC analyses have not been flagged.

Dilution was performed on samples 1ST FLOOR EXHAUST and SEWER VENT due to matrix interference.

**Definition of Data Qualifying Flags**

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

## Summary of Detected Compounds MODIFIED EPA METHOD TO-15 GC/MS SIM

**Client Sample ID: IA2 (1ST FLOOR)**

**Lab ID#: 1508074-01A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.032	0.43	0.16	2.1
Chloromethane	0.080	0.43	0.17	0.89
Chloroform	0.032	0.058	0.16	0.28
Carbon Tetrachloride	0.032	0.086 J0	0.20	0.54 J0
Benzene	0.080	0.12	0.26	0.38
Trichloroethene	0.032	0.075	0.17	0.40
Toluene	0.032	0.33	0.12	1.2
Tetrachloroethene	0.032	0.62	0.22	4.2
Ethyl Benzene	0.032	0.050	0.14	0.22
m,p-Xylene	0.064	0.16	0.28	0.67
o-Xylene	0.032	0.053	0.14	0.23

**Client Sample ID: IA4 (2ND FLOOR)**

**Lab ID#: 1508074-02A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.032	0.45	0.16	2.2
Chloromethane	0.079	0.49	0.16	1.0
Chloroform	0.032	1.1	0.15	5.4
Carbon Tetrachloride	0.032	0.083 J0	0.20	0.52 J0
Benzene	0.079	0.13	0.25	0.42
1,2-Dichloroethane	0.032	0.060	0.13	0.24
Trichloroethene	0.032	1.5	0.17	8.1
Toluene	0.032	0.64	0.12	2.4
Tetrachloroethene	0.032	0.53	0.21	3.6
Ethyl Benzene	0.032	0.095	0.14	0.41
m,p-Xylene	0.063	0.23	0.27	1.0
o-Xylene	0.032	0.10	0.14	0.46

**Client Sample ID: IA5 MEN'S ROOM (3RD FLOOR)**

**Lab ID#: 1508074-03A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
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## Summary of Detected Compounds MODIFIED EPA METHOD TO-15 GC/MS SIM

**Client Sample ID: IA5 MEN'S ROOM (3RD FLOOR)**

**Lab ID#: 1508074-03A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.032	0.43	0.16	2.1
Chloromethane	0.080	0.55	0.16	1.1
Chloroform	0.032	1.3	0.16	6.6
Carbon Tetrachloride	0.032	0.067 J0	0.20	0.42 J0
Benzene	0.080	0.14	0.25	0.43
1,2-Dichloroethane	0.032	0.049	0.13	0.20
Trichloroethene	0.032	1.2	0.17	6.5
Toluene	0.032	0.68	0.12	2.6
Tetrachloroethene	0.032	0.70	0.22	4.7
Ethyl Benzene	0.032	0.11	0.14	0.47
m,p-Xylene	0.064	0.26	0.28	1.1
o-Xylene	0.032	0.097	0.14	0.42

**Client Sample ID: ELEVATOR PIT**

**Lab ID#: 1508074-04A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.028	0.41	0.14	2.0
Chloromethane	0.070	0.43	0.14	0.89
Chloroform	0.028	0.20	0.14	0.98
Carbon Tetrachloride	0.028	0.088 J0	0.17	0.55 J0
Benzene	0.070	0.16	0.22	0.50
Trichloroethene	0.028	0.24	0.15	1.3
Toluene	0.028	0.38	0.10	1.4
Tetrachloroethene	0.028	6.4	0.19	43
Ethyl Benzene	0.028	0.056	0.12	0.24
m,p-Xylene	0.056	0.18	0.24	0.79
o-Xylene	0.028	0.066	0.12	0.29

**Client Sample ID: 1ST FLOOR EXHAUST**

**Lab ID#: 1508074-05A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
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## Summary of Detected Compounds MODIFIED EPA METHOD TO-15 GC/MS SIM

**Client Sample ID: 1ST FLOOR EXHAUST**

**Lab ID#: 1508074-05A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.32	0.54	1.6	2.7
Toluene	0.32	3.0	1.2	11
Tetrachloroethene	0.32	1.8	2.2	13
Ethyl Benzene	0.32	0.36	1.4	1.5
m,p-Xylene	0.65	0.86	2.8	3.7
o-Xylene	0.32	0.33	1.4	1.4

**Client Sample ID: SEWER VENT**

**Lab ID#: 1508074-06A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.28	0.43	1.4	2.1
Chloromethane	0.70	0.84	1.4	1.7
Chloroform	0.28	32	1.4	150
Trichloroethene	0.28	0.43	1.5	2.3
Toluene	0.28	1.9	1.0	7.1
Tetrachloroethene	0.28	2.8	1.9	19
Ethyl Benzene	0.28	0.30	1.2	1.3
m,p-Xylene	0.56	0.59	2.4	2.6

**Client Sample ID: BG-2 AMBIENT**

**Lab ID#: 1508074-07A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.031	0.46	0.15	2.3
Chloromethane	0.078	0.44	0.16	0.91
Carbon Tetrachloride	0.031	0.077 J0	0.20	0.48 J0
Benzene	0.078	0.095	0.25	0.30
Toluene	0.031	0.39	0.12	1.5
Ethyl Benzene	0.031	0.044	0.13	0.19
m,p-Xylene	0.062	0.14	0.27	0.59
o-Xylene	0.031	0.052	0.13	0.22



Air Toxics

Client Sample ID: IA2 (1ST FLOOR)

Lab ID#: 1508074-01A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	e080809sim	Date of Collection:	8/6/15 7:51:00 AM
Dil. Factor:	1.61	Date of Analysis:	8/8/15 12:19 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.032	0.43	0.16	2.1
Freon 114	0.032	Not Detected	0.22	Not Detected
Chloromethane	0.080	0.43	0.17	0.89
Vinyl Chloride	0.016	Not Detected	0.041	Not Detected
Chloroethane	0.080	Not Detected	0.21	Not Detected
1,1-Dichloroethene	0.016	Not Detected	0.064	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected
Methyl tert-butyl ether	0.16	Not Detected	0.58	Not Detected
1,1-Dichloroethane	0.032	Not Detected	0.13	Not Detected
cis-1,2-Dichloroethene	0.032	Not Detected	0.13	Not Detected
Chloroform	0.032	0.058	0.16	0.28
1,1,1-Trichloroethane	0.032	Not Detected	0.18	Not Detected
Carbon Tetrachloride	0.032	0.086 J0	0.20	0.54 J0
Benzene	0.080	0.12	0.26	0.38
1,2-Dichloroethane	0.032	Not Detected	0.13	Not Detected
Trichloroethene	0.032	0.075	0.17	0.40
Toluene	0.032	0.33	0.12	1.2
1,1,2-Trichloroethane	0.032	Not Detected	0.18	Not Detected
Tetrachloroethene	0.032	0.62	0.22	4.2
1,2-Dibromoethane (EDB)	0.032	Not Detected	0.25	Not Detected
Ethyl Benzene	0.032	0.050	0.14	0.22
m,p-Xylene	0.064	0.16	0.28	0.67
o-Xylene	0.032	0.053	0.14	0.23
1,1,2,2-Tetrachloroethane	0.032	Not Detected	0.22	Not Detected
1,4-Dichlorobenzene	0.032	Not Detected	0.19	Not Detected

J0 = Estimated value due to bias in the CCV.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	109	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	94	70-130





Air Toxics

Client Sample ID: IA4 (2ND FLOOR)

Lab ID#: 1508074-02A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	e080811sim	Date of Collection:	8/6/15 7:47:00 AM
Dil. Factor:	1.58	Date of Analysis:	8/8/15 01:42 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.032	0.45	0.16	2.2
Freon 114	0.032	Not Detected	0.22	Not Detected
Chloromethane	0.079	0.49	0.16	1.0
Vinyl Chloride	0.016	Not Detected	0.040	Not Detected
Chloroethane	0.079	Not Detected	0.21	Not Detected
1,1-Dichloroethene	0.016	Not Detected	0.063	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.63	Not Detected
Methyl tert-butyl ether	0.16	Not Detected	0.57	Not Detected
1,1-Dichloroethane	0.032	Not Detected	0.13	Not Detected
cis-1,2-Dichloroethene	0.032	Not Detected	0.12	Not Detected
Chloroform	0.032	1.1	0.15	5.4
1,1,1-Trichloroethane	0.032	Not Detected	0.17	Not Detected
Carbon Tetrachloride	0.032	0.083 J0	0.20	0.52 J0
Benzene	0.079	0.13	0.25	0.42
1,2-Dichloroethane	0.032	0.060	0.13	0.24
Trichloroethene	0.032	1.5	0.17	8.1
Toluene	0.032	0.64	0.12	2.4
1,1,2-Trichloroethane	0.032	Not Detected	0.17	Not Detected
Tetrachloroethene	0.032	0.53	0.21	3.6
1,2-Dibromoethane (EDB)	0.032	Not Detected	0.24	Not Detected
Ethyl Benzene	0.032	0.095	0.14	0.41
m,p-Xylene	0.063	0.23	0.27	1.0
o-Xylene	0.032	0.10	0.14	0.46
1,1,2,2-Tetrachloroethane	0.032	Not Detected	0.22	Not Detected
1,4-Dichlorobenzene	0.032	Not Detected	0.19	Not Detected

J0 = Estimated value due to bias in the CCV.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	96	70-130



Air Toxics

Client Sample ID: IA5 MEN'S ROOM (3RD FLOOR)

Lab ID#: 1508074-03A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	e080812sim	Date of Collection:	8/6/15 8:49:00 AM
Dil. Factor:	1.59	Date of Analysis:	8/8/15 02:25 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.032	0.43	0.16	2.1
Freon 114	0.032	Not Detected	0.22	Not Detected
Chloromethane	0.080	0.55	0.16	1.1
Vinyl Chloride	0.016	Not Detected	0.041	Not Detected
Chloroethane	0.080	Not Detected	0.21	Not Detected
1,1-Dichloroethene	0.016	Not Detected	0.063	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.63	Not Detected
Methyl tert-butyl ether	0.16	Not Detected	0.57	Not Detected
1,1-Dichloroethane	0.032	Not Detected	0.13	Not Detected
cis-1,2-Dichloroethene	0.032	Not Detected	0.13	Not Detected
Chloroform	0.032	1.3	0.16	6.6
1,1,1-Trichloroethane	0.032	Not Detected	0.17	Not Detected
Carbon Tetrachloride	0.032	0.067 J0	0.20	0.42 J0
Benzene	0.080	0.14	0.25	0.43
1,2-Dichloroethane	0.032	0.049	0.13	0.20
Trichloroethene	0.032	1.2	0.17	6.5
Toluene	0.032	0.68	0.12	2.6
1,1,2-Trichloroethane	0.032	Not Detected	0.17	Not Detected
Tetrachloroethene	0.032	0.70	0.22	4.7
1,2-Dibromoethane (EDB)	0.032	Not Detected	0.24	Not Detected
Ethyl Benzene	0.032	0.11	0.14	0.47
m,p-Xylene	0.064	0.26	0.28	1.1
o-Xylene	0.032	0.097	0.14	0.42
1,1,2,2-Tetrachloroethane	0.032	Not Detected	0.22	Not Detected
1,4-Dichlorobenzene	0.032	Not Detected	0.19	Not Detected

J0 = Estimated value due to bias in the CCV.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	95	70-130



Air Toxics

Client Sample ID: ELEVATOR PIT

Lab ID#: 1508074-04A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	e081009sim	Date of Collection:	8/6/15 7:41:00 AM
Dil. Factor:	1.39	Date of Analysis:	8/10/15 03:36 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.028	0.41	0.14	2.0
Freon 114	0.028	Not Detected	0.19	Not Detected
Chloromethane	0.070	0.43	0.14	0.89
Vinyl Chloride	0.014	Not Detected	0.036	Not Detected
Chloroethane	0.070	Not Detected	0.18	Not Detected
1,1-Dichloroethene	0.014	Not Detected	0.055	Not Detected
trans-1,2-Dichloroethene	0.14	Not Detected	0.55	Not Detected
Methyl tert-butyl ether	0.14	Not Detected	0.50	Not Detected
1,1-Dichloroethane	0.028	Not Detected	0.11	Not Detected
cis-1,2-Dichloroethene	0.028	Not Detected	0.11	Not Detected
Chloroform	0.028	0.20	0.14	0.98
1,1,1-Trichloroethane	0.028	Not Detected	0.15	Not Detected
Carbon Tetrachloride	0.028	0.088 J0	0.17	0.55 J0
Benzene	0.070	0.16	0.22	0.50
1,2-Dichloroethane	0.028	Not Detected	0.11	Not Detected
Trichloroethene	0.028	0.24	0.15	1.3
Toluene	0.028	0.38	0.10	1.4
1,1,2-Trichloroethane	0.028	Not Detected	0.15	Not Detected
Tetrachloroethene	0.028	6.4	0.19	43
1,2-Dibromoethane (EDB)	0.028	Not Detected	0.21	Not Detected
Ethyl Benzene	0.028	0.056	0.12	0.24
m,p-Xylene	0.056	0.18	0.24	0.79
o-Xylene	0.028	0.066	0.12	0.29
1,1,2,2-Tetrachloroethane	0.028	Not Detected	0.19	Not Detected
1,4-Dichlorobenzene	0.028	Not Detected	0.17	Not Detected

J0 = Estimated value due to bias in the CCV.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	112	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	93	70-130



Air Toxics

Client Sample ID: 1ST FLOOR EXHAUST

Lab ID#: 1508074-05A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	e081016sim	Date of Collection:	8/6/15 9:29:00 AM
Dil. Factor:	16.2	Date of Analysis:	8/10/15 09:32 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.32	0.54	1.6	2.7
Freon 114	0.32	Not Detected	2.3	Not Detected
Chloromethane	0.81	Not Detected	1.7	Not Detected
Vinyl Chloride	0.16	Not Detected	0.41	Not Detected
Chloroethane	0.81	Not Detected	2.1	Not Detected
1,1-Dichloroethene	0.16	Not Detected	0.64	Not Detected
trans-1,2-Dichloroethene	1.6	Not Detected	6.4	Not Detected
Methyl tert-butyl ether	1.6	Not Detected	5.8	Not Detected
1,1-Dichloroethane	0.32	Not Detected	1.3	Not Detected
cis-1,2-Dichloroethene	0.32	Not Detected	1.3	Not Detected
Chloroform	0.32	Not Detected	1.6	Not Detected
1,1,1-Trichloroethane	0.32	Not Detected	1.8	Not Detected
Carbon Tetrachloride	0.32	Not Detected UJ	2.0	Not Detected UJ
Benzene	0.81	Not Detected	2.6	Not Detected
1,2-Dichloroethane	0.32	Not Detected	1.3	Not Detected
Trichloroethene	0.32	Not Detected	1.7	Not Detected
Toluene	0.32	3.0	1.2	11
1,1,2-Trichloroethane	0.32	Not Detected	1.8	Not Detected
Tetrachloroethene	0.32	1.8	2.2	13
1,2-Dibromoethane (EDB)	0.32	Not Detected	2.5	Not Detected
Ethyl Benzene	0.32	0.36	1.4	1.5
m,p-Xylene	0.65	0.86	2.8	3.7
o-Xylene	0.32	0.33	1.4	1.4
1,1,2,2-Tetrachloroethane	0.32	Not Detected	2.2	Not Detected
1,4-Dichlorobenzene	0.32	Not Detected	1.9	Not Detected

UJ = Analyte associated with low bias in the CCV and/or LCS.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	100	70-130



Client Sample ID: SEWER VENT

Lab ID#: 1508074-06A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	e081015sim	Date of Collection:	8/6/15 8:21:00 AM
Dil. Factor:	13.9	Date of Analysis:	8/10/15 08:47 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.28	0.43	1.4	2.1
Freon 114	0.28	Not Detected	1.9	Not Detected
Chloromethane	0.70	0.84	1.4	1.7
Vinyl Chloride	0.14	Not Detected	0.36	Not Detected
Chloroethane	0.70	Not Detected	1.8	Not Detected
1,1-Dichloroethene	0.14	Not Detected	0.55	Not Detected
trans-1,2-Dichloroethene	1.4	Not Detected	5.5	Not Detected
Methyl tert-butyl ether	1.4	Not Detected	5.0	Not Detected
1,1-Dichloroethane	0.28	Not Detected	1.1	Not Detected
cis-1,2-Dichloroethene	0.28	Not Detected	1.1	Not Detected
Chloroform	0.28	32	1.4	150
1,1,1-Trichloroethane	0.28	Not Detected	1.5	Not Detected
Carbon Tetrachloride	0.28	Not Detected UJ	1.7	Not Detected UJ
Benzene	0.70	Not Detected	2.2	Not Detected
1,2-Dichloroethane	0.28	Not Detected	1.1	Not Detected
Trichloroethene	0.28	0.43	1.5	2.3
Toluene	0.28	1.9	1.0	7.1
1,1,2-Trichloroethane	0.28	Not Detected	1.5	Not Detected
Tetrachloroethene	0.28	2.8	1.9	19
1,2-Dibromoethane (EDB)	0.28	Not Detected	2.1	Not Detected
Ethyl Benzene	0.28	0.30	1.2	1.3
m,p-Xylene	0.56	0.59	2.4	2.6
o-Xylene	0.28	Not Detected	1.2	Not Detected
1,1,2,2-Tetrachloroethane	0.28	Not Detected	1.9	Not Detected
1,4-Dichlorobenzene	0.28	Not Detected	1.7	Not Detected

UJ = Analyte associated with low bias in the CCV and/or LCS.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	112	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	101	70-130



Air Toxics

Client Sample ID: BG-2 AMBIENT

Lab ID#: 1508074-07A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	e081014sim	Date of Collection:	8/6/15 7:38:00 AM
Dil. Factor:	1.55	Date of Analysis:	8/10/15 07:55 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.031	0.46	0.15	2.3
Freon 114	0.031	Not Detected	0.22	Not Detected
Chloromethane	0.078	0.44	0.16	0.91
Vinyl Chloride	0.016	Not Detected	0.040	Not Detected
Chloroethane	0.078	Not Detected	0.20	Not Detected
1,1-Dichloroethene	0.016	Not Detected	0.061	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.61	Not Detected
Methyl tert-butyl ether	0.16	Not Detected	0.56	Not Detected
1,1-Dichloroethane	0.031	Not Detected	0.12	Not Detected
cis-1,2-Dichloroethene	0.031	Not Detected	0.12	Not Detected
Chloroform	0.031	Not Detected	0.15	Not Detected
1,1,1-Trichloroethane	0.031	Not Detected	0.17	Not Detected
Carbon Tetrachloride	0.031	0.077 J0	0.20	0.48 J0
Benzene	0.078	0.095	0.25	0.30
1,2-Dichloroethane	0.031	Not Detected	0.12	Not Detected
Trichloroethene	0.031	Not Detected	0.17	Not Detected
Toluene	0.031	0.39	0.12	1.5
1,1,2-Trichloroethane	0.031	Not Detected	0.17	Not Detected
Tetrachloroethene	0.031	Not Detected	0.21	Not Detected
1,2-Dibromoethane (EDB)	0.031	Not Detected	0.24	Not Detected
Ethyl Benzene	0.031	0.044	0.13	0.19
m,p-Xylene	0.062	0.14	0.27	0.59
o-Xylene	0.031	0.052	0.13	0.22
1,1,2,2-Tetrachloroethane	0.031	Not Detected	0.21	Not Detected
1,4-Dichlorobenzene	0.031	Not Detected	0.19	Not Detected

J0 = Estimated value due to bias in the CCV.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	112	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	94	70-130



Client Sample ID: Lab Blank

Lab ID#: 1508074-08A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	e080807sim	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	8/8/15 10:44 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.020	Not Detected	0.099	Not Detected
Freon 114	0.020	Not Detected	0.14	Not Detected
Chloromethane	0.050	Not Detected	0.10	Not Detected
Vinyl Chloride	0.010	Not Detected	0.026	Not Detected
Chloroethane	0.050	Not Detected	0.13	Not Detected
1,1-Dichloroethene	0.010	Not Detected	0.040	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Methyl tert-butyl ether	0.10	Not Detected	0.36	Not Detected
1,1-Dichloroethane	0.020	Not Detected	0.081	Not Detected
cis-1,2-Dichloroethene	0.020	Not Detected	0.079	Not Detected
Chloroform	0.020	Not Detected	0.098	Not Detected
1,1,1-Trichloroethane	0.020	Not Detected	0.11	Not Detected
Carbon Tetrachloride	0.020	Not Detected UJ	0.12	Not Detected UJ
Benzene	0.050	Not Detected	0.16	Not Detected
1,2-Dichloroethane	0.020	Not Detected	0.081	Not Detected
Trichloroethene	0.020	Not Detected	0.11	Not Detected
Toluene	0.020	Not Detected	0.075	Not Detected
1,1,2-Trichloroethane	0.020	Not Detected	0.11	Not Detected
Tetrachloroethene	0.020	Not Detected	0.14	Not Detected
1,2-Dibromoethane (EDB)	0.020	Not Detected	0.15	Not Detected
Ethyl Benzene	0.020	Not Detected	0.087	Not Detected
m,p-Xylene	0.040	Not Detected	0.17	Not Detected
o-Xylene	0.020	Not Detected	0.087	Not Detected
1,1,2,2-Tetrachloroethane	0.020	Not Detected	0.14	Not Detected
1,4-Dichlorobenzene	0.020	Not Detected	0.12	Not Detected

UJ = Analyte associated with low bias in the CCV and/or LCS.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	94	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1508074-08B

**MODIFIED EPA METHOD TO-15 GC/MS SIM**

<b>File Name:</b>	<b>e081008sim</b>	<b>Date of Collection:</b> NA
<b>Dil. Factor:</b>	<b>1.68</b>	<b>Date of Analysis:</b> 8/10/15 02:45 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.034	Not Detected	0.17	Not Detected
Freon 114	0.034	Not Detected	0.23	Not Detected
Chloromethane	0.084	Not Detected	0.17	Not Detected
Vinyl Chloride	0.017	Not Detected	0.043	Not Detected
Chloroethane	0.084	Not Detected	0.22	Not Detected
1,1-Dichloroethene	0.017	Not Detected	0.067	Not Detected
trans-1,2-Dichloroethene	0.17	Not Detected	0.67	Not Detected
Methyl tert-butyl ether	0.17	Not Detected	0.60	Not Detected
1,1-Dichloroethane	0.034	Not Detected	0.14	Not Detected
cis-1,2-Dichloroethene	0.034	Not Detected	0.13	Not Detected
Chloroform	0.034	Not Detected	0.16	Not Detected
1,1,1-Trichloroethane	0.034	Not Detected	0.18	Not Detected
Carbon Tetrachloride	0.034	Not Detected UJ	0.21	Not Detected UJ
Benzene	0.084	Not Detected	0.27	Not Detected
1,2-Dichloroethane	0.034	Not Detected	0.14	Not Detected
Trichloroethene	0.034	Not Detected	0.18	Not Detected
Toluene	0.034	Not Detected	0.13	Not Detected
1,1,2-Trichloroethane	0.034	Not Detected	0.18	Not Detected
Tetrachloroethene	0.034	Not Detected	0.23	Not Detected
1,2-Dibromoethane (EDB)	0.034	Not Detected	0.26	Not Detected
Ethyl Benzene	0.034	Not Detected	0.14	Not Detected
m,p-Xylene	0.067	Not Detected	0.29	Not Detected
o-Xylene	0.034	Not Detected	0.14	Not Detected
1,1,2,2-Tetrachloroethane	0.034	Not Detected	0.23	Not Detected
1,4-Dichlorobenzene	0.034	Not Detected	0.20	Not Detected

UJ = Analyte associated with low bias in the CCV and/or LCS.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	92	70-130





Air Toxics

Client Sample ID: CCV

Lab ID#: 1508074-09A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	e080805sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/8/15 09:18 AM

Compound	%Recovery
Freon 12	97
Freon 114	84
Chloromethane	101
Vinyl Chloride	100
Chloroethane	94
1,1-Dichloroethene	84
trans-1,2-Dichloroethene	91
Methyl tert-butyl ether	94
1,1-Dichloroethane	95
cis-1,2-Dichloroethene	93
Chloroform	87
1,1,1-Trichloroethane	88
Carbon Tetrachloride	62 Q
Benzene	78
1,2-Dichloroethane	87
Trichloroethene	76
Toluene	85
1,1,2-Trichloroethane	82
Tetrachloroethene	78
1,2-Dibromoethane (EDB)	84
Ethyl Benzene	91
m,p-Xylene	97
o-Xylene	95
1,1,2,2-Tetrachloroethane	86
1,4-Dichlorobenzene	91

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	112	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	99	70-130



Air Toxics

Client Sample ID: CCV

Lab ID#: 1508074-09B

**MODIFIED EPA METHOD TO-15 GC/MS SIM**

<b>File Name:</b>	<b>e081003sim</b>	<b>Date of Collection: NA</b>
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis: 8/10/15 10:51 AM</b>

<b>Compound</b>	<b>%Recovery</b>
Freon 12	93
Freon 114	85
Chloromethane	96
Vinyl Chloride	96
Chloroethane	93
1,1-Dichloroethene	86
trans-1,2-Dichloroethene	93
Methyl tert-butyl ether	97
1,1-Dichloroethane	97
cis-1,2-Dichloroethene	93
Chloroform	89
1,1,1-Trichloroethane	90
Carbon Tetrachloride	61 Q
Benzene	80
1,2-Dichloroethane	93
Trichloroethene	79
Toluene	86
1,1,2-Trichloroethane	86
Tetrachloroethene	81
1,2-Dibromoethane (EDB)	88
Ethyl Benzene	93
m,p-Xylene	98
o-Xylene	96
1,1,2,2-Tetrachloroethane	87
1,4-Dichlorobenzene	86

Q = Exceeds Quality Control limits.

**Container Type: NA - Not Applicable**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	113	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	96	70-130



Air Toxics

Client Sample ID: LCS

Lab ID#: 1508074-10A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	e080803sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/8/15 07:12 AM

Compound	%Recovery	Method Limits
Freon 12	104	70-130
Freon 114	98	70-130
Chloromethane	105	70-130
Vinyl Chloride	107	70-130
Chloroethane	105	70-130
1,1-Dichloroethene	93	70-130
trans-1,2-Dichloroethene	86	70-130
Methyl tert-butyl ether	99	70-130
1,1-Dichloroethane	103	70-130
cis-1,2-Dichloroethene	112	70-130
Chloroform	95	70-130
1,1,1-Trichloroethane	96	70-130
Carbon Tetrachloride	112	60-140
Benzene	88	70-130
1,2-Dichloroethane	101	70-130
Trichloroethene	85	70-130
Toluene	94	70-130
1,1,2-Trichloroethane	94	70-130
Tetrachloroethene	89	70-130
1,2-Dibromoethane (EDB)	96	70-130
Ethyl Benzene	102	70-130
m,p-Xylene	106	70-130
o-Xylene	105	70-130
1,1,2,2-Tetrachloroethane	99	70-130
1,4-Dichlorobenzene	96	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	98	70-130



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1508074-10AA

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	e080804sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/8/15 07:55 AM

Compound	%Recovery	Method Limits
Freon 12	102	70-130
Freon 114	96	70-130
Chloromethane	104	70-130
Vinyl Chloride	106	70-130
Chloroethane	106	70-130
1,1-Dichloroethene	92	70-130
trans-1,2-Dichloroethene	86	70-130
Methyl tert-butyl ether	98	70-130
1,1-Dichloroethane	102	70-130
cis-1,2-Dichloroethene	110	70-130
Chloroform	95	70-130
1,1,1-Trichloroethane	96	70-130
Carbon Tetrachloride	112	60-140
Benzene	87	70-130
1,2-Dichloroethane	99	70-130
Trichloroethene	85	70-130
Toluene	93	70-130
1,1,2-Trichloroethane	93	70-130
Tetrachloroethene	88	70-130
1,2-Dibromoethane (EDB)	96	70-130
Ethyl Benzene	100	70-130
m,p-Xylene	105	70-130
o-Xylene	106	70-130
1,1,2,2-Tetrachloroethane	98	70-130
1,4-Dichlorobenzene	95	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	111	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	99	70-130



Air Toxics

Client Sample ID: LCS

Lab ID#: 1508074-10B

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	e081004sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/10/15 11:35 AM

Compound	%Recovery	Method Limits
Freon 12	104	70-130
Freon 114	98	70-130
Chloromethane	106	70-130
Vinyl Chloride	108	70-130
Chloroethane	107	70-130
1,1-Dichloroethene	94	70-130
trans-1,2-Dichloroethene	88	70-130
Methyl tert-butyl ether	102	70-130
1,1-Dichloroethane	105	70-130
cis-1,2-Dichloroethene	113	70-130
Chloroform	97	70-130
1,1,1-Trichloroethane	99	70-130
Carbon Tetrachloride	114	60-140
Benzene	89	70-130
1,2-Dichloroethane	102	70-130
Trichloroethene	87	70-130
Toluene	95	70-130
1,1,2-Trichloroethane	95	70-130
Tetrachloroethene	90	70-130
1,2-Dibromoethane (EDB)	97	70-130
Ethyl Benzene	103	70-130
m,p-Xylene	108	70-130
o-Xylene	108	70-130
1,1,2,2-Tetrachloroethane	98	70-130
1,4-Dichlorobenzene	94	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	114	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	98	70-130



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1508074-10BB

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	e081005sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/10/15 12:20 PM

Compound	%Recovery	Method Limits
Freon 12	103	70-130
Freon 114	97	70-130
Chloromethane	105	70-130
Vinyl Chloride	106	70-130
Chloroethane	109	70-130
1,1-Dichloroethene	95	70-130
trans-1,2-Dichloroethene	87	70-130
Methyl tert-butyl ether	102	70-130
1,1-Dichloroethane	105	70-130
cis-1,2-Dichloroethene	113	70-130
Chloroform	96	70-130
1,1,1-Trichloroethane	97	70-130
Carbon Tetrachloride	112	60-140
Benzene	88	70-130
1,2-Dichloroethane	101	70-130
Trichloroethene	86	70-130
Toluene	94	70-130
1,1,2-Trichloroethane	94	70-130
Tetrachloroethene	90	70-130
1,2-Dibromoethane (EDB)	97	70-130
Ethyl Benzene	103	70-130
m,p-Xylene	108	70-130
o-Xylene	109	70-130
1,1,2,2-Tetrachloroethane	99	70-130
1,4-Dichlorobenzene	98	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	113	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	97	70-130

# CHAIN OF CUSTODY RECORD

<b>P&amp;D ENVIRONMENTAL, INC.</b> 55 Santa Clara Ave., Suite 240 Oakland, CA 94610 (510) 658-6916										
PROJECT NUMBER:  <b>0461</b>				PROJECT NAME: <b>RED HAZARD CLEANERS</b> <b>6039 COLLEGE AVE.</b> <b>OAKLAND, CA</b>						
SAMPLED BY: (PRINTED & SIGNATURE) <i>Michael Bass-Reschges</i>										
SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION		NUMBER OF CONTAINERS	ANALYSIS(ES)	PRESERVATIVE	REMARKS	
01A	8/6/15	07:51:31	AIR	20	2.0	33503	1	X	ME 24-HR RUSH	
02A	"	08:13:00	"	30	5.0	34493	1	X	" "	
03A	"	08:17:11	"	30	5.0	34493	1	X	" "	
04A	"	07:44:18	"	30	0.5	35281	1	X	" "	
05A	"	07:37:17	"	30	5.5	35170	1	X	" "	
06A	"	08:31:30	"	30	1.5	34415	1	X	" "	
07A	"	07:44:28	"	30	5.0	50274	1	X	" "	
RELINQUISHED BY: (SIGNATURE) <i>Michael Bass-Reschges</i>			DATE	TIME	RECEIVED BY: (SIGNATURE) <i>A.M. Hill</i>			Total No. of Samples (This Shipment)	7	LABORATORY:
RELINQUISHED BY: (SIGNATURE) <i>J. Hill</i>			DATE	TIME	RECEIVED BY: (SIGNATURE)			Total No. of Containers (This Shipment)	7	EUREKA AIR TESTS, LTD.
RELINQUISHED BY: (SIGNATURE)			DATE	TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)			LABORATORY CONTACT: KYLE VACATRE		
								LABORATORY PHONE NUMBER: (911) 605-3339		
								SAMPLE ANALYSIS REQUEST SHEET ATTACHED: ( ) YES (X) NO		
Results and billing to: P&D Environmental, Inc. lab@pdenviro.com					REMARKS: FLOW CONTROLLER - 24M. (SIA CERTIFIED)  6-LITER SUMMA					

Revised CDC received via email on 8/7/2015 CAC 8/7/15

1508074

# CHAIN OF CUSTODY RECORD

## P&D ENVIRONMENTAL, INC.

55 Santa Clara Ave., Suite 240  
Oakland, CA 94610  
(510) 658-6916

PROJECT NUMBER:

0461

PROJECT NAME:

RED HANGER CLEANERS  
6839 COLLEGE AVE.  
OAKLAND, CA

SAMPLED BY: (PRINTED & SIGNATURE)

Michael Bass Deschamps *Michael Bass Deschamps*

SAMPLE NUMBER

DATE

TIME

TYPE

SAMPLE LOCATION

INITIAL VAE FINAL VAE SUMMA #

NUMBER OF CONTAINERS

ANALYSIS(ES):

PRESERVATIVE

REMARKS

IAS

SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION	INITIAL VAE	FINAL VAE	SUMMA #	NUMBER OF CONTAINERS	ANALYSIS(ES):	PRESERVATIVE	REMARKS
ELEVATOR PIT	8/6/15	08410	AIR	-30 -0.5			35289	1	X		24 HOUR TAT
MEN'S ROOM / 3 <sup>rd</sup> FLOOR		08417		-30 -5.0			94943	1			
IA2 (1 <sup>st</sup> Floor)		08420		-30 -5.0			32503	1			
1 <sup>st</sup> FLOOR EXHAUST		08430		-30 -5.5			35170	1			
IA4 (2 <sup>nd</sup> FLOOR)		08474		-30 -5.0			34493	1			
SEWER VENT		082120		-30 -1.50			34415	1			
BG-2 AMBIENT	↓	073806	↓	-30 -5.0			5624	1	✓		

Custody Seal Intact?

Y N None Temp N/A

EATLDO

RELINQUISHED BY: (SIGNATURE)

*Michael Bass Deschamps*

DATE

8/7/15

TIME

0600

RECEIVED BY: (SIGNATURE)

*A. M. Webb*

Total No. of Samples (This Shipment)

7

LABORATORY:

EUROFINS AIR TOXICS, LTD

RELINQUISHED BY: (SIGNATURE)

*A. M. Webb*

DATE

8-9-15

TIME

1157

RECEIVED BY: (SIGNATURE)

*Kyle Vagadori*

LABORATORY CONTACT:

KYLE VAGADORI

LABORATORY/PHONE NUMBER:

(916) 605-3339

RELINQUISHED BY: (SIGNATURE)

*[Signature]*

DATE

TIME

RECEIVED FOR LABORATORY BY: (SIGNATURE)

*[Signature]*

SAMPLE ANALYSIS REQUEST SHEET

ATTACHED: ( ) YES (X) NO

Results and billing to:  
P&D Environmental, Inc.  
lab@pdenviro.com

REMARKS: Flow Controller - 24 hr (Sim Certified)

6-LITER SUMMA



8/17/2015

Mr. Paul King  
P & D Environmental  
55 Santa Clara  
Suite 240  
Oakland CA 94610

Project Name: RED HANGER KLEANERS 6239 COLLEGE AVE

Project #: 0461

Workorder #: 1508200

Dear Mr. Paul King

The following report includes the data for the above referenced project for sample(s) received on 8/13/2015 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 SIM are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kyle Vagadori at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Kyle Vagadori  
Project Manager

**WORK ORDER #: 1508200**

Work Order Summary

<b>CLIENT:</b>	Mr. Paul King P & D Environmental 55 Santa Clara Suite 240 Oakland, CA 94610	<b>BILL TO:</b>	Mr. Paul King P & D Environmental 55 Santa Clara Suite 240 Oakland, CA 94610
<b>PHONE:</b>	510-658-6916	<b>P.O. #</b>	
<b>FAX:</b>	510-834-0772	<b>PROJECT #</b>	0461 RED HANGER KLEANERS 6239
<b>DATE RECEIVED:</b>	08/13/2015	<b>CONTACT:</b>	COLLEGE AVE Kyle Vagadori
<b>DATE COMPLETED:</b>	08/17/2015		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	IA4 (HALLWAY)	Modified TO-15 SIM	0.3 psi	5.2 psi
02A	IA6 (201 HEALTH CTR)	Modified TO-15 SIM	5.9 "Hg	5 psi
03A	IA6 DUP(201 HEALTH CTR)	Modified TO-15 SIM	6.1 "Hg	4.7 psi
04A	IA7 (203 CPA)	Modified TO-15 SIM	7.1 "Hg	4.8 psi
05A	IA8 (SUITE 204)	Modified TO-15 SIM	8 "Hg	5.2 psi
06A	IA5 (MEN'S ROOM)	Modified TO-15 SIM	5.7 "Hg	5 psi
07A	IA9 (301 KUMON)	Modified TO-15 SIM	12.2 "Hg	5.1 psi
08A	IA10 (SUITE 302)	Modified TO-15 SIM	6.9 "Hg	5.2 psi
09A	IA11 (SUITE 303)	Modified TO-15 SIM	5.9 "Hg	4.9 psi
10A	IA11 DUP(SUITE 303)	Modified TO-15 SIM	4.7 "Hg	4.8 psi
11A	BG2 AMBIENT	Modified TO-15 SIM	3.7 "Hg	5.4 psi
12A	Lab Blank	Modified TO-15 SIM	NA	NA
13A	CCV	Modified TO-15 SIM	NA	NA
14A	LCS	Modified TO-15 SIM	NA	NA
14AA	LCSD	Modified TO-15 SIM	NA	NA

CERTIFIED BY:   
 \_\_\_\_\_  
 Technical Director

DATE: 08/17/15

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,  
 TX NELAP - T104704343-14-7, UT NELAP CA009332014-5, VA NELAP - 460197, WA NELAP - C935  
 Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)  
 Accreditation number: CA300005, Effective date: 10/18/2014, Expiration date: 10/17/2015.

Eurofins Air Toxics Inc. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 9563  
 (916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

**LABORATORY NARRATIVE**  
**Modified TO-15 SIM**  
**P & D Environmental**  
**Workorder# 1508200**

Eleven 6 Liter Summa Canister (SIM Certified) samples were received on August 13, 2015. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the SIM acquisition mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

<i>Requirement</i>	<i>TO-15</i>	<i>ATL Modifications</i>
ICAL %RSD acceptance criteria	<math>\leq 30\%</math> RSD with 2 compounds allowed out to <math>< 40\%</math> RSD	Project specific; default criteria is <math>\leq 30\%</math> RSD with 10% of compounds allowed out to <math>< 40\%</math> RSD
Daily Calibration	+/- 30% Difference	Project specific; default criteria is <math>\leq 30\%</math> Difference with 10% of compounds allowed out up to <math>\leq 40\%</math>; flag and narrate outliers
Blank and standards	Zero air	Nitrogen
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

**Receiving Notes**

There were no receiving discrepancies.

**Analytical Notes**

Dilution was performed on sample IA7 (203 CPA) due to the presence of high level non-target species.

**Definition of Data Qualifying Flags**

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

**Summary of Detected Compounds  
MODIFIED EPA METHOD TO-15 GC/MS SIM**

**Client Sample ID: IA4 (HALLWAY)**

**Lab ID#: 1508200-01A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Freon 12	0.027	0.35	0.13	1.7
Chloromethane	0.066	0.40	0.14	0.82
Chloroform	0.027	0.77	0.13	3.8
Carbon Tetrachloride	0.027	0.065	0.17	0.41
Benzene	0.066	0.088	0.21	0.28
1,2-Dichloroethane	0.027	0.080	0.11	0.32
Trichloroethene	0.027	1.0	0.14	5.6
Toluene	0.027	0.43	0.10	1.6
Tetrachloroethene	0.027	0.55	0.18	3.7
Ethyl Benzene	0.027	1.6	0.12	6.8
m,p-Xylene	0.053	1.4	0.23	6.0
o-Xylene	0.027	0.40	0.12	1.7

**Client Sample ID: IA6 (201 HEALTH CTR)**

**Lab ID#: 1508200-02A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Freon 12	0.033	0.52	0.16	2.6
Chloromethane	0.084	0.59	0.17	1.2
Chloroform	0.033	0.67	0.16	3.3
Carbon Tetrachloride	0.033	0.10	0.21	0.63
Benzene	0.084	0.11	0.27	0.34
1,2-Dichloroethane	0.033	0.16	0.14	0.63
Trichloroethene	0.033	0.85	0.18	4.5
Toluene	0.033	0.55	0.12	2.0
Tetrachloroethene	0.033	0.79	0.23	5.4
Ethyl Benzene	0.033	2.7	0.14	12
m,p-Xylene	0.067	2.4	0.29	11
o-Xylene	0.033	0.66	0.14	2.9

**Client Sample ID: IA6 DUP(201 HEALTH CTR)**

**Lab ID#: 1508200-03A**

## Summary of Detected Compounds MODIFIED EPA METHOD TO-15 GC/MS SIM

**Client Sample ID: IA6 DUP(201 HEALTH CTR)**

**Lab ID#: 1508200-03A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.033	0.48	0.16	2.4
Chloromethane	0.083	0.57	0.17	1.2
Chloroform	0.033	0.67	0.16	3.3
Carbon Tetrachloride	0.033	0.098	0.21	0.61
Benzene	0.083	0.087	0.26	0.28
1,2-Dichloroethane	0.033	0.16	0.13	0.63
Trichloroethene	0.033	0.82	0.18	4.4
Toluene	0.033	0.55	0.12	2.1
Tetrachloroethene	0.033	0.76	0.22	5.2
Ethyl Benzene	0.033	2.8	0.14	12
m,p-Xylene	0.066	2.5	0.29	11
o-Xylene	0.033	0.67	0.14	2.9

**Client Sample ID: IA7 (203 CPA)**

**Lab ID#: 1508200-04A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.087	0.47	0.43	2.3
Chloromethane	0.22	0.61	0.45	1.2
Chloroform	0.087	0.29	0.42	1.4
Trichloroethene	0.087	0.35	0.47	1.9
Toluene	0.087	0.64	0.33	2.4
Tetrachloroethene	0.087	0.49	0.59	3.3
Ethyl Benzene	0.087	0.64	0.38	2.8
m,p-Xylene	0.17	0.62	0.76	2.7
o-Xylene	0.087	0.24	0.38	1.0

**Client Sample ID: IA8 (SUITE 204)**

**Lab ID#: 1508200-05A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.037	0.47	0.18	2.3
Chloromethane	0.092	0.53	0.19	1.1

## Summary of Detected Compounds MODIFIED EPA METHOD TO-15 GC/MS SIM

**Client Sample ID: IA8 (SUITE 204)**

**Lab ID#: 1508200-05A**

Chloroform	0.037	0.24	0.18	1.1
Carbon Tetrachloride	0.037	0.10	0.23	0.65
Trichloroethene	0.037	0.29	0.20	1.6
Toluene	0.037	0.28	0.14	1.1
Tetrachloroethene	0.037	0.19	0.25	1.3
Ethyl Benzene	0.037	0.14	0.16	0.62
m,p-Xylene	0.074	0.19	0.32	0.82
o-Xylene	0.037	0.092	0.16	0.40

**Client Sample ID: IA5 (MEN'S ROOM)**

**Lab ID#: 1508200-06A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.033	0.47	0.16	2.3
Chloromethane	0.083	0.66	0.17	1.4
Chloroform	0.033	1.6	0.16	7.6
Carbon Tetrachloride	0.033	0.11	0.21	0.69
Benzene	0.083	0.14	0.26	0.44
1,2-Dichloroethane	0.033	0.061	0.13	0.25
Trichloroethene	0.033	1.5	0.18	8.1
Toluene	0.033	0.72	0.12	2.7
Tetrachloroethene	0.033	0.81	0.22	5.5
Ethyl Benzene	0.033	0.94	0.14	4.1
m,p-Xylene	0.066	0.90	0.29	3.9
o-Xylene	0.033	0.26	0.14	1.1

**Client Sample ID: IA9 (301 KUMON)**

**Lab ID#: 1508200-07A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.046	0.51	0.22	2.5
Chloromethane	0.11	0.67	0.24	1.4
Chloroform	0.046	0.42	0.22	2.0
Carbon Tetrachloride	0.046	0.10	0.29	0.66

## Summary of Detected Compounds MODIFIED EPA METHOD TO-15 GC/MS SIM

**Client Sample ID: IA9 (301 KUMON)**

**Lab ID#: 1508200-07A**

Benzene	0.11	0.15	0.36	0.47
1,2-Dichloroethane	0.046	0.077	0.18	0.31
Trichloroethene	0.046	0.52	0.24	2.8
Toluene	0.046	1.3	0.17	4.9
Tetrachloroethene	0.046	0.70	0.31	4.7
Ethyl Benzene	0.046	1.1	0.20	4.6
m,p-Xylene	0.091	1.0	0.40	4.5
o-Xylene	0.046	0.33	0.20	1.4

**Client Sample ID: IA10 (SUITE 302)**

**Lab ID#: 1508200-08A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.035	0.48	0.17	2.4
Chloromethane	0.088	0.59	0.18	1.2
Chloroform	0.035	0.51	0.17	2.5
Carbon Tetrachloride	0.035	0.10	0.22	0.64
Benzene	0.088	0.13	0.28	0.42
1,2-Dichloroethane	0.035	0.055	0.14	0.22
Trichloroethene	0.035	0.65	0.19	3.5
Toluene	0.035	0.63	0.13	2.4
Tetrachloroethene	0.035	0.71	0.24	4.8
Ethyl Benzene	0.035	0.54	0.15	2.3
m,p-Xylene	0.070	0.54	0.30	2.3
o-Xylene	0.035	0.18	0.15	0.80

**Client Sample ID: IA11 (SUITE 303)**

**Lab ID#: 1508200-09A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.033	0.50	0.16	2.5
Chloromethane	0.083	0.53	0.17	1.1
Chloroform	0.033	0.14	0.16	0.69
Carbon Tetrachloride	0.033	0.10	0.21	0.66



## Summary of Detected Compounds MODIFIED EPA METHOD TO-15 GC/MS SIM

**Client Sample ID: IA11 (SUITE 303)**

**Lab ID#: 1508200-09A**

1,2-Dichloroethane	0.033	0.16	0.13	0.63
Trichloroethene	0.033	0.17	0.18	0.90
Toluene	0.033	0.27	0.12	1.0
Tetrachloroethene	0.033	0.14	0.22	0.96
Ethyl Benzene	0.033	0.16	0.14	0.70
m,p-Xylene	0.066	0.17	0.29	0.73
o-Xylene	0.033	0.059	0.14	0.26

**Client Sample ID: IA11 DUP(SUITE 303)**

**Lab ID#: 1508200-10A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.031	0.49	0.16	2.4
Chloromethane	0.078	0.57	0.16	1.2
Chloroform	0.031	0.12	0.15	0.61
Carbon Tetrachloride	0.031	0.090	0.20	0.57
1,2-Dichloroethane	0.031	0.14	0.13	0.59
Trichloroethene	0.031	0.16	0.17	0.85
Toluene	0.031	0.25	0.12	0.95
Tetrachloroethene	0.031	0.13	0.21	0.89
Ethyl Benzene	0.031	0.14	0.14	0.62
m,p-Xylene	0.063	0.16	0.27	0.70
o-Xylene	0.031	0.062	0.14	0.27

**Client Sample ID: BG2 AMBIENT**

**Lab ID#: 1508200-11A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.031	0.50	0.15	2.5
Chloromethane	0.078	0.54	0.16	1.1
Carbon Tetrachloride	0.031	0.096	0.20	0.60
Toluene	0.031	0.18	0.12	0.68
Ethyl Benzene	0.031	0.031	0.14	0.14
m,p-Xylene	0.062	0.086	0.27	0.37

**Summary of Detected Compounds**  
**MODIFIED EPA METHOD TO-15 GC/MS SIM**

**Client Sample ID: BG2 AMBIENT**

**Lab ID#: 1508200-11A**

o-Xylene	0.031	0.048	0.14	0.21
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Air Toxics

Client Sample ID: IA4 (HALLWAY)

Lab ID#: 1508200-01A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	e081415sim	Date of Collection:	8/13/15 1:28:00 PM
Dil. Factor:	1.33	Date of Analysis:	8/14/15 06:14 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.027	0.35	0.13	1.7
Freon 114	0.027	Not Detected	0.18	Not Detected
Chloromethane	0.066	0.40	0.14	0.82
Vinyl Chloride	0.013	Not Detected	0.034	Not Detected
Chloroethane	0.066	Not Detected	0.18	Not Detected
1,1-Dichloroethene	0.013	Not Detected	0.053	Not Detected
trans-1,2-Dichloroethene	0.13	Not Detected	0.53	Not Detected
Methyl tert-butyl ether	0.13	Not Detected	0.48	Not Detected
1,1-Dichloroethane	0.027	Not Detected	0.11	Not Detected
cis-1,2-Dichloroethene	0.027	Not Detected	0.10	Not Detected
Chloroform	0.027	0.77	0.13	3.8
1,1,1-Trichloroethane	0.027	Not Detected	0.14	Not Detected
Carbon Tetrachloride	0.027	0.065	0.17	0.41
Benzene	0.066	0.088	0.21	0.28
1,2-Dichloroethane	0.027	0.080	0.11	0.32
Trichloroethene	0.027	1.0	0.14	5.6
Toluene	0.027	0.43	0.10	1.6
1,1,2-Trichloroethane	0.027	Not Detected	0.14	Not Detected
Tetrachloroethene	0.027	0.55	0.18	3.7
1,2-Dibromoethane (EDB)	0.027	Not Detected	0.20	Not Detected
Ethyl Benzene	0.027	1.6	0.12	6.8
m,p-Xylene	0.053	1.4	0.23	6.0
o-Xylene	0.027	0.40	0.12	1.7
1,1,2,2-Tetrachloroethane	0.027	Not Detected	0.18	Not Detected
1,4-Dichlorobenzene	0.027	Not Detected	0.16	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	120	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	94	70-130



Air Toxics

Client Sample ID: IA6 (201 HEALTH CTR)

Lab ID#: 1508200-02A

**MODIFIED EPA METHOD TO-15 GC/MS SIM**

<b>File Name:</b>	<b>e081416sim</b>	<b>Date of Collection:</b> 8/13/15 1:21:00 PM
<b>Dil. Factor:</b>	<b>1.67</b>	<b>Date of Analysis:</b> 8/14/15 07:06 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.033	0.52	0.16	2.6
Freon 114	0.033	Not Detected	0.23	Not Detected
Chloromethane	0.084	0.59	0.17	1.2
Vinyl Chloride	0.017	Not Detected	0.043	Not Detected
Chloroethane	0.084	Not Detected	0.22	Not Detected
1,1-Dichloroethene	0.017	Not Detected	0.066	Not Detected
trans-1,2-Dichloroethene	0.17	Not Detected	0.66	Not Detected
Methyl tert-butyl ether	0.17	Not Detected	0.60	Not Detected
1,1-Dichloroethane	0.033	Not Detected	0.14	Not Detected
cis-1,2-Dichloroethene	0.033	Not Detected	0.13	Not Detected
Chloroform	0.033	0.67	0.16	3.3
1,1,1-Trichloroethane	0.033	Not Detected	0.18	Not Detected
Carbon Tetrachloride	0.033	0.10	0.21	0.63
Benzene	0.084	0.11	0.27	0.34
1,2-Dichloroethane	0.033	0.16	0.14	0.63
Trichloroethene	0.033	0.85	0.18	4.5
Toluene	0.033	0.55	0.12	2.0
1,1,2-Trichloroethane	0.033	Not Detected	0.18	Not Detected
Tetrachloroethene	0.033	0.79	0.23	5.4
1,2-Dibromoethane (EDB)	0.033	Not Detected	0.26	Not Detected
Ethyl Benzene	0.033	2.7	0.14	12
m,p-Xylene	0.067	2.4	0.29	11
o-Xylene	0.033	0.66	0.14	2.9
1,1,2,2-Tetrachloroethane	0.033	Not Detected	0.23	Not Detected
1,4-Dichlorobenzene	0.033	Not Detected	0.20	Not Detected

**Container Type: 6 Liter Summa Canister (SIM Certified)**

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	120	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	95	70-130



Air Toxics

Client Sample ID: IA6 DUP(201 HEALTH CTR)

Lab ID#: 1508200-03A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	e081417sim	Date of Collection:	8/13/15 1:21:00 PM
Dil. Factor:	1.66	Date of Analysis:	8/14/15 08:10 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.033	0.48	0.16	2.4
Freon 114	0.033	Not Detected	0.23	Not Detected
Chloromethane	0.083	0.57	0.17	1.2
Vinyl Chloride	0.017	Not Detected	0.042	Not Detected
Chloroethane	0.083	Not Detected	0.22	Not Detected
1,1-Dichloroethene	0.017	Not Detected	0.066	Not Detected
trans-1,2-Dichloroethene	0.17	Not Detected	0.66	Not Detected
Methyl tert-butyl ether	0.17	Not Detected	0.60	Not Detected
1,1-Dichloroethane	0.033	Not Detected	0.13	Not Detected
cis-1,2-Dichloroethene	0.033	Not Detected	0.13	Not Detected
Chloroform	0.033	0.67	0.16	3.3
1,1,1-Trichloroethane	0.033	Not Detected	0.18	Not Detected
Carbon Tetrachloride	0.033	0.098	0.21	0.61
Benzene	0.083	0.087	0.26	0.28
1,2-Dichloroethane	0.033	0.16	0.13	0.63
Trichloroethene	0.033	0.82	0.18	4.4
Toluene	0.033	0.55	0.12	2.1
1,1,2-Trichloroethane	0.033	Not Detected	0.18	Not Detected
Tetrachloroethene	0.033	0.76	0.22	5.2
1,2-Dibromoethane (EDB)	0.033	Not Detected	0.26	Not Detected
Ethyl Benzene	0.033	2.8	0.14	12
m,p-Xylene	0.066	2.5	0.29	11
o-Xylene	0.033	0.67	0.14	2.9
1,1,2,2-Tetrachloroethane	0.033	Not Detected	0.23	Not Detected
1,4-Dichlorobenzene	0.033	Not Detected	0.20	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	120	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	95	70-130



Air Toxics

Client Sample ID: IA7 (203 CPA)

Lab ID#: 1508200-04A

**MODIFIED EPA METHOD TO-15 GC/MS SIM**

<b>File Name:</b>	<b>e081425sim</b>	<b>Date of Collection:</b> 8/13/15 1:34:00 PM
<b>Dil. Factor:</b>	<b>4.35</b>	<b>Date of Analysis:</b> 8/15/15 07:37 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.087	0.47	0.43	2.3
Freon 114	0.087	Not Detected	0.61	Not Detected
Chloromethane	0.22	0.61	0.45	1.2
Vinyl Chloride	0.044	Not Detected	0.11	Not Detected
Chloroethane	0.22	Not Detected	0.57	Not Detected
1,1-Dichloroethene	0.044	Not Detected	0.17	Not Detected
trans-1,2-Dichloroethene	0.44	Not Detected	1.7	Not Detected
Methyl tert-butyl ether	0.44	Not Detected	1.6	Not Detected
1,1-Dichloroethane	0.087	Not Detected	0.35	Not Detected
cis-1,2-Dichloroethene	0.087	Not Detected	0.34	Not Detected
Chloroform	0.087	0.29	0.42	1.4
1,1,1-Trichloroethane	0.087	Not Detected	0.47	Not Detected
Carbon Tetrachloride	0.087	Not Detected	0.55	Not Detected
Benzene	0.22	Not Detected	0.69	Not Detected
1,2-Dichloroethane	0.087	Not Detected	0.35	Not Detected
Trichloroethene	0.087	0.35	0.47	1.9
Toluene	0.087	0.64	0.33	2.4
1,1,2-Trichloroethane	0.087	Not Detected	0.47	Not Detected
Tetrachloroethene	0.087	0.49	0.59	3.3
1,2-Dibromoethane (EDB)	0.087	Not Detected	0.67	Not Detected
Ethyl Benzene	0.087	0.64	0.38	2.8
m,p-Xylene	0.17	0.62	0.76	2.7
o-Xylene	0.087	0.24	0.38	1.0
1,1,2,2-Tetrachloroethane	0.087	Not Detected	0.60	Not Detected
1,4-Dichlorobenzene	0.087	Not Detected	0.52	Not Detected

**Container Type: 6 Liter Summa Canister (SIM Certified)**

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	120	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	91	70-130



Air Toxics

Client Sample ID: IA8 (SUITE 204)

Lab ID#: 1508200-05A

**MODIFIED EPA METHOD TO-15 GC/MS SIM**

<b>File Name:</b>	<b>e081418sim</b>	<b>Date of Collection:</b> 8/13/15 1:40:00 PM
<b>Dil. Factor:</b>	<b>1.84</b>	<b>Date of Analysis:</b> 8/14/15 08:57 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.037	0.47	0.18	2.3
Freon 114	0.037	Not Detected	0.26	Not Detected
Chloromethane	0.092	0.53	0.19	1.1
Vinyl Chloride	0.018	Not Detected	0.047	Not Detected
Chloroethane	0.092	Not Detected	0.24	Not Detected
1,1-Dichloroethene	0.018	Not Detected	0.073	Not Detected
trans-1,2-Dichloroethene	0.18	Not Detected	0.73	Not Detected
Methyl tert-butyl ether	0.18	Not Detected	0.66	Not Detected
1,1-Dichloroethane	0.037	Not Detected	0.15	Not Detected
cis-1,2-Dichloroethene	0.037	Not Detected	0.14	Not Detected
Chloroform	0.037	0.24	0.18	1.1
1,1,1-Trichloroethane	0.037	Not Detected	0.20	Not Detected
Carbon Tetrachloride	0.037	0.10	0.23	0.65
Benzene	0.092	Not Detected	0.29	Not Detected
1,2-Dichloroethane	0.037	Not Detected	0.15	Not Detected
Trichloroethene	0.037	0.29	0.20	1.6
Toluene	0.037	0.28	0.14	1.1
1,1,2-Trichloroethane	0.037	Not Detected	0.20	Not Detected
Tetrachloroethene	0.037	0.19	0.25	1.3
1,2-Dibromoethane (EDB)	0.037	Not Detected	0.28	Not Detected
Ethyl Benzene	0.037	0.14	0.16	0.62
m,p-Xylene	0.074	0.19	0.32	0.82
o-Xylene	0.037	0.092	0.16	0.40
1,1,2,2-Tetrachloroethane	0.037	Not Detected	0.25	Not Detected
1,4-Dichlorobenzene	0.037	Not Detected	0.22	Not Detected

**Container Type: 6 Liter Summa Canister (SIM Certified)**

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	120	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	92	70-130



Air Toxics

Client Sample ID: IA5 (MEN'S ROOM)

Lab ID#: 1508200-06A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	e081419sim	Date of Collection:	8/13/15 1:45:00 PM
Dil. Factor:	1.66	Date of Analysis:	8/14/15 09:42 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.033	0.47	0.16	2.3
Freon 114	0.033	Not Detected	0.23	Not Detected
Chloromethane	0.083	0.66	0.17	1.4
Vinyl Chloride	0.017	Not Detected	0.042	Not Detected
Chloroethane	0.083	Not Detected	0.22	Not Detected
1,1-Dichloroethene	0.017	Not Detected	0.066	Not Detected
trans-1,2-Dichloroethene	0.17	Not Detected	0.66	Not Detected
Methyl tert-butyl ether	0.17	Not Detected	0.60	Not Detected
1,1-Dichloroethane	0.033	Not Detected	0.13	Not Detected
cis-1,2-Dichloroethene	0.033	Not Detected	0.13	Not Detected
Chloroform	0.033	1.6	0.16	7.6
1,1,1-Trichloroethane	0.033	Not Detected	0.18	Not Detected
Carbon Tetrachloride	0.033	0.11	0.21	0.69
Benzene	0.083	0.14	0.26	0.44
1,2-Dichloroethane	0.033	0.061	0.13	0.25
Trichloroethene	0.033	1.5	0.18	8.1
Toluene	0.033	0.72	0.12	2.7
1,1,2-Trichloroethane	0.033	Not Detected	0.18	Not Detected
Tetrachloroethene	0.033	0.81	0.22	5.5
1,2-Dibromoethane (EDB)	0.033	Not Detected	0.26	Not Detected
Ethyl Benzene	0.033	0.94	0.14	4.1
m,p-Xylene	0.066	0.90	0.29	3.9
o-Xylene	0.033	0.26	0.14	1.1
1,1,2,2-Tetrachloroethane	0.033	Not Detected	0.23	Not Detected
1,4-Dichlorobenzene	0.033	Not Detected	0.20	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	120	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	94	70-130





Air Toxics

Client Sample ID: IA9 (301 KUMON)

Lab ID#: 1508200-07A

**MODIFIED EPA METHOD TO-15 GC/MS SIM**

<b>File Name:</b>	<b>e081420sim</b>	<b>Date of Collection:</b> 8/13/15 1:44:00 PM
<b>Dil. Factor:</b>	<b>2.28</b>	<b>Date of Analysis:</b> 8/14/15 10:26 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.046	0.51	0.22	2.5
Freon 114	0.046	Not Detected	0.32	Not Detected
Chloromethane	0.11	0.67	0.24	1.4
Vinyl Chloride	0.023	Not Detected	0.058	Not Detected
Chloroethane	0.11	Not Detected	0.30	Not Detected
1,1-Dichloroethene	0.023	Not Detected	0.090	Not Detected
trans-1,2-Dichloroethene	0.23	Not Detected	0.90	Not Detected
Methyl tert-butyl ether	0.23	Not Detected	0.82	Not Detected
1,1-Dichloroethane	0.046	Not Detected	0.18	Not Detected
cis-1,2-Dichloroethene	0.046	Not Detected	0.18	Not Detected
Chloroform	0.046	0.42	0.22	2.0
1,1,1-Trichloroethane	0.046	Not Detected	0.25	Not Detected
Carbon Tetrachloride	0.046	0.10	0.29	0.66
Benzene	0.11	0.15	0.36	0.47
1,2-Dichloroethane	0.046	0.077	0.18	0.31
Trichloroethene	0.046	0.52	0.24	2.8
Toluene	0.046	1.3	0.17	4.9
1,1,2-Trichloroethane	0.046	Not Detected	0.25	Not Detected
Tetrachloroethene	0.046	0.70	0.31	4.7
1,2-Dibromoethane (EDB)	0.046	Not Detected	0.35	Not Detected
Ethyl Benzene	0.046	1.1	0.20	4.6
m,p-Xylene	0.091	1.0	0.40	4.5
o-Xylene	0.046	0.33	0.20	1.4
1,1,2,2-Tetrachloroethane	0.046	Not Detected	0.31	Not Detected
1,4-Dichlorobenzene	0.046	Not Detected	0.27	Not Detected

**Container Type: 6 Liter Summa Canister (SIM Certified)**

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	121	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	93	70-130



Air Toxics

Client Sample ID: IA10 (SUITE 302)

Lab ID#: 1508200-08A

**MODIFIED EPA METHOD TO-15 GC/MS SIM**

<b>File Name:</b>	<b>e081421sim</b>	<b>Date of Collection:</b> 8/13/15 1:42:00 PM
<b>Dil. Factor:</b>	<b>1.76</b>	<b>Date of Analysis:</b> 8/14/15 11:07 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.035	0.48	0.17	2.4
Freon 114	0.035	Not Detected	0.25	Not Detected
Chloromethane	0.088	0.59	0.18	1.2
Vinyl Chloride	0.018	Not Detected	0.045	Not Detected
Chloroethane	0.088	Not Detected	0.23	Not Detected
1,1-Dichloroethene	0.018	Not Detected	0.070	Not Detected
trans-1,2-Dichloroethene	0.18	Not Detected	0.70	Not Detected
Methyl tert-butyl ether	0.18	Not Detected	0.63	Not Detected
1,1-Dichloroethane	0.035	Not Detected	0.14	Not Detected
cis-1,2-Dichloroethene	0.035	Not Detected	0.14	Not Detected
Chloroform	0.035	0.51	0.17	2.5
1,1,1-Trichloroethane	0.035	Not Detected	0.19	Not Detected
Carbon Tetrachloride	0.035	0.10	0.22	0.64
Benzene	0.088	0.13	0.28	0.42
1,2-Dichloroethane	0.035	0.055	0.14	0.22
Trichloroethene	0.035	0.65	0.19	3.5
Toluene	0.035	0.63	0.13	2.4
1,1,2-Trichloroethane	0.035	Not Detected	0.19	Not Detected
Tetrachloroethene	0.035	0.71	0.24	4.8
1,2-Dibromoethane (EDB)	0.035	Not Detected	0.27	Not Detected
Ethyl Benzene	0.035	0.54	0.15	2.3
m,p-Xylene	0.070	0.54	0.30	2.3
o-Xylene	0.035	0.18	0.15	0.80
1,1,2,2-Tetrachloroethane	0.035	Not Detected	0.24	Not Detected
1,4-Dichlorobenzene	0.035	Not Detected	0.21	Not Detected

**Container Type: 6 Liter Summa Canister (SIM Certified)**

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	120	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	93	70-130



Air Toxics

Client Sample ID: IA11 (SUITE 303)

Lab ID#: 1508200-09A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	e081422sim	Date of Collection:	8/13/15 2:26:00 PM
Dil. Factor:	1.66	Date of Analysis:	8/14/15 11:49 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.033	0.50	0.16	2.5
Freon 114	0.033	Not Detected	0.23	Not Detected
Chloromethane	0.083	0.53	0.17	1.1
Vinyl Chloride	0.017	Not Detected	0.042	Not Detected
Chloroethane	0.083	Not Detected	0.22	Not Detected
1,1-Dichloroethene	0.017	Not Detected	0.066	Not Detected
trans-1,2-Dichloroethene	0.17	Not Detected	0.66	Not Detected
Methyl tert-butyl ether	0.17	Not Detected	0.60	Not Detected
1,1-Dichloroethane	0.033	Not Detected	0.13	Not Detected
cis-1,2-Dichloroethene	0.033	Not Detected	0.13	Not Detected
Chloroform	0.033	0.14	0.16	0.69
1,1,1-Trichloroethane	0.033	Not Detected	0.18	Not Detected
Carbon Tetrachloride	0.033	0.10	0.21	0.66
Benzene	0.083	Not Detected	0.26	Not Detected
1,2-Dichloroethane	0.033	0.16	0.13	0.63
Trichloroethene	0.033	0.17	0.18	0.90
Toluene	0.033	0.27	0.12	1.0
1,1,2-Trichloroethane	0.033	Not Detected	0.18	Not Detected
Tetrachloroethene	0.033	0.14	0.22	0.96
1,2-Dibromoethane (EDB)	0.033	Not Detected	0.26	Not Detected
Ethyl Benzene	0.033	0.16	0.14	0.70
m,p-Xylene	0.066	0.17	0.29	0.73
o-Xylene	0.033	0.059	0.14	0.26
1,1,2,2-Tetrachloroethane	0.033	Not Detected	0.23	Not Detected
1,4-Dichlorobenzene	0.033	Not Detected	0.20	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	122	70-130
Toluene-d8	105	70-130
4-Bromofluorobenzene	94	70-130



Air Toxics

Client Sample ID: IA11 DUP(SUITE 303)

Lab ID#: 1508200-10A

**MODIFIED EPA METHOD TO-15 GC/MS SIM**

<b>File Name:</b>	<b>e081423sim</b>	<b>Date of Collection:</b> 8/13/15 2:26:00 PM
<b>Dil. Factor:</b>	<b>1.57</b>	<b>Date of Analysis:</b> 8/15/15 06:12 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.031	0.49	0.16	2.4
Freon 114	0.031	Not Detected	0.22	Not Detected
Chloromethane	0.078	0.57	0.16	1.2
Vinyl Chloride	0.016	Not Detected	0.040	Not Detected
Chloroethane	0.078	Not Detected	0.21	Not Detected
1,1-Dichloroethene	0.016	Not Detected	0.062	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.62	Not Detected
Methyl tert-butyl ether	0.16	Not Detected	0.57	Not Detected
1,1-Dichloroethane	0.031	Not Detected	0.13	Not Detected
cis-1,2-Dichloroethene	0.031	Not Detected	0.12	Not Detected
Chloroform	0.031	0.12	0.15	0.61
1,1,1-Trichloroethane	0.031	Not Detected	0.17	Not Detected
Carbon Tetrachloride	0.031	0.090	0.20	0.57
Benzene	0.078	Not Detected	0.25	Not Detected
1,2-Dichloroethane	0.031	0.14	0.13	0.59
Trichloroethene	0.031	0.16	0.17	0.85
Toluene	0.031	0.25	0.12	0.95
1,1,2-Trichloroethane	0.031	Not Detected	0.17	Not Detected
Tetrachloroethene	0.031	0.13	0.21	0.89
1,2-Dibromoethane (EDB)	0.031	Not Detected	0.24	Not Detected
Ethyl Benzene	0.031	0.14	0.14	0.62
m,p-Xylene	0.063	0.16	0.27	0.70
o-Xylene	0.031	0.062	0.14	0.27
1,1,2,2-Tetrachloroethane	0.031	Not Detected	0.22	Not Detected
1,4-Dichlorobenzene	0.031	Not Detected	0.19	Not Detected

**Container Type: 6 Liter Summa Canister (SIM Certified)**

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	121	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	93	70-130



Air Toxics

Client Sample ID: BG2 AMBIENT

Lab ID#: 1508200-11A

**MODIFIED EPA METHOD TO-15 GC/MS SIM**

<b>File Name:</b>	<b>e081424sim</b>	<b>Date of Collection:</b> 8/13/15 2:31:00 PM
<b>Dil. Factor:</b>	<b>1.56</b>	<b>Date of Analysis:</b> 8/15/15 06:53 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.031	0.50	0.15	2.5
Freon 114	0.031	Not Detected	0.22	Not Detected
Chloromethane	0.078	0.54	0.16	1.1
Vinyl Chloride	0.016	Not Detected	0.040	Not Detected
Chloroethane	0.078	Not Detected	0.20	Not Detected
1,1-Dichloroethene	0.016	Not Detected	0.062	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.62	Not Detected
Methyl tert-butyl ether	0.16	Not Detected	0.56	Not Detected
1,1-Dichloroethane	0.031	Not Detected	0.13	Not Detected
cis-1,2-Dichloroethene	0.031	Not Detected	0.12	Not Detected
Chloroform	0.031	Not Detected	0.15	Not Detected
1,1,1-Trichloroethane	0.031	Not Detected	0.17	Not Detected
Carbon Tetrachloride	0.031	0.096	0.20	0.60
Benzene	0.078	Not Detected	0.25	Not Detected
1,2-Dichloroethane	0.031	Not Detected	0.13	Not Detected
Trichloroethene	0.031	Not Detected	0.17	Not Detected
Toluene	0.031	0.18	0.12	0.68
1,1,2-Trichloroethane	0.031	Not Detected	0.17	Not Detected
Tetrachloroethene	0.031	Not Detected	0.21	Not Detected
1,2-Dibromoethane (EDB)	0.031	Not Detected	0.24	Not Detected
Ethyl Benzene	0.031	0.031	0.14	0.14
m,p-Xylene	0.062	0.086	0.27	0.37
o-Xylene	0.031	0.048	0.14	0.21
1,1,2,2-Tetrachloroethane	0.031	Not Detected	0.21	Not Detected
1,4-Dichlorobenzene	0.031	Not Detected	0.19	Not Detected

**Container Type: 6 Liter Summa Canister (SIM Certified)**

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	122	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	92	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1508200-12A

**MODIFIED EPA METHOD TO-15 GC/MS SIM**

<b>File Name:</b>	<b>e081409sim</b>	<b>Date of Collection:</b> NA
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis:</b> 8/14/15 01:38 PM

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Freon 12	0.020	Not Detected	0.099	Not Detected
Freon 114	0.020	Not Detected	0.14	Not Detected
Chloromethane	0.050	Not Detected	0.10	Not Detected
Vinyl Chloride	0.010	Not Detected	0.026	Not Detected
Chloroethane	0.050	Not Detected	0.13	Not Detected
1,1-Dichloroethene	0.010	Not Detected	0.040	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Methyl tert-butyl ether	0.10	Not Detected	0.36	Not Detected
1,1-Dichloroethane	0.020	Not Detected	0.081	Not Detected
cis-1,2-Dichloroethene	0.020	Not Detected	0.079	Not Detected
Chloroform	0.020	Not Detected	0.098	Not Detected
1,1,1-Trichloroethane	0.020	Not Detected	0.11	Not Detected
Carbon Tetrachloride	0.020	Not Detected	0.12	Not Detected
Benzene	0.050	Not Detected	0.16	Not Detected
1,2-Dichloroethane	0.020	Not Detected	0.081	Not Detected
Trichloroethene	0.020	Not Detected	0.11	Not Detected
Toluene	0.020	Not Detected	0.075	Not Detected
1,1,2-Trichloroethane	0.020	Not Detected	0.11	Not Detected
Tetrachloroethene	0.020	Not Detected	0.14	Not Detected
1,2-Dibromoethane (EDB)	0.020	Not Detected	0.15	Not Detected
Ethyl Benzene	0.020	Not Detected	0.087	Not Detected
m,p-Xylene	0.040	Not Detected	0.17	Not Detected
o-Xylene	0.020	Not Detected	0.087	Not Detected
1,1,2,2-Tetrachloroethane	0.020	Not Detected	0.14	Not Detected
1,4-Dichlorobenzene	0.020	Not Detected	0.12	Not Detected

**Container Type: NA - Not Applicable**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	122	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	90	70-130



Air Toxics

Client Sample ID: CCV

Lab ID#: 1508200-13A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	e081404sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/14/15 09:53 AM

Compound	%Recovery
Freon 12	114
Freon 114	100
Chloromethane	121
Vinyl Chloride	114
Chloroethane	115
1,1-Dichloroethene	100
trans-1,2-Dichloroethene	110
Methyl tert-butyl ether	115
1,1-Dichloroethane	120
cis-1,2-Dichloroethene	112
Chloroform	110
1,1,1-Trichloroethane	112
Carbon Tetrachloride	81
Benzene	100
1,2-Dichloroethane	120
Trichloroethene	95
Toluene	104
1,1,2-Trichloroethane	105
Tetrachloroethene	97
1,2-Dibromoethane (EDB)	106
Ethyl Benzene	111
m,p-Xylene	117
o-Xylene	115
1,1,2,2-Tetrachloroethane	109
1,4-Dichlorobenzene	105

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	122	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	97	70-130



Air Toxics

Client Sample ID: LCS

Lab ID#: 1508200-14A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	e081405sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/14/15 10:34 AM

Compound	%Recovery	Method Limits
Freon 12	103	70-130
Freon 114	96	70-130
Chloromethane	107	70-130
Vinyl Chloride	104	70-130
Chloroethane	102	70-130
1,1-Dichloroethene	90	70-130
trans-1,2-Dichloroethene	84	70-130
Methyl tert-butyl ether	94	70-130
1,1-Dichloroethane	104	70-130
cis-1,2-Dichloroethene	108	70-130
Chloroform	96	70-130
1,1,1-Trichloroethane	97	70-130
Carbon Tetrachloride	110	60-140
Benzene	89	70-130
1,2-Dichloroethane	107	70-130
Trichloroethene	84	70-130
Toluene	92	70-130
1,1,2-Trichloroethane	94	70-130
Tetrachloroethene	87	70-130
1,2-Dibromoethane (EDB)	95	70-130
Ethyl Benzene	99	70-130
m,p-Xylene	105	70-130
o-Xylene	104	70-130
1,1,2,2-Tetrachloroethane	100	70-130
1,4-Dichlorobenzene	94	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	118	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	97	70-130





Air Toxics

Client Sample ID: LCSD

Lab ID#: 1508200-14AA

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	e081406sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 8/14/15 11:19 AM

Compound	%Recovery	Method Limits
Freon 12	106	70-130
Freon 114	94	70-130
Chloromethane	112	70-130
Vinyl Chloride	109	70-130
Chloroethane	106	70-130
1,1-Dichloroethene	89	70-130
trans-1,2-Dichloroethene	83	70-130
Methyl tert-butyl ether	95	70-130
1,1-Dichloroethane	103	70-130
cis-1,2-Dichloroethene	106	70-130
Chloroform	95	70-130
1,1,1-Trichloroethane	96	70-130
Carbon Tetrachloride	110	60-140
Benzene	88	70-130
1,2-Dichloroethane	103	70-130
Trichloroethene	82	70-130
Toluene	91	70-130
1,1,2-Trichloroethane	94	70-130
Tetrachloroethene	86	70-130
1,2-Dibromoethane (EDB)	96	70-130
Ethyl Benzene	99	70-130
m,p-Xylene	103	70-130
o-Xylene	103	70-130
1,1,2,2-Tetrachloroethane	100	70-130
1,4-Dichlorobenzene	92	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	118	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	96	70-130



# K PRIME, Inc.

CONSULTING ANALYTICAL CHEMISTS

3621 Westwind Blvd.  
Santa Rosa CA 95403  
Phone: 707 527 7574  
FAX: 707 527 7879

## TRANSMITTAL

**DATE:** 9/8/2015

**TO:** MR. PAUL KING  
P&D ENVIRONMENTAL, INC.  
55 SANTA CLARA AVE., SUITE 240  
OAKLAND, CA 94610

**ACCT:** 4639  
**PROJ:** 0461

Phone: 510-658-6916  
Fax: 510-834-0152  
Email: lab@pdenviro.com  
PDKing0000@aol.com

**FROM:** Richard A. Kageł, Ph.D. *RAK 9/8/2015*  
Laboratory Director

**SUBJECT:** LABORATORY RESULTS FOR YOUR PROJECT 0461

Enclosed please find K Prime's laboratory reports for the following samples:

<b>SAMPLE ID</b>	<b>TYPE</b>	<b>DATE</b>	<b>TIME</b>	<b>KPI LAB #</b>
IA4 (HALLWAY)	AIR	9/4/2015	13:35	136577
IA5 (MENS ROOM 3RD FL)	AIR	9/4/2015	13:40	136578
BG2 (AMBIENT)	AIR	9/4/2015	13:47	136579

The above listed sample group was received on 9/4/2015 and tested as requested on the chain of custody document.

Please call me if you have any questions or need further information.  
Thank you for this opportunity to be of service.

**K PRIME, INC.**  
**LABORATORY REPORT**

K PRIME PROJECT: 4639  
 CLIENT PROJECT: 0461

METHOD: VOC'S IN AIR  
 REFERENCE: EPA METHOD TO-15-SIM (GC-MS-SIM)

SAMPLE ID: IA4 (HALLWAY)  
 LAB NO: 136577  
 SAMPLE TYPE: AIR  
 DATE SAMPLED: 09/04/2015  
 TIME SAMPLED: 13:35  
 BATCH ID: 090415A1  
 DATE ANALYZED: 09/08/2015

COMPOUND NAME	CAS NO.	PPB (V/V)		µg/cu. m	
		MRL	SAMPLE CONC	MRL	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	0.0100	0.571	0.0495	2.82
DICHLOROTETRAFLUOROETHANE	76-14-2	0.0100	0.0212	0.0699	0.148
CHLOROMETHANE	74-87-3	0.0500	0.542	0.103	1.12
VINYL CHLORIDE	75-01-4	0.0100	ND	0.0256	ND
CHLOROETHANE	75-00-3	0.0100	ND	0.0264	ND
1,1-DICHLOROETHENE	75-35-4	0.0100	ND	0.0397	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	0.0100	ND	0.0396	ND
1,1-DICHLOROETHANE	75-34-3	0.0100	ND	0.0405	ND
CIS-1,2-DICHLOROETHENE	156-59-2	0.0100	ND	0.0397	ND
CHLOROFORM	67-66-3	0.0100	0.853	0.0488	4.17
1,1,1-TRICHLOROETHANE	71-55-6	0.0100	0.0254	0.0546	0.138
1,2-DICHLOROETHANE	107-06-2	0.0100	0.0901	0.0405	0.365
BENZENE	71-43-2	0.0500	0.135	0.160	0.432
CARBON TETRACHLORIDE	56-23-5	0.0100	0.101	0.0629	0.634
TRICHLOROETHENE	79-01-6	0.0100	1.51	0.0537	8.09
TOLUENE	108-88-3	0.0500	0.848	0.188	3.19
1,1,2-TRICHLOROETHANE	79-00-5	0.0100	ND	0.0546	ND
1,2-DIBROMOETHANE	106-93-4	0.0100	ND	0.0768	ND
TETRACHLOROETHENE	127-18-4	0.0100	1.05	0.0678	7.15
ETHYLBENZENE	100-41-4	0.0100	0.286	0.0434	1.24
XYLENE (M+P)	1330-20-7	0.0200	0.476	0.0868	2.07
XYLENE (O)	95-47-6	0.0100	0.176	0.0434	0.765
1,1,2,2-TETRACHLOROETHANE	79-34-5	0.0100	ND	0.0687	ND
1,4-DICHLOROBENZENE	106-46-7	0.0100	0.0317	0.0601	0.190

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT  
 MRL - METHOD REPORTING LIMIT  
 NA - NOT APPLICABLE OR AVAILABLE  
 µg/cu. m VALUES ARE CALCULATED FROM PPB RESULTS USING NORMAL TEMPERATURE AND PRESSURE (NPT).

APPROVED BY: AMK  
 DATE: 9/8/15



**K PRIME, INC.**  
**LABORATORY REPORT**

K PRIME PROJECT: 4639  
 CLIENT PROJECT: 0461

METHOD: VOC'S IN AIR  
 REFERENCE: EPA METHOD TO-15-SIM (GC-MS-SIM)

SAMPLE ID: BG2 (AMBIENT)  
 LAB NO: 136579  
 SAMPLE TYPE: AIR  
 DATE SAMPLED: 09/04/2015  
 TIME SAMPLED: 13:47  
 BATCH ID: 090415A1  
 DATE ANALYZED: 09/08/2015

COMPOUND NAME	CAS NO.	PPB (V/V)		µg/cu. m	
		MRL	SAMPLE CONC	MRL	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	0.0100	0.589	0.0495	2.91
DICHLOROTETRAFLUOROETHANE	76-14-2	0.0100	0.0208	0.0699	0.146
CHLOROMETHANE	74-87-3	0.0500	0.593	0.103	1.22
VINYL CHLORIDE	75-01-4	0.0100	ND	0.0256	ND
CHLOROETHANE	75-00-3	0.0100	ND	0.0264	ND
1,1-DICHLOROETHENE	75-35-4	0.0100	ND	0.0397	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	0.0100	ND	0.0396	ND
1,1-DICHLOROETHANE	75-34-3	0.0100	ND	0.0405	ND
CIS-1,2-DICHLOROETHENE	156-59-2	0.0100	ND	0.0397	ND
CHLOROFORM	67-66-3	0.0100	ND	0.0488	ND
1,1,1-TRICHLOROETHANE	71-55-6	0.0100	ND	0.0546	ND
1,2-DICHLOROETHANE	107-06-2	0.0100	0.0147	0.0405	0.0596
BENZENE	71-43-2	0.0500	0.0999	0.160	0.319
CARBON TETRACHLORIDE	56-23-5	0.0100	0.104	0.0629	0.653
TRICHLOROETHENE	79-01-6	0.0100	ND	0.0537	ND
TOLUENE	108-88-3	0.0500	0.410	0.188	1.54
1,1,2-TRICHLOROETHANE	79-00-5	0.0100	ND	0.0546	ND
1,2-DIBROMOETHANE	106-93-4	0.0100	ND	0.0768	ND
TETRACHLOROETHENE	127-18-4	0.0100	0.0314	0.0678	0.213
ETHYLBENZENE	100-41-4	0.0100	0.0526	0.0434	0.229
XYLENE (M+P)	1330-20-7	0.0200	0.195	0.0868	0.848
XYLENE (O)	95-47-6	0.0100	0.0736	0.0434	0.319
1,1,2,2-TETRACHLOROETHANE	79-34-5	0.0100	ND	0.0687	ND
1,4-DICHLOROBENZENE	106-46-7	0.0100	ND	0.0601	ND

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT  
 MRL - METHOD REPORTING LIMIT  
 NA - NOT APPLICABLE OR AVAILABLE  
 µg/cu. m VALUES ARE CALCULATED FROM PPB RESULTS USING NORMAL TEMPERATURE AND PRESSURE (NPT).

APPROVED BY:                     MYK                      
 DATE:                     9/8/15

**K PRIME, INC.**  
**LABORATORY METHOD BLANK REPORT**

**METHOD BLANK ID:** B090415A1  
**SAMPLE TYPE:** AIR

**BATCH ID:** 090415A1  
**DATE ANALYZED:** 09/04/2015

**METHOD:** VOC'S IN AIR  
**REFERENCE:** EPA METHOD TO-15-SIM (GC-MS-SIM)

COMPOUND NAME	CAS NO.	PPB (V/V)		µg/cu. m	
		MRL	SAMPLE CONC	MRL	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	0.0100	ND	0.0495	ND
DICHLOROTETRAFLUROETHANE	76-14-2	0.0100	ND	0.0699	ND
CHLOROMETHANE	74-87-3	0.0500	ND	0.103	ND
VINYL CHLORIDE	75-01-4	0.0100	ND	0.0256	ND
CHLOROETHANE	75-00-3	0.0100	ND	0.0264	ND
1,1-DICHLOROETHENE	75-35-4	0.0100	ND	0.0397	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	0.0100	ND	0.0396	ND
1,1-DICHLOROETHANE	75-34-3	0.0100	ND	0.0405	ND
CIS-1,2-DICHLOROETHENE	156-59-2	0.0100	ND	0.0397	ND
CHLOROFORM	67-66-3	0.0100	ND	0.0488	ND
1,1,1-TRICHLOROETHANE	71-55-6	0.0100	ND	0.0546	ND
1,2-DICHLOROETHANE	107-06-2	0.0100	ND	0.0405	ND
BENZENE	71-43-2	0.0500	ND	0.160	ND
CARBON TETRACHLORIDE	56-23-5	0.0100	ND	0.0629	ND
TRICHLOROETHENE	79-01-6	0.0100	ND	0.0537	ND
TOLUENE	108-88-3	0.0500	ND	0.188	ND
1,1,2-TRICHLOROETHANE	79-00-5	0.0100	ND	0.0546	ND
1,2-DIBROMOETHANE	106-93-4	0.0100	ND	0.0768	ND
TETRACHLOROETHENE	127-18-4	0.0100	ND	0.0678	ND
ETHYLBENZENE	100-41-4	0.0100	ND	0.0434	ND
XYLENE (M+P)	1330-20-7	0.0200	ND	0.0868	ND
XYLENE (O)	95-47-6	0.0100	ND	0.0434	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	0.0100	ND	0.0687	ND
1,4-DICHLOROBENZENE	106-46-7	0.0100	ND	0.0601	ND

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

MRL - METHOD REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE

µg/cu. m VALUES ARE CALCULATED FROM PPB RESULTS USING NORMAL TEMPERATURE AND PRESSURE (NPT).

**K PRIME, INC.**  
**LABORATORY QUALITY CONTROL REPORT**

**LAB CONTROL ID:** L090415A1  
**LAB CONTROL DUPLICATE ID:** D090415A1

**SAMPLE TYPE:** AIR  
**BATCH ID:** 090415A1  
**DATE ANALYZED:** 09/04/2015

**METHOD:** VOC'S IN AIR  
**REFERENCE:** EPA METHOD TO-15-SIM (GC-MS-SIM)

COMPOUND NAME	SPIKE ADDED (PPB)	REPORTING LIMIT (PPB)	SAMPLE CONC (PPB)	SPIKE CONC (PPB)	SPIKE REC (%)	REC LIMITS (%)
1,1-DICHLOROETHENE	0.500	0.010	ND	0.475	95	60 - 140
TRICHLOROETHENE	0.500	0.010	ND	0.567	113	60 - 140
BENZENE	0.500	0.050	ND	0.427	85	60 - 140
TOLUENE	0.500	0.050	ND	0.532	106	60 - 140
TETRACHLOROETHENE	0.500	0.010	ND	0.611	122	60 - 140

COMPOUND NAME	SPIKE ADDED (PPB)	SPIKE DUP CONC (PPB)	SPIKE DUP REC (%)	QC LIMITS		
				RPD (%)	RPD (%)	REC (%)
1,1-DICHLOROETHENE	0.500	0.470	94	1.2	25	60 - 140
TRICHLOROETHENE	0.500	0.552	110	2.7	25	60 - 140
BENZENE	0.500	0.425	85	0.3	25	60 - 140
TOLUENE	0.500	0.536	107	0.7	25	60 - 140
TETRACHLOROETHENE	0.500	0.595	119	2.6	25	60 - 140

**NOTES:**

NA - NOT APPLICABLE OR AVAILABLE  
 ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT





10/14/2015  
Mr. Paul King  
P & D Environmental  
55 Santa Clara  
Suite 240  
Oakland CA 94610

Project Name: RED HANGER KLEANERS 6239 COLLEGE AVE  
Project #: 0461  
Workorder #: 1510220

Dear Mr. Paul King

The following report includes the data for the above referenced project for sample(s) received on 10/13/2015 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 SIM are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to the Project Manager: Kyle Vagadori at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Kyle Vagadori  
Project Manager

**WORK ORDER #: 1510220**

Work Order Summary

**CLIENT:** Mr. Paul King  
P & D Environmental  
55 Santa Clara  
Suite 240  
Oakland, CA 94610

**BILL TO:** Mr. Paul King  
P & D Environmental  
55 Santa Clara  
Suite 240  
Oakland, CA 94610

**PHONE:** 510-658-6916

**P.O. #**

**FAX:** 510-834-0772

**PROJECT #** 0461 RED HANGER KLEANERS 6239

**DATE RECEIVED:** 10/13/2015

**CONTACT:** COLLEGE AVE  
Kyle Vagadori

**DATE COMPLETED:** 10/14/2015

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	IA 4 HALLWAY	Modified TO-15 SIM	7.0 "Hg	5 psi
02A	IA 5 MENS RM (3RD FL)	Modified TO-15 SIM	7.0 "Hg	5 psi
03A	BG 2 AMBIENT	Modified TO-15 SIM	3.0 "Hg	5 psi
04A	Lab Blank	Modified TO-15 SIM	NA	NA
05A	CCV	Modified TO-15 SIM	NA	NA
06A	LCS	Modified TO-15 SIM	NA	NA
06AA	LCSD	Modified TO-15 SIM	NA	NA

CERTIFIED BY:   
\_\_\_\_\_  
Technical Director

DATE: 10/14/15  
\_\_\_\_\_

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,  
TX NELAP - T104704343-14-7, UT NELAP CA009332014-5, VA NELAP - 460197, WA NELAP - C935  
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)  
Accreditation number: CA300005, Effective date: 10/18/2014, Expiration date: 10/17/2015.

Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 9562  
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

**LABORATORY NARRATIVE**  
**Modified TO-15 SIM**  
**P & D Environmental**  
**Workorder# 1510220**

Three 6 Liter Summa Canister (SIM Certified) samples were received on October 13, 2015. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the SIM acquisition mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

<i>Requirement</i>	<i>TO-15</i>	<i>ATL Modifications</i>
ICAL %RSD acceptance criteria	</=30% RSD with 2 compounds allowed out to < 40% RSD	Project specific; default criteria is </=30% RSD with 10% of compounds allowed out to < 40% RSD
Daily Calibration	+/- 30% Difference	Project specific; default criteria is </= 30% Difference with 10% of compounds allowed out up to </=40%.; flag and narrate outliers
Blank and standards	Zero air	Nitrogen
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

**Receiving Notes**

There were no receiving discrepancies.

**Analytical Notes**

There were no analytical discrepancies.

**Definition of Data Qualifying Flags**

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV  
N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

## Summary of Detected Compounds MODIFIED EPA METHOD TO-15 GC/MS SIM

**Client Sample ID: IA 4 HALLWAY**

**Lab ID#: 1510220-01A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.035	0.48	0.17	2.4
Chloromethane	0.088	0.55	0.18	1.1
Chloroform	0.035	0.14	0.17	0.70
Trichloroethene	0.035	0.064	0.19	0.34
Toluene	0.035	0.14	0.13	0.52
Tetrachloroethene	0.035	0.036	0.24	0.24
m,p-Xylene	0.070	0.076	0.30	0.33

**Client Sample ID: IA 5 MENS RM (3RD FL)**

**Lab ID#: 1510220-02A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.035	0.47	0.17	2.3
Chloromethane	0.088	0.57	0.18	1.2
Chloroform	0.035	0.40	0.17	2.0
Benzene	0.088	0.10	0.28	0.32
Trichloroethene	0.035	0.050	0.19	0.27
Toluene	0.035	0.30	0.13	1.1
Tetrachloroethene	0.035	0.12	0.24	0.80
Ethyl Benzene	0.035	0.055	0.15	0.24
m,p-Xylene	0.070	0.15	0.30	0.67
o-Xylene	0.035	0.060	0.15	0.26

**Client Sample ID: BG 2 AMBIENT**

**Lab ID#: 1510220-03A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.030	0.47	0.15	2.3
Chloromethane	0.074	0.53	0.15	1.1
Chloroform	0.030	0.055	0.14	0.27
Carbon Tetrachloride	0.030	0.062	0.19	0.39
Benzene	0.074	0.31	0.24	0.98
Toluene	0.030	0.79	0.11	3.0

**Summary of Detected Compounds  
MODIFIED EPA METHOD TO-15 GC/MS SIM**

**Client Sample ID: BG 2 AMBIENT**

**Lab ID#: 1510220-03A**

Ethyl Benzene	0.030	0.14	0.13	0.59
m,p-Xylene	0.060	0.45	0.26	2.0
o-Xylene	0.030	0.17	0.13	0.72
1,4-Dichlorobenzene	0.030	0.034	0.18	0.20



Air Toxics

Client Sample ID: IA 4 HALLWAY

Lab ID#: 1510220-01A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	v101315sim	Date of Collection:	10/13/15 9:00:00 AM
Dil. Factor:	1.75	Date of Analysis:	10/13/15 08:24 PM

Compound	Rot. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.035	0.48	0.17	2.4
Freon 114	0.035	Not Detected	0.24	Not Detected
Chloromethane	0.088	0.55	0.18	1.1
Vinyl Chloride	0.018	Not Detected	0.045	Not Detected
Chloroethane	0.088	Not Detected	0.23	Not Detected
1,1-Dichloroethene	0.018	Not Detected	0.069	Not Detected
trans-1,2-Dichloroethene	0.18	Not Detected	0.69	Not Detected
Methyl tert-butyl ether	0.18	Not Detected	0.63	Not Detected
1,1-Dichloroethane	0.035	Not Detected	0.14	Not Detected
cis-1,2-Dichloroethene	0.035	Not Detected	0.14	Not Detected
Chloroform	0.035	0.14	0.17	0.70
1,1,1-Trichloroethane	0.035	Not Detected	0.19	Not Detected
Carbon Tetrachloride	0.035	Not Detected	0.22	Not Detected
Benzene	0.088	Not Detected	0.28	Not Detected
1,2-Dichloroethane	0.035	Not Detected	0.14	Not Detected
Trichloroethene	0.035	0.064	0.19	0.34
Toluene	0.035	0.14	0.13	0.52
1,1,2-Trichloroethane	0.035	Not Detected	0.19	Not Detected
Tetrachloroethene	0.035	0.036	0.24	0.24
1,2-Dibromoethane (EDB)	0.035	Not Detected	0.27	Not Detected
Ethyl Benzene	0.035	Not Detected	0.15	Not Detected
m,p-Xylene	0.070	0.076	0.30	0.33
o-Xylene	0.035	Not Detected	0.15	Not Detected
1,1,2,2-Tetrachloroethane	0.035	Not Detected	0.24	Not Detected
1,4-Dichlorobenzene	0.035	Not Detected	0.21	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	99	70-130





Air Toxics

Client Sample ID: IA 5 MENS RM (3RD FL)

Lab ID#: 1510220-02A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	v101316sim	Date of Collection:	10/13/15 9:05:00 AM
Dil. Factor:	1.75	Date of Analysis:	10/13/15 09:02 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.035	0.47	0.17	2.3
Freon 114	0.035	Not Detected	0.24	Not Detected
Chloromethane	0.088	0.57	0.18	1.2
Vinyl Chloride	0.018	Not Detected	0.045	Not Detected
Chloroethane	0.088	Not Detected	0.23	Not Detected
1,1-Dichloroethene	0.018	Not Detected	0.069	Not Detected
trans-1,2-Dichloroethene	0.18	Not Detected	0.69	Not Detected
Methyl tert-butyl ether	0.18	Not Detected	0.63	Not Detected
1,1-Dichloroethane	0.035	Not Detected	0.14	Not Detected
cis-1,2-Dichloroethene	0.035	Not Detected	0.14	Not Detected
Chloroform	0.035	0.40	0.17	2.0
1,1,1-Trichloroethane	0.035	Not Detected	0.19	Not Detected
Carbon Tetrachloride	0.035	Not Detected	0.22	Not Detected
Benzene	0.088	0.10	0.28	0.32
1,2-Dichloroethane	0.035	Not Detected	0.14	Not Detected
Trichloroethene	0.035	0.050	0.19	0.27
Toluene	0.035	0.30	0.13	1.1
1,1,2-Trichloroethane	0.035	Not Detected	0.19	Not Detected
Tetrachloroethene	0.035	0.12	0.24	0.80
1,2-Dibromoethane (EDB)	0.035	Not Detected	0.27	Not Detected
Ethyl Benzene	0.035	0.055	0.15	0.24
m,p-Xylene	0.070	0.15	0.30	0.67
o-Xylene	0.035	0.060	0.15	0.26
1,1,2,2-Tetrachloroethane	0.035	Not Detected	0.24	Not Detected
1,4-Dichlorobenzene	0.035	Not Detected	0.21	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	100	70-130



Air Toxics

Client Sample ID: BG 2 AMBIENT

Lab ID#: 1510220-03A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	v101317sim	Date of Collection:	10/13/15 9:07:00 AM
Dil. Factor:	1.49	Date of Analysis:	10/13/15 09:46 PM

Compound	Rot. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.030	0.47	0.15	2.3
Freon 114	0.030	Not Detected	0.21	Not Detected
Chloromethane	0.074	0.53	0.15	1.1
Vinyl Chloride	0.015	Not Detected	0.038	Not Detected
Chloroethane	0.074	Not Detected	0.20	Not Detected
1,1-Dichloroethene	0.015	Not Detected	0.059	Not Detected
trans-1,2-Dichloroethene	0.15	Not Detected	0.59	Not Detected
Methyl tert-butyl ether	0.15	Not Detected	0.54	Not Detected
1,1-Dichloroethane	0.030	Not Detected	0.12	Not Detected
cis-1,2-Dichloroethene	0.030	Not Detected	0.12	Not Detected
Chloroform	0.030	0.055	0.14	0.27
1,1,1-Trichloroethane	0.030	Not Detected	0.16	Not Detected
Carbon Tetrachloride	0.030	0.062	0.19	0.39
Benzene	0.074	0.31	0.24	0.98
1,2-Dichloroethane	0.030	Not Detected	0.12	Not Detected
Trichloroethene	0.030	Not Detected	0.16	Not Detected
Toluene	0.030	0.79	0.11	3.0
1,1,2-Trichloroethane	0.030	Not Detected	0.16	Not Detected
Tetrachloroethene	0.030	Not Detected	0.20	Not Detected
1,2-Dibromoethane (EDB)	0.030	Not Detected	0.23	Not Detected
Ethyl Benzene	0.030	0.14	0.13	0.59
m,p-Xylene	0.060	0.45	0.26	2.0
o-Xylene	0.030	0.17	0.13	0.72
1,1,2,2-Tetrachloroethane	0.030	Not Detected	0.20	Not Detected
1,4-Dichlorobenzene	0.030	0.034	0.18	0.20

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	99	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1510220-04A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	v101306sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/13/15 11:57 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.020	Not Detected	0.099	Not Detected
Freon 114	0.020	Not Detected	0.14	Not Detected
Chloromethane	0.050	Not Detected	0.10	Not Detected
Vinyl Chloride	0.010	Not Detected	0.026	Not Detected
Chloroethane	0.050	Not Detected	0.13	Not Detected
1,1-Dichloroethene	0.010	Not Detected	0.040	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Methyl tert-butyl ether	0.10	Not Detected	0.36	Not Detected
1,1-Dichloroethane	0.020	Not Detected	0.081	Not Detected
cis-1,2-Dichloroethene	0.020	Not Detected	0.079	Not Detected
Chloroform	0.020	Not Detected	0.098	Not Detected
1,1,1-Trichloroethane	0.020	Not Detected	0.11	Not Detected
Carbon Tetrachloride	0.020	Not Detected	0.12	Not Detected
Benzene	0.050	Not Detected	0.16	Not Detected
1,2-Dichloroethane	0.020	Not Detected	0.081	Not Detected
Trichloroethene	0.020	Not Detected	0.11	Not Detected
Toluene	0.020	Not Detected	0.075	Not Detected
1,1,2-Trichloroethane	0.020	Not Detected	0.11	Not Detected
Tetrachloroethene	0.020	Not Detected	0.14	Not Detected
1,2-Dibromoethane (EDB)	0.020	Not Detected	0.15	Not Detected
Ethyl Benzene	0.020	Not Detected	0.087	Not Detected
m,p-Xylene	0.040	Not Detected	0.17	Not Detected
o-Xylene	0.020	Not Detected	0.087	Not Detected
1,1,2,2-Tetrachloroethane	0.020	Not Detected	0.14	Not Detected
1,4-Dichlorobenzene	0.020	Not Detected	0.12	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	98	70-130



Air Toxics

Client Sample ID: CCV

Lab ID#: 1510220-05A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	v101302sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/13/15 08:54 AM

Compound	%Recovery
Freon 12	99
Freon 114	99
Chloromethane	85
Vinyl Chloride	98
Chloroethane	114
1,1-Dichloroethene	90
trans-1,2-Dichloroethene	96
Methyl tert-butyl ether	104
1,1-Dichloroethane	102
cis-1,2-Dichloroethene	95
Chloroform	98
1,1,1-Trichloroethane	98
Carbon Tetrachloride	115
Benzene	99
1,2-Dichloroethane	100
Trichloroethene	98
Toluene	102
1,1,2-Trichloroethane	104
Tetrachloroethene	97
1,2-Dibromoethane (EDB)	104
Ethyl Benzene	99
m,p-Xylene	97
o-Xylene	95
1,1,2,2-Tetrachloroethane	94
1,4-Dichlorobenzene	77

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	94	70-130

Client Sample ID: LCS

Lab ID#: 1510220-06A

**MODIFIED EPA METHOD TO-15 GC/MS SIM**

<b>File Name:</b>	<b>v101303sim</b>	<b>Date of Collection: NA</b>
<b>Dil. Factor:</b>	<b>1.00</b>	<b>Date of Analysis: 10/13/15 09:42 AM</b>

<b>Compound</b>	<b>%Recovery</b>	<b>Method Limits</b>
Freon 12	111	70-130
Freon 114	111	70-130
Chloromethane	94	70-130
Vinyl Chloride	110	70-130
Chloroethane	121	70-130
1,1-Dichloroethene	95	70-130
trans-1,2-Dichloroethene	88	70-130
Methyl tert-butyl ether	110	70-130
1,1-Dichloroethane	109	70-130
cis-1,2-Dichloroethene	112	70-130
Chloroform	103	70-130
1,1,1-Trichloroethane	104	70-130
Carbon Tetrachloride	112	60-140
Benzene	103	70-130
1,2-Dichloroethane	104	70-130
Trichloroethene	102	70-130
Toluene	108	70-130
1,1,2-Trichloroethane	111	70-130
Tetrachloroethene	103	70-130
1,2-Dibromoethane (EDB)	111	70-130
Ethyl Benzene	110	70-130
m,p-Xylene	110	70-130
o-Xylene	112	70-130
1,1,2,2-Tetrachloroethane	106	70-130
1,4-Dichlorobenzene	94	70-130

**Container Type: NA - Not Applicable**

<b>Surrogates</b>	<b>%Recovery</b>	<b>Method Limits</b>
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	97	70-130



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1510220-06AA

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	v101304sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/13/15 10:20 AM

Compound	%Recovery	Method Limits
Freon 12	109	70-130
Freon 114	112	70-130
Chloromethane	94	70-130
Vinyl Chloride	108	70-130
Chloroethane	123	70-130
1,1-Dichloroethene	96	70-130
trans-1,2-Dichloroethene	90	70-130
Methyl tert-butyl ether	111	70-130
1,1-Dichloroethane	110	70-130
cis-1,2-Dichloroethene	114	70-130
Chloroform	105	70-130
1,1,1-Trichloroethane	104	70-130
Carbon Tetrachloride	114	60-140
Benzene	106	70-130
1,2-Dichloroethane	107	70-130
Trichloroethene	105	70-130
Toluene	108	70-130
1,1,2-Trichloroethane	115	70-130
Tetrachloroethene	106	70-130
1,2-Dibromoethane (EDB)	114	70-130
Ethyl Benzene	110	70-130
m,p-Xylene	109	70-130
o-Xylene	110	70-130
1,1,2,2-Tetrachloroethane	108	70-130
1,4-Dichlorobenzene	92	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	97	70-130



10/28/2015

Mr. Paul King  
P & D Environmental  
55 Santa Clara  
Suite 240  
Oakland CA 94610

Project Name: RED HANGER KLEANERS 6239 COLLEGE AVE.

Project #: 0461

Workorder #: 1510465

Dear Mr. Paul King

The following report includes the data for the above referenced project for sample(s) received on 10/21/2015 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 SIM are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free the Project Manager: Kyle Vagadori at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Kyle Vagadori  
Project Manager



**WORK ORDER #: 1510465**

Work Order Summary

<b>CLIENT:</b>	Mr. Paul King P & D Environmental 55 Santa Clara Suite 240 Oakland, CA 94610	<b>BILL TO:</b>	Mr. Paul King P & D Environmental 55 Santa Clara Suite 240 Oakland, CA 94610
<b>PHONE:</b>	510-658-6916	<b>P.O. #</b>	
<b>FAX:</b>	510-834-0772	<b>PROJECT #</b>	0461 RED HANGER KLEANERS 6239
<b>DATE RECEIVED:</b>	10/21/2015	<b>CONTACT:</b>	COLLEGE AVE. Kyle Vagadori
<b>DATE COMPLETED:</b>	10/28/2015		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>	<u>FINAL PRESSURE</u>
01A	IA5 MEN'S ROOM(3RD FLOOR)	Modified TO-15 SIM	7.6 "Hg	4.8 psi
02A	IA6 (201 HEALTH CENTER)	Modified TO-15 SIM	14.1 "Hg	4.9 psi
03A	IA6-DUP(201 HEALTH CENTER)	Modified TO-15 SIM	9.2 "Hg	5.1 psi
04A	IA7 (203 CPA)	Modified TO-15 SIM	8.2 "Hg	5 psi
05A	IA9 (301 KUMON)	Modified TO-15 SIM	8.8 "Hg	4.7 psi
06A	IA12 (SUITE 304)	Modified TO-15 SIM	6.7 "Hg	5 psi
07A	ELEVATOR PIT	Modified TO-15 SIM	5.1 "Hg	4.9 psi
08A	BG2-AMBIENT	Modified TO-15 SIM	4.1 "Hg	5.1 psi
09A	Lab Blank	Modified TO-15 SIM	NA	NA
10A	CCV	Modified TO-15 SIM	NA	NA
11A	LCS	Modified TO-15 SIM	NA	NA
11AA	LCSD	Modified TO-15 SIM	NA	NA

CERTIFIED BY:   
 \_\_\_\_\_  
 Technical Director

DATE: 10/28/15

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,  
 TX NELAP - T104704343-14-7, UT NELAP CA009332014-5, VA NELAP - 460197, WA NELAP - C935  
 Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)  
 Accreditation number: CA300005, Effective date: 10/18/2014, Expiration date: 10/17/2015.

Eurofins Air Toxics Inc. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 9563  
 (916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

**LABORATORY NARRATIVE**  
**Modified TO-15 SIM**  
**P & D Environmental**  
**Workorder# 1510465**

Eight 6 Liter Summa Canister (SIM Certified) samples were received on October 21, 2015. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the SIM acquisition mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

<i>Requirement</i>	<i>TO-15</i>	<i>ATL Modifications</i>
ICAL %RSD acceptance criteria	<math>\leq 30\%</math> RSD with 2 compounds allowed out to <math>< 40\%</math> RSD	Project specific; default criteria is <math>\leq 30\%</math> RSD with 10% of compounds allowed out to <math>< 40\%</math> RSD
Daily Calibration	+/- 30% Difference	Project specific; default criteria is <math>\leq 30\%</math> Difference with 10% of compounds allowed out up to <math>\leq 40\%</math>; flag and narrate outliers
Blank and standards	Zero air	Nitrogen
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

**Receiving Notes**

The Chain of Custody (COC) information for sample IA6-DUP(201 HEALTH CENTER) did not match the entry on the sample tag with regard to sample identification. The information on the COC was used to process and report the sample.

**Analytical Notes**

There were no analytical discrepancies.

**Definition of Data Qualifying Flags**

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See

data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

**Summary of Detected Compounds  
MODIFIED EPA METHOD TO-15 GC/MS SIM**

**Client Sample ID: IA5 MEN'S ROOM(3RD FLOOR)**

**Lab ID#: 1510465-01A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Freon 12	0.035	0.44	0.18	2.2
Chloromethane	0.088	0.50	0.18	1.0
Chloroform	0.035	0.37	0.17	1.8
Benzene	0.088	0.10	0.28	0.32
Trichloroethene	0.035	0.061	0.19	0.33
Toluene	0.035	0.28	0.13	1.0
Tetrachloroethene	0.035	0.13	0.24	0.88
Ethyl Benzene	0.035	0.052	0.15	0.23
m,p-Xylene	0.071	0.13	0.31	0.57
o-Xylene	0.035	0.055	0.15	0.24

**Client Sample ID: IA6 (201 HEALTH CENTER)**

**Lab ID#: 1510465-02A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Freon 12	0.050	0.43	0.25	2.1
Chloromethane	0.12	0.56	0.26	1.2
Chloroform	0.050	0.089	0.24	0.44
Benzene	0.12	0.22	0.40	0.69
1,2-Dichloroethane	0.050	0.12	0.20	0.49
Trichloroethene	0.050	0.096	0.27	0.52
Toluene	0.050	1.0	0.19	3.8
Tetrachloroethene	0.050	0.20	0.34	1.3
Ethyl Benzene	0.050	0.13	0.22	0.57
m,p-Xylene	0.10	0.40	0.44	1.8
o-Xylene	0.050	0.17	0.22	0.72

**Client Sample ID: IA6-DUP(201 HEALTH CENTER)**

**Lab ID#: 1510465-03A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Freon 12	0.039	0.45	0.19	2.2
Chloromethane	0.097	0.53	0.20	1.1

## Summary of Detected Compounds MODIFIED EPA METHOD TO-15 GC/MS SIM

**Client Sample ID: IA6-DUP(201 HEALTH CENTER)**

**Lab ID#: 1510465-03A**

Chloroform	0.039	0.091	0.19	0.44
Carbon Tetrachloride	0.039	0.042	0.24	0.26
Benzene	0.097	0.16	0.31	0.51
1,2-Dichloroethane	0.039	0.12	0.16	0.47
Trichloroethene	0.039	0.089	0.21	0.48
Toluene	0.039	0.56	0.15	2.1
Tetrachloroethene	0.039	0.19	0.26	1.3
Ethyl Benzene	0.039	0.097	0.17	0.42
m,p-Xylene	0.078	0.29	0.34	1.2
o-Xylene	0.039	0.12	0.17	0.51

**Client Sample ID: IA7 (203 CPA)**

**Lab ID#: 1510465-04A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.037	0.44	0.18	2.2
Chloromethane	0.092	0.56	0.19	1.2
Chloroform	0.037	0.056	0.18	0.27
Carbon Tetrachloride	0.037	0.060	0.23	0.38
Benzene	0.092	0.18	0.29	0.58
Toluene	0.037	0.51	0.14	1.9
Tetrachloroethene	0.037	0.064	0.25	0.43
Ethyl Benzene	0.037	0.082	0.16	0.36
m,p-Xylene	0.074	0.26	0.32	1.1
o-Xylene	0.037	0.093	0.16	0.40

**Client Sample ID: IA9 (301 KUMON)**

**Lab ID#: 1510465-05A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.037	0.45	0.18	2.2
Chloromethane	0.093	0.64	0.19	1.3
Chloroform	0.037	0.074	0.18	0.36
Carbon Tetrachloride	0.037	0.049	0.23	0.31

## Summary of Detected Compounds MODIFIED EPA METHOD TO-15 GC/MS SIM

**Client Sample ID: IA9 (301 KUMON)**

**Lab ID#: 1510465-05A**

Benzene	0.093	0.19	0.30	0.62
Trichloroethene	0.037	0.048	0.20	0.26
Toluene	0.037	0.69	0.14	2.6
Tetrachloroethene	0.037	0.23	0.25	1.5
Ethyl Benzene	0.037	0.11	0.16	0.48
m,p-Xylene	0.074	0.30	0.32	1.3
o-Xylene	0.037	0.11	0.16	0.47

**Client Sample ID: IA12 (SUITE 304)**

**Lab ID#: 1510465-06A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.035	0.46	0.17	2.3
Chloromethane	0.086	0.53	0.18	1.1
Chloroform	0.035	0.061	0.17	0.30
Carbon Tetrachloride	0.035	0.052	0.22	0.33
Benzene	0.086	0.17	0.28	0.55
Toluene	0.035	0.36	0.13	1.4
Tetrachloroethene	0.035	0.047	0.23	0.32
Ethyl Benzene	0.035	0.063	0.15	0.27
m,p-Xylene	0.069	0.21	0.30	0.92
o-Xylene	0.035	0.080	0.15	0.35

**Client Sample ID: ELEVATOR PIT**

**Lab ID#: 1510465-07A**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.032	0.45	0.16	2.2
Chloromethane	0.080	1.5	0.17	3.1
Chloroform	0.032	0.49	0.16	2.4
Carbon Tetrachloride	0.032	0.069	0.20	0.44
Benzene	0.080	0.37	0.26	1.2
Trichloroethene	0.032	0.63	0.17	3.4
Toluene	0.032	0.98	0.12	3.7

**Summary of Detected Compounds  
MODIFIED EPA METHOD TO-15 GC/MS SIM**

**Client Sample ID: ELEVATOR PIT**

**Lab ID#: 1510465-07A**

Tetrachloroethene	0.032	6.5	0.22	44
Ethyl Benzene	0.032	0.16	0.14	0.68
m,p-Xylene	0.064	0.53	0.28	2.3
o-Xylene	0.032	0.20	0.14	0.86

**Client Sample ID: BG2-AMBIENT**

**Lab ID#: 1510465-08A**

<b>Compound</b>	<b>Rpt. Limit (ppbv)</b>	<b>Amount (ppbv)</b>	<b>Rpt. Limit (ug/m3)</b>	<b>Amount (ug/m3)</b>
Freon 12	0.031	0.47	0.15	2.3
Chloromethane	0.078	0.54	0.16	1.1
Chloroform	0.031	0.044	0.15	0.22
Carbon Tetrachloride	0.031	0.057	0.20	0.36
Benzene	0.078	0.24	0.25	0.77
Toluene	0.031	0.55	0.12	2.1
Ethyl Benzene	0.031	0.097	0.14	0.42
m,p-Xylene	0.062	0.33	0.27	1.4
o-Xylene	0.031	0.12	0.14	0.51
1,4-Dichlorobenzene	0.031	0.031 J	0.19	0.18 J



Air Toxics

Client Sample ID: IA5 MEN'S ROOM(3RD FLOOR)

Lab ID#: 1510465-01A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	v102707sim	Date of Collection:	10/21/15 7:41:00 AM
Dil. Factor:	1.77	Date of Analysis:	10/27/15 10:28 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.035	0.44	0.18	2.2
Freon 114	0.035	Not Detected	0.25	Not Detected
Chloromethane	0.088	0.50	0.18	1.0
Vinyl Chloride	0.018	Not Detected	0.045	Not Detected
Chloroethane	0.088	Not Detected	0.23	Not Detected
1,1-Dichloroethene	0.018	Not Detected	0.070	Not Detected
trans-1,2-Dichloroethene	0.18	Not Detected	0.70	Not Detected
Methyl tert-butyl ether	0.18	Not Detected	0.64	Not Detected
1,1-Dichloroethane	0.035	Not Detected	0.14	Not Detected
cis-1,2-Dichloroethene	0.035	Not Detected	0.14	Not Detected
Chloroform	0.035	0.37	0.17	1.8
1,1,1-Trichloroethane	0.035	Not Detected	0.19	Not Detected
Carbon Tetrachloride	0.035	Not Detected	0.22	Not Detected
Benzene	0.088	0.10	0.28	0.32
1,2-Dichloroethane	0.035	Not Detected	0.14	Not Detected
Trichloroethene	0.035	0.061	0.19	0.33
Toluene	0.035	0.28	0.13	1.0
1,1,2-Trichloroethane	0.035	Not Detected	0.19	Not Detected
Tetrachloroethene	0.035	0.13	0.24	0.88
1,2-Dibromoethane (EDB)	0.035	Not Detected	0.27	Not Detected
Ethyl Benzene	0.035	0.052	0.15	0.23
m,p-Xylene	0.071	0.13	0.31	0.57
o-Xylene	0.035	0.055	0.15	0.24
1,1,2,2-Tetrachloroethane	0.035	Not Detected	0.24	Not Detected
1,4-Dichlorobenzene	0.035	Not Detected	0.21	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	90	70-130





Air Toxics

Client Sample ID: IA6 (201 HEALTH CENTER)

Lab ID#: 1510465-02A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	v102708sim	Date of Collection:	10/21/15 7:33:00 AM
Dil. Factor:	2.51	Date of Analysis:	10/27/15 11:17 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.050	0.43	0.25	2.1
Freon 114	0.050	Not Detected	0.35	Not Detected
Chloromethane	0.12	0.56	0.26	1.2
Vinyl Chloride	0.025	Not Detected	0.064	Not Detected
Chloroethane	0.12	Not Detected	0.33	Not Detected
1,1-Dichloroethene	0.025	Not Detected	0.10	Not Detected
trans-1,2-Dichloroethene	0.25	Not Detected	1.0	Not Detected
Methyl tert-butyl ether	0.25	Not Detected	0.90	Not Detected
1,1-Dichloroethane	0.050	Not Detected	0.20	Not Detected
cis-1,2-Dichloroethene	0.050	Not Detected	0.20	Not Detected
Chloroform	0.050	0.089	0.24	0.44
1,1,1-Trichloroethane	0.050	Not Detected	0.27	Not Detected
Carbon Tetrachloride	0.050	Not Detected	0.32	Not Detected
Benzene	0.12	0.22	0.40	0.69
1,2-Dichloroethane	0.050	0.12	0.20	0.49
Trichloroethene	0.050	0.096	0.27	0.52
Toluene	0.050	1.0	0.19	3.8
1,1,2-Trichloroethane	0.050	Not Detected	0.27	Not Detected
Tetrachloroethene	0.050	0.20	0.34	1.3
1,2-Dibromoethane (EDB)	0.050	Not Detected	0.38	Not Detected
Ethyl Benzene	0.050	0.13	0.22	0.57
m,p-Xylene	0.10	0.40	0.44	1.8
o-Xylene	0.050	0.17	0.22	0.72
1,1,2,2-Tetrachloroethane	0.050	Not Detected	0.34	Not Detected
1,4-Dichlorobenzene	0.050	Not Detected	0.30	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	94	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	92	70-130



Air Toxics

Client Sample ID: IA6-DUP(201 HEALTH CENTER)

Lab ID#: 1510465-03A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	v102709sim	Date of Collection:	10/21/15 7:33:00 AM
Dil. Factor:	1.94	Date of Analysis:	10/27/15 12:19 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.039	0.45	0.19	2.2
Freon 114	0.039	Not Detected	0.27	Not Detected
Chloromethane	0.097	0.53	0.20	1.1
Vinyl Chloride	0.019	Not Detected	0.050	Not Detected
Chloroethane	0.097	Not Detected	0.26	Not Detected
1,1-Dichloroethene	0.019	Not Detected	0.077	Not Detected
trans-1,2-Dichloroethene	0.19	Not Detected	0.77	Not Detected
Methyl tert-butyl ether	0.19	Not Detected	0.70	Not Detected
1,1-Dichloroethane	0.039	Not Detected	0.16	Not Detected
cis-1,2-Dichloroethene	0.039	Not Detected	0.15	Not Detected
Chloroform	0.039	0.091	0.19	0.44
1,1,1-Trichloroethane	0.039	Not Detected	0.21	Not Detected
Carbon Tetrachloride	0.039	0.042	0.24	0.26
Benzene	0.097	0.16	0.31	0.51
1,2-Dichloroethane	0.039	0.12	0.16	0.47
Trichloroethene	0.039	0.089	0.21	0.48
Toluene	0.039	0.56	0.15	2.1
1,1,2-Trichloroethane	0.039	Not Detected	0.21	Not Detected
Tetrachloroethene	0.039	0.19	0.26	1.3
1,2-Dibromoethane (EDB)	0.039	Not Detected	0.30	Not Detected
Ethyl Benzene	0.039	0.097	0.17	0.42
m,p-Xylene	0.078	0.29	0.34	1.2
o-Xylene	0.039	0.12	0.17	0.51
1,1,2,2-Tetrachloroethane	0.039	Not Detected	0.27	Not Detected
1,4-Dichlorobenzene	0.039	Not Detected	0.23	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	92	70-130



Air Toxics

Client Sample ID: IA7 (203 CPA)

Lab ID#: 1510465-04A

**MODIFIED EPA METHOD TO-15 GC/MS SIM**

<b>File Name:</b>	v102710sim	<b>Date of Collection:</b> 10/21/15 7:55:00 AM
<b>Dil. Factor:</b>	1.84	<b>Date of Analysis:</b> 10/27/15 12:55 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.037	0.44	0.18	2.2
Freon 114	0.037	Not Detected	0.26	Not Detected
Chloromethane	0.092	0.56	0.19	1.2
Vinyl Chloride	0.018	Not Detected	0.047	Not Detected
Chloroethane	0.092	Not Detected	0.24	Not Detected
1,1-Dichloroethene	0.018	Not Detected	0.073	Not Detected
trans-1,2-Dichloroethene	0.18	Not Detected	0.73	Not Detected
Methyl tert-butyl ether	0.18	Not Detected	0.66	Not Detected
1,1-Dichloroethane	0.037	Not Detected	0.15	Not Detected
cis-1,2-Dichloroethene	0.037	Not Detected	0.14	Not Detected
Chloroform	0.037	0.056	0.18	0.27
1,1,1-Trichloroethane	0.037	Not Detected	0.20	Not Detected
Carbon Tetrachloride	0.037	0.060	0.23	0.38
Benzene	0.092	0.18	0.29	0.58
1,2-Dichloroethane	0.037	Not Detected	0.15	Not Detected
Trichloroethene	0.037	Not Detected	0.20	Not Detected
Toluene	0.037	0.51	0.14	1.9
1,1,2-Trichloroethane	0.037	Not Detected	0.20	Not Detected
Tetrachloroethene	0.037	0.064	0.25	0.43
1,2-Dibromoethane (EDB)	0.037	Not Detected	0.28	Not Detected
Ethyl Benzene	0.037	0.082	0.16	0.36
m,p-Xylene	0.074	0.26	0.32	1.1
o-Xylene	0.037	0.093	0.16	0.40
1,1,2,2-Tetrachloroethane	0.037	Not Detected	0.25	Not Detected
1,4-Dichlorobenzene	0.037	Not Detected	0.22	Not Detected

**Container Type: 6 Liter Summa Canister (SIM Certified)**

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	92	70-130



Air Toxics

Client Sample ID: IA9 (301 KUMON)

Lab ID#: 1510465-05A

**MODIFIED EPA METHOD TO-15 GC/MS SIM**

<b>File Name:</b>	v102711sim	<b>Date of Collection:</b> 10/21/15 7:45:00 AM
<b>Dil. Factor:</b>	1.86	<b>Date of Analysis:</b> 10/27/15 01:31 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.037	0.45	0.18	2.2
Freon 114	0.037	Not Detected	0.26	Not Detected
Chloromethane	0.093	0.64	0.19	1.3
Vinyl Chloride	0.019	Not Detected	0.048	Not Detected
Chloroethane	0.093	Not Detected	0.24	Not Detected
1,1-Dichloroethene	0.019	Not Detected	0.074	Not Detected
trans-1,2-Dichloroethene	0.19	Not Detected	0.74	Not Detected
Methyl tert-butyl ether	0.19	Not Detected	0.67	Not Detected
1,1-Dichloroethane	0.037	Not Detected	0.15	Not Detected
cis-1,2-Dichloroethene	0.037	Not Detected	0.15	Not Detected
Chloroform	0.037	0.074	0.18	0.36
1,1,1-Trichloroethane	0.037	Not Detected	0.20	Not Detected
Carbon Tetrachloride	0.037	0.049	0.23	0.31
Benzene	0.093	0.19	0.30	0.62
1,2-Dichloroethane	0.037	Not Detected	0.15	Not Detected
Trichloroethene	0.037	0.048	0.20	0.26
Toluene	0.037	0.69	0.14	2.6
1,1,2-Trichloroethane	0.037	Not Detected	0.20	Not Detected
Tetrachloroethene	0.037	0.23	0.25	1.5
1,2-Dibromoethane (EDB)	0.037	Not Detected	0.28	Not Detected
Ethyl Benzene	0.037	0.11	0.16	0.48
m,p-Xylene	0.074	0.30	0.32	1.3
o-Xylene	0.037	0.11	0.16	0.47
1,1,2,2-Tetrachloroethane	0.037	Not Detected	0.26	Not Detected
1,4-Dichlorobenzene	0.037	Not Detected	0.22	Not Detected

**Container Type: 6 Liter Summa Canister (SIM Certified)**

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	92	70-130



Air Toxics

Client Sample ID: IA12 (SUITE 304)

Lab ID#: 1510465-06A

**MODIFIED EPA METHOD TO-15 GC/MS SIM**

<b>File Name:</b>	v102712sim	<b>Date of Collection:</b> 10/21/15 7:14:00 AM
<b>Dil. Factor:</b>	1.73	<b>Date of Analysis:</b> 10/27/15 02:06 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.035	0.46	0.17	2.3
Freon 114	0.035	Not Detected	0.24	Not Detected
Chloromethane	0.086	0.53	0.18	1.1
Vinyl Chloride	0.017	Not Detected	0.044	Not Detected
Chloroethane	0.086	Not Detected	0.23	Not Detected
1,1-Dichloroethene	0.017	Not Detected	0.068	Not Detected
trans-1,2-Dichloroethene	0.17	Not Detected	0.68	Not Detected
Methyl tert-butyl ether	0.17	Not Detected	0.62	Not Detected
1,1-Dichloroethane	0.035	Not Detected	0.14	Not Detected
cis-1,2-Dichloroethene	0.035	Not Detected	0.14	Not Detected
Chloroform	0.035	0.061	0.17	0.30
1,1,1-Trichloroethane	0.035	Not Detected	0.19	Not Detected
Carbon Tetrachloride	0.035	0.052	0.22	0.33
Benzene	0.086	0.17	0.28	0.55
1,2-Dichloroethane	0.035	Not Detected	0.14	Not Detected
Trichloroethene	0.035	Not Detected	0.18	Not Detected
Toluene	0.035	0.36	0.13	1.4
1,1,2-Trichloroethane	0.035	Not Detected	0.19	Not Detected
Tetrachloroethene	0.035	0.047	0.23	0.32
1,2-Dibromoethane (EDB)	0.035	Not Detected	0.26	Not Detected
Ethyl Benzene	0.035	0.063	0.15	0.27
m,p-Xylene	0.069	0.21	0.30	0.92
o-Xylene	0.035	0.080	0.15	0.35
1,1,2,2-Tetrachloroethane	0.035	Not Detected	0.24	Not Detected
1,4-Dichlorobenzene	0.035	Not Detected	0.21	Not Detected

**Container Type: 6 Liter Summa Canister (SIM Certified)**

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	93	70-130



Air Toxics

Client Sample ID: ELEVATOR PIT

Lab ID#: 1510465-07A

**MODIFIED EPA METHOD TO-15 GC/MS SIM**

<b>File Name:</b>	v102713sim	<b>Date of Collection:</b> 10/21/15 6:55:00 AM
<b>Dil. Factor:</b>	1.61	<b>Date of Analysis:</b> 10/27/15 02:42 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.032	0.45	0.16	2.2
Freon 114	0.032	Not Detected	0.22	Not Detected
Chloromethane	0.080	1.5	0.17	3.1
Vinyl Chloride	0.016	Not Detected	0.041	Not Detected
Chloroethane	0.080	Not Detected	0.21	Not Detected
1,1-Dichloroethene	0.016	Not Detected	0.064	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.64	Not Detected
Methyl tert-butyl ether	0.16	Not Detected	0.58	Not Detected
1,1-Dichloroethane	0.032	Not Detected	0.13	Not Detected
cis-1,2-Dichloroethene	0.032	Not Detected	0.13	Not Detected
Chloroform	0.032	0.49	0.16	2.4
1,1,1-Trichloroethane	0.032	Not Detected	0.18	Not Detected
Carbon Tetrachloride	0.032	0.069	0.20	0.44
Benzene	0.080	0.37	0.26	1.2
1,2-Dichloroethane	0.032	Not Detected	0.13	Not Detected
Trichloroethene	0.032	0.63	0.17	3.4
Toluene	0.032	0.98	0.12	3.7
1,1,2-Trichloroethane	0.032	Not Detected	0.18	Not Detected
Tetrachloroethene	0.032	6.5	0.22	44
1,2-Dibromoethane (EDB)	0.032	Not Detected	0.25	Not Detected
Ethyl Benzene	0.032	0.16	0.14	0.68
m,p-Xylene	0.064	0.53	0.28	2.3
o-Xylene	0.032	0.20	0.14	0.86
1,1,2,2-Tetrachloroethane	0.032	Not Detected	0.22	Not Detected
1,4-Dichlorobenzene	0.032	Not Detected	0.19	Not Detected

**Container Type: 6 Liter Summa Canister (SIM Certified)**

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	97	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	91	70-130



Air Toxics

Client Sample ID: BG2-AMBIENT

Lab ID#: 1510465-08A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	v102714sim	Date of Collection:	10/21/15 8:01:00 AM
Dil. Factor:	1.56	Date of Analysis:	10/27/15 03:18 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.031	0.47	0.15	2.3
Freon 114	0.031	Not Detected	0.22	Not Detected
Chloromethane	0.078	0.54	0.16	1.1
Vinyl Chloride	0.016	Not Detected	0.040	Not Detected
Chloroethane	0.078	Not Detected	0.20	Not Detected
1,1-Dichloroethene	0.016	Not Detected	0.062	Not Detected
trans-1,2-Dichloroethene	0.16	Not Detected	0.62	Not Detected
Methyl tert-butyl ether	0.16	Not Detected	0.56	Not Detected
1,1-Dichloroethane	0.031	Not Detected	0.13	Not Detected
cis-1,2-Dichloroethene	0.031	Not Detected	0.12	Not Detected
Chloroform	0.031	0.044	0.15	0.22
1,1,1-Trichloroethane	0.031	Not Detected	0.17	Not Detected
Carbon Tetrachloride	0.031	0.057	0.20	0.36
Benzene	0.078	0.24	0.25	0.77
1,2-Dichloroethane	0.031	Not Detected	0.13	Not Detected
Trichloroethene	0.031	Not Detected	0.17	Not Detected
Toluene	0.031	0.55	0.12	2.1
1,1,2-Trichloroethane	0.031	Not Detected	0.17	Not Detected
Tetrachloroethene	0.031	Not Detected	0.21	Not Detected
1,2-Dibromoethane (EDB)	0.031	Not Detected	0.24	Not Detected
Ethyl Benzene	0.031	0.097	0.14	0.42
m,p-Xylene	0.062	0.33	0.27	1.4
o-Xylene	0.031	0.12	0.14	0.51
1,1,2,2-Tetrachloroethane	0.031	Not Detected	0.21	Not Detected
1,4-Dichlorobenzene	0.031	0.031 J	0.19	0.18 J

J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	92	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1510465-09A

**MODIFIED EPA METHOD TO-15 GC/MS SIM**

<b>File Name:</b>	v102706sim	<b>Date of Collection:</b> NA
<b>Dil. Factor:</b>	1.00	<b>Date of Analysis:</b> 10/27/15 09:19 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	0.020	Not Detected	0.099	Not Detected
Freon 114	0.020	Not Detected	0.14	Not Detected
Chloromethane	0.050	Not Detected	0.10	Not Detected
Vinyl Chloride	0.010	Not Detected	0.026	Not Detected
Chloroethane	0.050	Not Detected	0.13	Not Detected
1,1-Dichloroethene	0.010	Not Detected	0.040	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Methyl tert-butyl ether	0.10	Not Detected	0.36	Not Detected
1,1-Dichloroethane	0.020	Not Detected	0.081	Not Detected
cis-1,2-Dichloroethene	0.020	Not Detected	0.079	Not Detected
Chloroform	0.020	Not Detected	0.098	Not Detected
1,1,1-Trichloroethane	0.020	Not Detected	0.11	Not Detected
Carbon Tetrachloride	0.020	Not Detected	0.12	Not Detected
Benzene	0.050	Not Detected	0.16	Not Detected
1,2-Dichloroethane	0.020	Not Detected	0.081	Not Detected
Trichloroethene	0.020	Not Detected	0.11	Not Detected
Toluene	0.020	Not Detected	0.075	Not Detected
1,1,2-Trichloroethane	0.020	Not Detected	0.11	Not Detected
Tetrachloroethene	0.020	Not Detected	0.14	Not Detected
1,2-Dibromoethane (EDB)	0.020	Not Detected	0.15	Not Detected
Ethyl Benzene	0.020	Not Detected	0.087	Not Detected
m,p-Xylene	0.040	Not Detected	0.17	Not Detected
o-Xylene	0.020	Not Detected	0.087	Not Detected
1,1,2,2-Tetrachloroethane	0.020	Not Detected	0.14	Not Detected
1,4-Dichlorobenzene	0.020	Not Detected	0.12	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	93	70-130





Air Toxics

Client Sample ID: CCV

Lab ID#: 1510465-10A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	v102702sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/27/15 06:07 AM

Compound	%Recovery
Freon 12	102
Freon 114	99
Chloromethane	94
Vinyl Chloride	102
Chloroethane	120
1,1-Dichloroethene	92
trans-1,2-Dichloroethene	99
Methyl tert-butyl ether	103
1,1-Dichloroethane	105
cis-1,2-Dichloroethene	97
Chloroform	101
1,1,1-Trichloroethane	96
Carbon Tetrachloride	110
Benzene	105
1,2-Dichloroethane	102
Trichloroethene	99
Toluene	104
1,1,2-Trichloroethane	112
Tetrachloroethene	99
1,2-Dibromoethane (EDB)	110
Ethyl Benzene	107
m,p-Xylene	110
o-Xylene	108
1,1,2,2-Tetrachloroethane	109
1,4-Dichlorobenzene	88

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	94	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	96	70-130



Air Toxics

Client Sample ID: LCS

Lab ID#: 1510465-11A

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	v102703sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/27/15 06:47 AM

Compound	%Recovery	Method Limits
Freon 12	110	70-130
Freon 114	110	70-130
Chloromethane	100	70-130
Vinyl Chloride	111	70-130
Chloroethane	128	70-130
1,1-Dichloroethene	97	70-130
trans-1,2-Dichloroethene	89	70-130
Methyl tert-butyl ether	108	70-130
1,1-Dichloroethane	111	70-130
cis-1,2-Dichloroethene	113	70-130
Chloroform	106	70-130
1,1,1-Trichloroethane	101	70-130
Carbon Tetrachloride	100	60-140
Benzene	110	70-130
1,2-Dichloroethane	108	70-130
Trichloroethene	104	70-130
Toluene	109	70-130
1,1,2-Trichloroethane	119	70-130
Tetrachloroethene	105	70-130
1,2-Dibromoethane (EDB)	118	70-130
Ethyl Benzene	112	70-130
m,p-Xylene	109	70-130
o-Xylene	111	70-130
1,1,2,2-Tetrachloroethane	118	70-130
1,4-Dichlorobenzene	91	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	94	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	92	70-130



Air Toxics

Client Sample ID: LCSD

Lab ID#: 1510465-11AA

MODIFIED EPA METHOD TO-15 GC/MS SIM

File Name:	v102704sim	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/27/15 07:24 AM

Compound	%Recovery	Method Limits
Freon 12	112	70-130
Freon 114	109	70-130
Chloromethane	102	70-130
Vinyl Chloride	114	70-130
Chloroethane	130	70-130
1,1-Dichloroethene	97	70-130
trans-1,2-Dichloroethene	90	70-130
Methyl tert-butyl ether	108	70-130
1,1-Dichloroethane	112	70-130
cis-1,2-Dichloroethene	113	70-130
Chloroform	106	70-130
1,1,1-Trichloroethane	101	70-130
Carbon Tetrachloride	100	60-140
Benzene	110	70-130
1,2-Dichloroethane	107	70-130
Trichloroethene	103	70-130
Toluene	110	70-130
1,1,2-Trichloroethane	118	70-130
Tetrachloroethene	105	70-130
1,2-Dibromoethane (EDB)	117	70-130
Ethyl Benzene	113	70-130
m,p-Xylene	113	70-130
o-Xylene	115	70-130
1,1,2,2-Tetrachloroethane	120	70-130
1,4-Dichlorobenzene	96	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	94	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	92	70-130





# McC Campbell Analytical, Inc.

"When Quality Counts"

## Analytical Report

**WorkOrder:** 1508164 **Amended:** 10/28/2015

**Report Created for:** P & D Environmental

55 Santa Clara, Ste.240  
Oakland, CA 94610

**Project Contact:** Paul King

**Project P.O.:**

**Project Name:** #0461; 6239 College Ave. Oakland, CA

**Project Received:** 08/06/2015

Analytical Report reviewed & approved for release on 08/07/2015 by:

Angela Rydelius,  
Laboratory Manager

*The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.*





## Glossary of Terms & Qualifier Definitions

**Client:** P & D Environmental  
**Project:** #0461; 6239 College Ave. Oakland, CA  
**WorkOrder:** 1508164

### Glossary Abbreviation

95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test
DUP	Duplicate
EDL	Estimated Detection Limit
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

### Analytical Qualifiers

a13	reporting limit raised due to low density sample
c9	Internal standard is out of acceptance criteria due to matrix interference therefore values are estimated



## Analytical Report

**Client:** P & D Environmental  
**Date Received:** 8/6/15 15:29  
**Date Prepared:** 8/6/15  
**Project:** #0461; 6239 College Ave. Oakland, CA

**WorkOrder:** 1508164  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
1st Floor Exhaust Lint	1508164-001A	Solid	08/06/2015 09:15	GC16	108623
Analytes	Result	RL	DF	Date Analyzed	
Acetone	ND	1.0	1	08/07/2015 11:22	
tert-Amyl methyl ether (TAME)	ND	0.050	1	08/07/2015 11:22	
Benzene	ND	0.050	1	08/07/2015 11:22	
Bromobenzene	ND	0.050	1	08/07/2015 11:22	
Bromochloromethane	ND	0.050	1	08/07/2015 11:22	
Bromodichloromethane	ND	0.050	1	08/07/2015 11:22	
Bromoform	ND	0.050	1	08/07/2015 11:22	
Bromomethane	ND	0.050	1	08/07/2015 11:22	
2-Butanone (MEK)	ND	0.20	1	08/07/2015 11:22	
t-Butyl alcohol (TBA)	ND	0.50	1	08/07/2015 11:22	
n-Butyl benzene	ND	0.050	1	08/07/2015 11:22	
sec-Butyl benzene	ND	0.050	1	08/07/2015 11:22	
tert-Butyl benzene	ND	0.050	1	08/07/2015 11:22	
Carbon Disulfide	ND	0.050	1	08/07/2015 11:22	
Carbon Tetrachloride	ND	0.050	1	08/07/2015 11:22	
Chlorobenzene	ND	0.050	1	08/07/2015 11:22	
Chloroethane	ND	0.050	1	08/07/2015 11:22	
Chloroform	ND	0.050	1	08/07/2015 11:22	
Chloromethane	ND	0.050	1	08/07/2015 11:22	
2-Chlorotoluene	ND	0.050	1	08/07/2015 11:22	
4-Chlorotoluene	ND	0.050	1	08/07/2015 11:22	
Dibromochloromethane	ND	0.050	1	08/07/2015 11:22	
1,2-Dibromo-3-chloropropane	ND	0.040	1	08/07/2015 11:22	
1,2-Dibromoethane (EDB)	ND	0.040	1	08/07/2015 11:22	
Dibromomethane	ND	0.050	1	08/07/2015 11:22	
1,2-Dichlorobenzene	ND	0.050	1	08/07/2015 11:22	
1,3-Dichlorobenzene	ND	0.050	1	08/07/2015 11:22	
1,4-Dichlorobenzene	ND	0.050	1	08/07/2015 11:22	
Dichlorodifluoromethane	ND	0.050	1	08/07/2015 11:22	
1,1-Dichloroethane	ND	0.050	1	08/07/2015 11:22	
1,2-Dichloroethane (1,2-DCA)	ND	0.040	1	08/07/2015 11:22	
1,1-Dichloroethene	ND	0.050	1	08/07/2015 11:22	
cis-1,2-Dichloroethene	ND	0.050	1	08/07/2015 11:22	
trans-1,2-Dichloroethene	ND	0.050	1	08/07/2015 11:22	
1,2-Dichloropropane	ND	0.050	1	08/07/2015 11:22	
1,3-Dichloropropane	ND	0.050	1	08/07/2015 11:22	
2,2-Dichloropropane	ND	0.050	1	08/07/2015 11:22	

(Cont.)



## Analytical Report

**Client:** P & D Environmental  
**Date Received:** 8/6/15 15:29  
**Date Prepared:** 8/6/15  
**Project:** #0461; 6239 College Ave. Oakland, CA

**WorkOrder:** 1508164  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
1st Floor Exhaust Lint	1508164-001A	Solid	08/06/2015 09:15	GC16	108623

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.050	1	08/07/2015 11:22
cis-1,3-Dichloropropene	ND	0.050	1	08/07/2015 11:22
trans-1,3-Dichloropropene	ND	0.050	1	08/07/2015 11:22
Diisopropyl ether (DIPE)	ND	0.050	1	08/07/2015 11:22
Ethylbenzene	ND	0.050	1	08/07/2015 11:22
Ethyl tert-butyl ether (ETBE)	ND	0.050	1	08/07/2015 11:22
Freon 113	ND	0.050	1	08/07/2015 11:22
Hexachlorobutadiene	ND	0.050	1	08/07/2015 11:22
Hexachloroethane	ND	0.050	1	08/07/2015 11:22
2-Hexanone	ND	0.050	1	08/07/2015 11:22
Isopropylbenzene	ND	0.050	1	08/07/2015 11:22
4-Isopropyl toluene	ND	0.050	1	08/07/2015 11:22
Methyl-t-butyl ether (MTBE)	ND	0.050	1	08/07/2015 11:22
Methylene chloride	ND	0.050	1	08/07/2015 11:22
4-Methyl-2-pentanone (MIBK)	ND	0.050	1	08/07/2015 11:22
Naphthalene	ND	0.050	1	08/07/2015 11:22
n-Propyl benzene	ND	0.050	1	08/07/2015 11:22
Styrene	ND	0.050	1	08/07/2015 11:22
1,1,1,2-Tetrachloroethane	ND	0.050	1	08/07/2015 11:22
1,1,2,2-Tetrachloroethane	ND	0.050	1	08/07/2015 11:22
Tetrachloroethene	ND	0.050	1	08/07/2015 11:22
Toluene	ND	0.050	1	08/07/2015 11:22
1,2,3-Trichlorobenzene	ND	0.050	1	08/07/2015 11:22
1,2,4-Trichlorobenzene	ND	0.050	1	08/07/2015 11:22
1,1,1-Trichloroethane	ND	0.050	1	08/07/2015 11:22
1,1,2-Trichloroethane	ND	0.050	1	08/07/2015 11:22
Trichloroethene	ND	0.050	1	08/07/2015 11:22
Trichlorofluoromethane	ND	0.050	1	08/07/2015 11:22
1,2,3-Trichloropropane	ND	0.050	1	08/07/2015 11:22
1,2,4-Trimethylbenzene	ND	0.050	1	08/07/2015 11:22
1,3,5-Trimethylbenzene	ND	0.050	1	08/07/2015 11:22
Vinyl Chloride	ND	0.050	1	08/07/2015 11:22
Xylenes, Total	ND	0.050	1	08/07/2015 11:22

(Cont.)





## Analytical Report

**Client:** P & D Environmental  
**Date Received:** 8/6/15 15:29  
**Date Prepared:** 8/6/15  
**Project:** #0461; 6239 College Ave. Oakland, CA

**WorkOrder:** 1508164  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/kg

### Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
1st Floor Exhaust Lint	1508164-001A	Solid	08/06/2015 09:15	GC16	108623

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	100	70-130		08/07/2015 11:22
Toluene-d8	110	70-130		08/07/2015 11:22
4-BFB	99	70-130		08/07/2015 11:22
Benzene-d6	97	60-140		08/07/2015 11:22
Ethylbenzene-d10	105	60-140		08/07/2015 11:22
1,2-DCB-d4	74	60-140		08/07/2015 11:22

Analyst(s): KF

Analytical Comments: a13,c9



## Quality Control Report

**Client:** P & D Environmental  
**Date Prepared:** 8/6/15  
**Date Analyzed:** 8/6/15  
**Instrument:** GC16  
**Matrix:** Soil  
**Project:** #0461; 6239 College Ave. Oakland, CA

**WorkOrder:** 1508164  
**BatchID:** 108623  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-108623  
 1508141-004AMS/MSD

### QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	0.10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.0405	0.0050	0.050	-	81	53-116
Benzene	ND	0.0508	0.0050	0.050	-	102	63-137
Bromobenzene	ND	-	0.0050	-	-	-	-
Bromochloromethane	ND	-	0.0050	-	-	-	-
Bromodichloromethane	ND	-	0.0050	-	-	-	-
Bromoform	ND	-	0.0050	-	-	-	-
Bromomethane	ND	-	0.0050	-	-	-	-
2-Butanone (MEK)	ND	-	0.020	-	-	-	-
t-Butyl alcohol (TBA)	ND	0.156	0.050	0.20	-	78	41-135
n-Butyl benzene	ND	-	0.0050	-	-	-	-
sec-Butyl benzene	ND	-	0.0050	-	-	-	-
tert-Butyl benzene	ND	-	0.0050	-	-	-	-
Carbon Disulfide	ND	-	0.0050	-	-	-	-
Carbon Tetrachloride	ND	-	0.0050	-	-	-	-
Chlorobenzene	ND	0.0510	0.0050	0.050	-	102	77-121
Chloroethane	ND	-	0.0050	-	-	-	-
Chloroform	ND	-	0.0050	-	-	-	-
Chloromethane	ND	-	0.0050	-	-	-	-
2-Chlorotoluene	ND	-	0.0050	-	-	-	-
4-Chlorotoluene	ND	-	0.0050	-	-	-	-
Dibromochloromethane	ND	-	0.0050	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.0040	-	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0487	0.0040	0.050	-	97	67-119
Dibromomethane	ND	-	0.0050	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.0050	-	-	-	-
Dichlorodifluoromethane	ND	-	0.0050	-	-	-	-
1,1-Dichloroethane	ND	-	0.0050	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0504	0.0040	0.050	-	101	58-135
1,1-Dichloroethene	ND	0.0488	0.0050	0.050	-	98	42-145
cis-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
1,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,3-Dichloropropane	ND	-	0.0050	-	-	-	-
2,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,1-Dichloropropene	ND	-	0.0050	-	-	-	-

(Cont.)



## Quality Control Report

**Client:** P & D Environmental  
**Date Prepared:** 8/6/15  
**Date Analyzed:** 8/6/15  
**Instrument:** GC16  
**Matrix:** Soil  
**Project:** #0461; 6239 College Ave. Oakland, CA

**WorkOrder:** 1508164  
**BatchID:** 108623  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-108623  
 1508141-004AMS/MSD

### QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
cis-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
Diisopropyl ether (DIPE)	ND	0.0459	0.0050	0.050	-	92	52-129
Ethylbenzene	ND	-	0.0050	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0441	0.0050	0.050	-	88	53-125
Freon 113	ND	-	0.0050	-	-	-	-
Hexachlorobutadiene	ND	-	0.0050	-	-	-	-
Hexachloroethane	ND	-	0.0050	-	-	-	-
2-Hexanone	ND	-	0.0050	-	-	-	-
Isopropylbenzene	ND	-	0.0050	-	-	-	-
4-Isopropyl toluene	ND	-	0.0050	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.0440	0.0050	0.050	-	88	58-122
Methylene chloride	ND	-	0.0050	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.0050	-	-	-	-
Naphthalene	ND	-	0.0050	-	-	-	-
n-Propyl benzene	ND	-	0.0050	-	-	-	-
Styrene	ND	-	0.0050	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
Tetrachloroethene	ND	-	0.0050	-	-	-	-
Toluene	ND	0.0549	0.0050	0.050	-	110	76-130
1,2,3-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.0050	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.0050	-	-	-	-
Trichloroethene	ND	0.0501	0.0050	0.050	-	100	72-132
Trichlorofluoromethane	ND	-	0.0050	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.0050	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.0050	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.0050	-	-	-	-
Vinyl Chloride	ND	-	0.0050	-	-	-	-
Xylenes, Total	ND	-	0.0050	-	-	-	-

(Cont.)



## Quality Control Report

**Client:** P & D Environmental  
**Date Prepared:** 8/6/15  
**Date Analyzed:** 8/6/15  
**Instrument:** GC16  
**Matrix:** Soil  
**Project:** #0461; 6239 College Ave. Oakland, CA

**WorkOrder:** 1508164  
**BatchID:** 108623  
**Extraction Method:** SW5030B  
**Analytical Method:** SW8260B  
**Unit:** mg/Kg  
**Sample ID:** MB/LCS-108623  
 1508141-004AMS/MSD

### QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
<b>Surrogate Recovery</b>							
Dibromofluoromethane	0.126	0.128		0.12	101	103	70-130
Toluene-d8	0.138	0.135		0.12	110	108	70-130
4-BFB	0.0119	0.0126		0.012	95	101	70-130
Benzene-d6	0.0936	0.102		0.10	94	101	60-140
Ethylbenzene-d10	0.104	0.114		0.10	104	114	60-140
1,2-DCB-d4	0.0755	0.0901		0.10	76	90	60-140

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	0.0398	0.0399	0.050	ND	80	80	70-130	0	20
Benzene	0.0500	0.0494	0.050	ND	100	99	70-130	1.30	20
t-Butyl alcohol (TBA)	0.158	0.160	0.20	ND	79	80	70-130	1.21	20
Chlorobenzene	0.0496	0.0488	0.050	ND	99	98	70-130	1.59	20
1,2-Dibromoethane (EDB)	0.0469	0.0463	0.050	ND	94	93	70-130	1.32	20
1,2-Dichloroethane (1,2-DCA)	0.0489	0.0485	0.050	ND	98	97	70-130	0.720	20
1,1-Dichloroethene	0.0482	0.0477	0.050	ND	96	95	70-130	0.971	20
Diisopropyl ether (DIPE)	0.0455	0.0453	0.050	ND	91	91	70-130	0	20
Ethyl tert-butyl ether (ETBE)	0.0438	0.0435	0.050	ND	88	87	70-130	0.740	20
Methyl-t-butyl ether (MTBE)	0.0433	0.0431	0.050	ND	87	86	70-130	0.561	20
Toluene	0.0535	0.0528	0.050	ND	107	106	70-130	1.24	20
Trichloroethene	0.0497	0.0489	0.050	ND	99	98	70-130	1.65	20

<b>Surrogate Recovery</b>									
Dibromofluoromethane	0.130	0.130	0.12		104	104	70-130	0	20
Toluene-d8	0.134	0.134	0.12		108	107	70-130	0.680	20
4-BFB	0.0122	0.0124	0.012		97	99	70-130	1.51	20
Benzene-d6	0.0969	0.0957	0.10		97	96	60-140	1.24	20
Ethylbenzene-d10	0.109	0.107	0.10		109	107	60-140	1.67	20
1,2-DCB-d4	0.0848	0.0831	0.10		85	83	60-140	2.02	20

1534 Willow Pass Rd  
Pittsburg, CA 94565-1701  
(925) 252-9262

# CHAIN-OF-CUSTODY RECORD

**WorkOrder: 1508164**

**ClientCode: PDEO**

WaterTrax   
  WriteOn   
  EDF   
  Excel   
  EQulS   
  Email   
  HardCopy   
  ThirdParty   
  J-flag

**Report to:**  
Paul King  
P & D Environmental  
55 Santa Clara, Ste.240  
Oakland, CA 94610  
(510) 658-6916    FAX: 510-834-0152

**Email:** lab@pdenviro.com; Paul.King@pdenviro.c  
cc/3rd Party:  
**PO:**  
**ProjectNo:** #0461; 6239 College Ave. Oakland, CA

**Bill to:**  
Accounts Payable  
P & D Environmental  
55 Santa Clara, Ste.240  
Oakland, CA 94610

**Requested TAT: 1 day;**  
  
**Date Received: 08/06/2015**  
**Date Printed: 10/28/2015**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)												
					1	2	3	4	5	6	7	8	9	10	11	12	
1508164-001	1st Floor Exhaust Lint	Solid	8/6/2015 9:15	<input type="checkbox"/>	A												

**Test Legend:**

1	8260B_S	2		3		4	
5		6		7		8	
9		10		11		12	

**Prepared by: Briana Cutino**

**Comments:**

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days). Hazardous samples will be returned to client or disposed of at client expense.



## WORK ORDER SUMMARY

**Client Name:** P & D ENVIRONMENTAL

**QC Level:** LEVEL 2

**Work Order:** 1508164

**Project:** #0461; 6239 College Ave. Oakland, CA

**Client Contact:** Paul King

**Date Received:** 8/6/2015

**Comments:**

**Contact's Email:** lab@pdenviro.com; Paul.King@pdenviro.com;  
pdking0000@aol.com

WaterTrax     WriteOn     EDF     Excel     Fax     Email     HardCopy     ThirdParty     J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1508164-001A	1st Floor Exhaust Lint	Solid	SW8260B (VOCs)	7	VOA	<input type="checkbox"/>	8/6/2015 9:15	1 day		<input type="checkbox"/>	

**NOTES:** - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.





### Sample Receipt Checklist

Client Name: **P & D Environmental** Date and Time Received: **8/6/2015 3:29:19 PM**  
 Project Name: **#0461; 6239 College Ave. Oakland, CA** LogIn Reviewed by: **Briana Cutino**  
 WorkOrder No: **1508164** Matrix: Solid Carrier: Bernie Cummins (MAI Courier)

**Chain of Custody (COC) Information**

Chain of custody present? Yes  No   
 Chain of custody signed when relinquished and received? Yes  No   
 Chain of custody agrees with sample labels? Yes  No   
 Sample IDs noted by Client on COC? Yes  No   
 Date and Time of collection noted by Client on COC? Yes  No   
 Sampler's name noted on COC? Yes  No

**Sample Receipt Information**

Custody seals intact on shipping container/cooler? Yes  No  NA   
 Shipping container/cooler in good condition? Yes  No   
 Samples in proper containers/bottles? Yes  No   
 Sample containers intact? Yes  No   
 Sufficient sample volume for indicated test? Yes  No

**Sample Preservation and Hold Time (HT) Information**

All samples received within holding time? Yes  No   
 Sample/Temp Blank temperature Temp: 3.3°C NA   
 Water - VOA vials have zero headspace / no bubbles? Yes  No  NA   
 Sample labels checked for correct preservation? Yes  No   
 pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)? Yes  No  NA   
 Samples Received on Ice? Yes  No

(Ice Type: BLUE ICE )

**UCMR3 Samples:**

Total Chlorine tested and acceptable upon receipt for EPA 522? Yes  No  NA   
 Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539? Yes  No  NA

\* NOTE: If the "No" box is checked, see comments below.

-----  
 Comments: