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*Via Email*

January 9, 2014

Ms. Dilan Roe  
Alameda County Environmental Health  
1131 Harbor Bay Parkway  
Alameda, California 94502

**Re: Interim Removal Action Report for Park Avenue Cleaners at 7100-7120  
Dublin Boulevard, Dublin, Alameda County, California  
ACEH Case No. RO3113**

Dear Ms. Roe:

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.

Sincerely,

SHELTER BAY RETAIL GROUP

As authorized agent for Ready Family Partnership

A handwritten signature in black ink, appearing to read "Sharlene A. Hassler".

Sharlene A. Hassler FMA, RPA  
Property Manager

**INTERIM REMOVAL  
ACTION REPORT**

**Former Park Avenue Cleaners at  
Dublin Crossroad Shopping Center  
7100-7120 Dublin Boulevard  
Dublin, California**

**January 13, 2014**

*Prepared for:*

Ready Family Partnership

*Prepared by:*

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## 1.0 INTRODUCTION

On behalf of Ready Family Partnership, Iris Environmental has prepared this *Interim Removal Action Report* (IRAR) for the former Park Avenue Cleaners facility located at 7104 Dublin Boulevard in Dublin, California (the Site, Figure 1). The Site is currently enrolled in a voluntary cleanup program with Alameda County Environmental (ACEH) oversight. This IRAR is being submitted pursuant to our *Revised Interim Removal Action Plan* (IRAP), dated September 19, 2013 (Iris Environmental 2013b), and discussion outcome with our meeting with ACEH on August 29, 2013 to discuss the analytical data to date.

The IRAP was focused on the removal of volatile organic compounds (VOCs) in vadose zone (unsaturated) soil potentially associated with the former dry cleaning machine that used tetrachloroethene (PCE). The location of the former PCE dry cleaning machine is presented in Figure 2. The proposed interim remedial action was to remove identified sources of soils containing elevated VOCs in vadose soils that pose a vapor intrusion concern beneath the building in the vicinity of the former dry cleaning machine within the 7104 tenant space that used PCE.

ACEH concurred with the recommendation to perform interim remedial action in an effort to remove source soils and reduce the potential for vapor intrusion to building occupants. A copy of the approval letter from ACEH, dated September 27, 2013 is presented in Appendix A.

### 1.1 Background Information

The Site is part of a commercial retail shopping center that is developed with three one-story multi-tenant commercial buildings, associated parking and landscaped areas. The entire shopping complex is referred to as the “Dublin Crossroads” (7100-7120 Dublin Boulevard) and was constructed in 1976. Prior to that time, the property was undeveloped.

Park Avenue Cleaners operated a laundry and dry cleaning facility at 7102B Dublin Boulevard from 1990 to 2004. The approximate location of the former dry cleaner is presented in Figure 2. The former dry cleaner unit at 7102B Dublin Boulevard utilized PCE, a VOC, in the former dry cleaning machine. In 2004, Park Avenue Cleaners relocated to the adjacent retail space at 7104 Dublin Boulevard.

Two dry cleaning machines were located within the central portion of suite 7104; one of which (the southernmost) is the former PCE dry cleaning machine from the adjacent unit at 7102B Dublin Boulevard relocated to the 7104 tenant space. The northernmost former dry cleaning machine was a petroleum-based system purchased circa 2005/2006. On July 22, 2013, Park Avenue Cleaners vacated the Site and removed the former dry cleaning units and associated equipment that was used at the 7104 tenant space.

In October 2012, a limited subsurface investigation for the Dublin Crossroads shopping center was performed by Basics Environmental. The initial investigation (Basics Environmental 2012) included advancing ten (10) borings (B1 to B5, SG1 to SG5) to collect soil, grab-groundwater and soil vapor samples. The approximate locations are presented in Figure 2. Concentrations of PCE were detected in the two of the three analyzed soil samples at concentrations of 0.011 milligrams per kilogram (mg/kg) (B2 @4.5 ft) and 0.12 mg/kg (B3 @ 4.5 ft). The highest concentration of PCE in the analyzed soil vapor samples was detected to the west of the former

dry cleaning machine (SG3) at a concentration of 54,000 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) above the Environmental Screening Level (ESL) promulgated by the San Francisco Bay Regional Water Quality Control Board (SFRWQCB) for commercial land use.

In June 2013, the Site was enrolled into a voluntary cleanup program under local oversight by ACEH. Case No. RO3113 was assigned for the Site. In July and August 2013, Iris Environmental advanced 29 borings at the locations presented in Figure 2 to collect soil, grab-groundwater, and soil vapor and sub-slab soil vapor samples beneath the Site. Maximum concentrations of PCE in soil, groundwater, soil vapor and sub-slab soil vapor were detected in the vicinity of the former dry cleaning machine at the 7104 tenant space. Details are presented in the Iris Environmental's *Subsurface Investigation Report*, dated September 6, 2013 (Iris Environmental 2013a), which concluded the following:

- A suspected release of PCE to the subsurface has occurred in the vicinity of the former PCE dry cleaning machine located at the 7104 tenant space. The subsurface impacts of the release to subsurface soil appear to be limited in both lateral and vertical extent.
- Groundwater impacts appear to be limited in lateral and vertical extent. Deeper groundwater does not appear to be impacted with VOCs and the extent of shallow groundwater VOC impacts appears defined to the Site property (as defined by ESL drinking water criteria). Maximum concentrations of PCE, trichloroethene (TCE) and cis-1,2-dichloroethene (DCE) detected in groundwater were 31  $\mu\text{g}/\text{L}$ , 0.6  $\mu\text{g}/\text{L}$  and 1.4  $\mu\text{g}/\text{L}$ , respectively, indicating that a release of PCE has not significantly impacted shallow or deeper groundwater and that potential or incomplete natural attenuation of PCE in groundwater is likely occurring.
- Concentrations of PCE were detected in the analyzed soil vapor samples collected at depths of 5 feet below the ground surface (bgs) in excess of commercial ESLs in the vicinity of the former dry cleaning machine at the 7104 tenant space. In addition, concentrations of PCE were detected in the sub-slab samples that indicate a vapor intrusion risk in the vicinity of the former dry cleaning machine near SS-02.
- Elevated concentrations of PCE were also detected in the outside soil vapor sample locations adjacent to the sanitary sewer line in the alleyway collected from approximate depths of 5 feet bgs. Although there are no indications that a PCE release has occurred adjacent to the sanitary sewer line based on the analyzed soil samples and groundwater data in the vicinity, the elevated soil gas concentrations are likely associated with the volatilization of the underlying groundwater plume in the vicinity and possibly lateral migration of soil vapors along the backfill material of the sanitary sewer line.
- The elevated concentrations of VOCs detected in the sub-slab and soil vapor in the vicinity of the former dry cleaning machine in the 7104 tenant space are likely associated with the PCE-impacted soils detected in the shallow soils. Removal of these soils will likely reduce the potential for vapor intrusion beneath the Site and remove the residual source of PCE beneath the Site in vadose zone soil.

## 1.2 Interim Remedial Action Plan

The IRAP (Iris Environmental 2013b, 2013c) was developed, based on the above analytical data and recommended removal of the PCE-impacted soils in the immediate vicinity of the dry cleaning unit as an interim remedial action. The vacant tenant spaces provided an excellent opportunity to remove presumed source soils beneath the Site.

The objectives of the IRAP were as follows:

- Establish appropriate remedial action objectives (RAOs);
- Remove source vadose zone soils in the vicinity of the former dry cleaning machine to the extent possible;
- Perform confirmation soil sampling to evaluate whether source soils have been removed to the established RAO;
- Perform sub-slab soil vapor sampling before, during and after excavation activities have been completed to evaluate whether excavation of vadose zone soils have effectively reduced or eliminated the potential vapor intrusion concern to below the established RAO.

## 1.3 Interim Remedial Action Objectives (RAOs)

This interim action was performance-based and focused on removal of VOC-impacted vadose zone soil. The primary chemical of potential concern (COPC) pertaining to this interim remedial action was PCE in soil, soil vapor and sub-slab soil vapor. Groundwater RAOs were not proposed. The RAOs for this interim remedial action were as follows:

### 1.3.1 Soil

The interim RAO for soil is the residential use, direct contact ESL established at 0.55 mg/kg for PCE (Cal/EPA 2013). The selected RAO is slightly more conservative than the groundwater protection ESL established at 0.7 mg/kg for PCE.

### 1.3.2 Sub-Slab Soil Vapor

To evaluate the potential for vapor intrusion beneath the Site, the theoretical calculated commercial land use ESL of  $42 \mu\text{g}/\text{m}^3$  was selected for sub-slab vapor samples assuming the default attenuation factor of 0.05, as recommended by DTSC guidance. The RAO was calculated by multiplying the commercial indoor air ESL for PCE established at  $2.1 \mu\text{g}/\text{m}^3$  by an attenuation factor of 20 as recommended by DTSC.

### 1.3.3 Soil Vapor

To evaluate whether interim soil excavation mitigated the potential for vapor intrusion beneath the Site, the commercial land use ESL of  $2,100 \mu\text{g}/\text{m}^3$  for PCE was selected.

## 2.0 SCOPE OF WORK

Iris Environmental completed or oversaw the following scope of work:

- Conducted pre-field activities that includes obtaining an excavation permit from the City of Dublin, provided notification to applicable tenants, property owners and the Bay Area

Air Quality Management District (BAAQMD) of the upcoming excavation activities and clearing the excavation limit locations of potential underground utilities;

- Installed two (2) additional long-term sub-slab vapor probes (SS-04 and SS-05) within the base rock material just beneath the concrete slab to evaluate sub-slab vapor conditions before, during and after excavation activities are completed;
- Excavated VOC-impacted soils from an approximate 20-foot by 40-foot surface area and to a maximum depth of 10 feet;
- Collected confirmation soil samples from the floor and sidewalls of the proposed excavation to document that vadose zone source soils were removed to the RAO;
- Exposed the sanitary sewer line towards the rear of the building to install controlled density fill (CDF) material (2-sack clean sand concrete mix) in an effort to prevent soil vapor from migrating back into the building after excavation has been completed;
- Installed horizontal piping beneath the concrete slab (after excavation has been completed) that could be used as a potential vapor mitigation system, if needed;
- Removed and transported soil/wastes to appropriate disposal facilities;
- Collected additional sub-slab soil vapor and soil vapor samples for chemical analysis after excavation to evaluate the effectiveness of the proposed interim remedial action and the potential for vapor intrusion to future building occupants; and
- Backfilled the completed excavation and restored the concrete slab.

### **3.0 PREFIELD ACTIVITIES**

Site access agreements were secured with the property owners prior to fieldwork.

Iris Environmental updated its' Site-Specific Health and Safety Plan (HASP) in accordance with the requirements of the State of California General Industry Safety Order (GISO) 5192 and Title 29 of the Code of Federal Regulations, Section 1910.120 (29 CFR 1910.120). A copy of the HASP was kept onsite during field activities. The HASP detailed the work to be performed, safety precautions, emergency response procedures, nearest hospital information, and onsite personnel responsible for managing emergency situations. Subcontractors were responsible for the health and safety of their own workers and developed their own HASP as described above.

Prior to conducting work, Iris Environmental submitted required excavation plans and obtained an excavation permit from the City of Dublin (City) for approval. Work did not commence until the permit was received from the City. A copy of the approved excavation permit is presented in Appendix A.

The proposed excavation limits were marked in white paint prior to excavation. Underground Service Alert (USA) was contacted at least 48 hours prior to excavation, as required by law. USA Ticket No. 394143 was issued on October 7, 2013.

In advance of excavation work, Iris Environmental distributed a Fact Sheet summarizing the interim action presented in the IRAP by hand to adjacent tenants and owners of the Site. Notifications were completed by October 3, 2013.

The BAAQMD was notified of excavation activities at least five days prior to implementation in accordance with Regulation 8, Rule 40. The BAAQMD was notified on October 1, 2013.

## **4.0 EXCAVATION ACTIVITIES AND RESULTS**

The following sections outline the excavation activities that were completed in accordance with the IRAP. Excavation activities commenced on October 14, 2013 and were completed on November 5, 2013; installation of the potential sub-slab depressurization system and concrete slab were completed on November 14, 2013. During excavation activities, the control measures presented in the IRAP were followed.

### **4.1 Overview**

Interim remedial action included the excavation of shallow VOC-impacted soil to reduce the threat to human health and the environment beneath the Site with the goal of providing a permanent solution that reduces the toxicity, mobility and volume of contaminated media. The interim remedial action targeted areas beneath the building structure where PCE concentrations in vadose soil exceed approved RAOs.

### **4.2 Excavation Limits**

The subsurface impacts of the suspected release to subsurface soil are limited in both lateral and vertical extent. The estimated area of PCE-impacted soils above or near the RAO measured approximately 20- by 40-feet extending to a depth of about 10 feet. The completed excavation limits are presented in Figure 3. Excavation was constrained in some areas beneath the shear wall by footings and utilities.

### **4.3 Excavation Methodologies**

Access to the 7102 tenant space was provided through existing roll-up doors. Access to the 7104 tenant space was provided through the rear of the building.

The concrete floor slab overlying the proposed excavation was saw-cut and removed; construction debris was transported off-site for disposal or recycling. Excavation of PCE-impacted soil was performed by Innovative Construction Solutions (ICS), a California-licensed hazardous waste contractor based in Oakland, California. A backhoe attached to a mini-excavator was used to excavate accessible soil to an approximate depth of 10 feet bgs within the excavation limits.

The excavation activities were completed in a four-fold, phased manner: (1) slot cutting along the shear wall that separates the 7102 and 7104 tenant spaces; (2) general excavation on the distal ends of the excavation limits at a safe distance from the shear wall; (3) shallow trenching to native soil (within the sub-slab engineered fill) to install horizontal piping (see Section 4.6); and, (4) exposure of the sanitary sewer line to install CDF surrounding the sewer pipe in an effort to prevent potential soil vapor migration along the annulus of the sanitary sewer line back into the building.

#### *4.3.1 Slot Cutting Excavation Area*

The integrity of the shear wall separating the 7102 and 7104 tenant spaces was maintained in general accordance with the approved excavation plans. Prior to excavation, each side of the shear wall was braced using 2-inch by 12-inch beams that were secured with carriage bolts at least four feet beyond the edge of the excavation limits. Once secured, PCE-impacted soils on each side of the shear wall and below the wall (where practical) was removed in a series of slot trenches that varied in width between 5 and 8 feet in length. The footing and slab directly beneath the shear wall was left in place. The slot trenches were sequentially excavated to approximately 10 feet bgs.

Confirmation soil samples were not collected from within the limits of the slot cut excavation area based on proximity to existing analytical data and in an attempt to keep the excavation open for a minimal amount of time. Upon completion, the slot trenches were backfilled (Section 4.5.1) with CDF to approximately one foot below grade. Once completed, this process was completed for the other side of the wall.

#### *4.3.2 General Excavation Area*

Following slot-cutting on each side of the shear wall, the remainder of the VOC-containing soils within the excavation limits was removed using the backhoe of a mini-excavator. Confirmation soil samples were collected from the excavation sidewalls and floor at the approximate locations presented in Figure 3.

#### *4.3.3 Concrete Slab Trenching to Install Horizontal Piping*

As later discussed in Section 4.6, horizontal piping constructed of Schedule 40 PVC was installed within the sub-slab material for use as a potential vapor mitigation system in the event that sub-slab vapor conditions in the vicinity of the excavation limits do not meet the RAO. To complete this effort, approximate 2-foot wide shallow trenches extending to the top of native soil were completed using a backhoe. The locations of the trenches are presented in Figure 4.

#### *4.3.4 Sanitary Sewer Line Exposure to Install CDF*

In an effort to prevent future potential migration of VOC vapors from entering the newly completed excavation, the sanitary sewer at the rear of the building within the 7104 tenant space was exposed at the T-junction (just north of the bathrooms). CDF was installed within the annulus material and around the existing sewer line. The location of the sewer line that was exposed for installing CDF is presented in Figure 4.

### **4.4 Confirmation Soil Sampling Methodology**

Soil samples from the excavation sidewalls within the main excavation were collected at a spacing of one sample per 20 lineal feet. The sidewall samples were collected at approximately 5 feet bgs, which was halfway between the surface and base of the excavation. Two soil samples were collected from the base of the excavation at a minimum of every 400 square feet. Two 10-foot samples (IE-19 and IE-29) were previously collected near the center of the proposed excavation limit (Figure 3). The additional floor samples 7102-GenEx-Floor-10.0 and 7104-GenEx-Floor-10.0 were collected from a depth of 10 feet bgs to the east of IE-19 and west of IE-29, respectively.

Soil samples were collected from the excavation floor and sidewalls using a backhoe; personnel did not enter the excavation. Soil samples for analysis of VOCs were collected from undisturbed soil within the backhoe using a multi-functional sampling device (i.e., Terra Core™ Sampler) in accordance with EPA Method 5035. Upon collection, the soil samples were labeled with identifying information, and stored in a pre-chilled ice-chest awaiting transportation to the analytical laboratory. Samples collected for chemical analysis were recorded onto a chain-of-custody document that accompanied the samples to Curtis & Tompkins, Ltd. (C&T), a state-certified laboratory based in Berkeley, California for analysis for VOCs using U.S. EPA Method 8260B. Soil samples were analyzed on a RUSH 24- to 48-hour turn-around time. Upon receipt of the analytical data, Iris Environmental verbally reported the data to ACEH prior to backfilling the general excavation. Over-excavation of soils was not performed confirmation soil samples were below the RAO.

#### **4.5 Excavation Backfilling and Material**

Excavation backfilling did not commence until the analytical data for the confirmation soil samples was evaluated. Because the concentrations of PCE in the confirmation soil samples were below the RAO, the excavation was backfilled as described in the sections below.

##### *4.5.1 Slot Cutting Excavation Area*

Upon completion of excavation within each sequenced slot trenched area, the excavation was filled with CDF from the base of the excavation to approximately one foot below the existing grade. Once the concrete slurry cured and backfilling at other locations described below was completed, horizontal piping was placed within washed pea gravel to approximately five inches below the existing grade. After backfilling (and installation of horizontal piping), excavated areas were resurfaced with concrete to match the surrounding surface to the extent practical.

##### *4.5.2 General Excavation Area*

Backfill material within the general excavation area also included the use of slurry concrete as described above. Once the concrete slurry cured, horizontal piping was placed within engineered gravel base rock material to approximately five inches below grade and excavated areas was resurfaced with concrete as previously described.

##### *4.5.3 Concrete Slab Trenching to Install Horizontal Piping*

Once the horizontal piping was installed, washed pea gravel was placed within the shallow trenches to an approximate depth of five inches below grade to minimize sediment from entering the perforations of the slotted horizontal piping (Section 4.6). Upon completion of laying the pea gravel, a layer of visqueen was placed atop the pea gravel and the trenched excavated area was resurfaced with concrete as previously described.

##### *4.5.4 Sanitary Sewer Line Exposure to Install CDF*

Upon completion of adding CDF to the annulus of the sanitary sewer line near the existing restroom in the 7104 tenant space, CDF was placed within the small excavation. Upon completion, the excavated area was resurfaced with concrete as previously described.

#### **4.6 Installation of Horizontal Piping**

In the unlikely event that vadose zone source removal of PCE-impacted soils does not effectively reduce the potential for vapor intrusion beneath the building, a series of horizontal screened (slotted) and blank (solid) PVC piping was installed beneath the existing slab. The horizontal piping could serve as potential infrastructure for either active or passive vapor mitigation measures if sub-slab vapor conditions in the vicinity of the former dry cleaning machine in the 7104 tenant space pose a vapor intrusion concern after excavation has been completed.

Design plans of the horizontal piping that could be used at a later date for potential vapor mitigation are presented in Figure 4.

The horizontal piping is constructed of Schedule-40 PVC casing with approximate 0.1-inch factory-cut slots that are flush-threaded to Schedule 40 PVC blank casing that runs within a common shallow trench extending to beyond the rear of the building. The blank casings at the rear of the building were capped below grade for connection to a potential vapor mitigation system in the possible future. The terminal ends of the horizontal screened sections of piping were fitted with PVC end caps. CDF was installed at the connections where the blank and screened piping meet and cross the excavation limits in an effort to maximize potential vapor mitigation system effectiveness.

#### **4.7 Waste Disposal and Manifests**

Soil removal activities were completed in accordance with the transportation plan presented in Section 5.0 of the IRAP.

Construction debris (i.e. concrete, metal framing) was removed and transported to Bush Transfer Station in Pleasanton, California for recycling.

Asbestos containing materials (ACM) were transported under manifest to Waste Management's Altamont Landfill (Altamont) in Livermore, California. A copy of the ACM waste manifest is presented in Appendix C.

Approximately 410 tons of soil were excavated and removed from the Site. The excavated soils generated during the excavation were placed into temporary roll-off bins that were sealed and labeled with the appropriate generator information and later transported to Altamont under manifest for proper disposal, as required. The excavated soils were transported by appropriately licensed waste haulers to the designated disposal facility. Transportation activities were performed in compliance with state and federal regulations. Copies of the soil waste manifests and weight tickets or bills of lading are presented in Appendix C.

#### **5.0 SUB-SLAB AND SOIL VAPOR MONITORING**

In accordance with the IRAP, sub-slab vapor conditions in and beyond the excavation area were monitored before, during and after the proposed excavation activities were completed. The data were used to evaluate the potential for vapor intrusion to existing and future occupants in accordance with the IRAP.



## 5.1 Sub-Slab Probe Installation

Interim excavation activities destroyed one of the existing long-term sub-slab probes (SS-02) and one soil vapor well (SV-02). On October 4, 2013, Iris Environmental installed two additional long-term sub-slab soil vapor probes (SS-04 and SS-05) beneath the slab. SS-04 was installed in the 7106 vacant tenant space to the west of the planned excavation. SS-05 was installed to the north of the excavation within the 7104 vacant space to evaluate the potential for vapor intrusion and effectiveness of the interim removal action. The approximate locations of SS-04 and SS-05 are presented in Figure 5.

The sub-slab probes were constructed of 3-inch stainless-steel implant probes installed just below the concrete slab approximately 3-4 inches within the existing sub-slab material. The sub-slab probes are manufactured by AMS and consist of a 1-inch diameter rubber shaft plug that is situated along a stainless-steel tube positioned just above the base of the slab. The 3-inch implant probe was embedded within the sub-base material beneath the tube and connected with Swagelok fittings to provide an adequate seal. A 12-inch long stainless-steel tube was then cut to account for actual slab thickness at each location. Once cut, the top of the tube was connected to a Swagelok connector (SS-400-7-4) that was flush-mounted with a 2-inch diameter recessed core. The annulus of the 1-inch core was filled with neat cement grout to the top of the rubber plug to provide a seal. Once the grout was cured, the top fitting was secured with a threaded “tamper-resistant” top that was sealed flush with the interior surface.

## 5.2 Soil Vapor and Sub-Slab Probe Sampling Methodology

Soil vapor samples were collected from the sub-slab and existing soil vapor probes to evaluate soil vapor concentrations beneath the Site in general accordance with the *Advisory - Active Soil Gas Investigations* (April 2012) prepared by California Environmental Protection Agency, Department of Toxic Substances Control (DTSC), Los Angeles Regional Water Quality Control Board, and San Francisco Regional Water Quality Control Board. The sub-slab probes were sample before, during, and after the excavation activities. Newly installed sub-slab probes SS-04 and SS-05 were allowed to stabilize for a minimum of two hours prior to purging and sample collection. A total of nine soil vapor samples (7 primary samples and 2 duplicate samples) and 10 sub-slab samples (9 primary samples and 1 duplicate sample) were collected. The sub-slab samples were collected on October 8, 2013, October 21, 2013, and November 18, 2013; the soil vapor samples were collected on November 18, 2013.

Each soil gas sample for this project was collected using a helium shroud system. The helium shroud system was used to monitor for the intrusion of ambient air into samples through leaks in either the sample train or the annular space of the boring. Each shroud, built by Curtis & Tompkins, Ltd. (C&T), a State-certified analytical laboratory located in Berkeley, California, was constructed in general accordance with the principles illustrated in Appendix C of the 2012 DTSC Advisory. This shroud enclosed the entire above ground portion of the sampling train. A separate laboratory-cleaned shroud and sampling train were used for each sample.

Prior to purging, the sample tubing was fitted to the sampling train inside the shroud and the shroud was placed over the sampling point and then filled with helium (a tracer gas). The helium concentration in the shroud was monitored continuously using a diffusion cell helium sensor also supplied by C&T. The helium concentration was adjusted as needed to maintain an atmosphere of helium inside the shroud pursuant to the 2012 DTSC Advisory.

For the sub-slab samples, the tamper-resistant cap for the sub-slab probes was removed and a stainless-steel mini ball-valve adaptor was tightened to the Swagelok connector (SS-400-7-4) prior to purging and sampling. A closed hose barb connector (SS-4-AC-1-4) was then attached to the sample tubing that connected to the shroud.

A vacuum test was performed prior to purging each sample to confirm that the purge line was secure and that there were no obvious or significant leaks. As well, the vacuum gauge attached on the sampling line, which was attached to the sample Summa canister was checked periodically in order to assure there was no leak in the sampling line (i.e., if the vacuum gauge dropped below the initial SUMMA canister vacuum then ambient air was leaking into sample SUMMA canister).

For the soil vapor probes, approximately three volumes of the sum of the internal volume of tubing used, the void space of the sand pack around the probe tip, and one-half of the void space of the dry bentonite pack was purged from each location using a 60 milliliter (mL) syringe. Three volumes of the sum of the internal volume of stainless steel and Teflon tubing used were purged from each sub-slab location.

During purging, the purge syringe was connected to an in-line helium detector (also supplied by C&T) to monitor whether there were indications of surface leaks into the subsurface, improper installation of the soil gas inlet probe, or leaks in the purge line. Helium was not detected above five percent (recommended DTSC allowance) during purging indicating that the seals and manifolds were intact and representative samples could be collected.

After purging, soil vapor samples were collected at a flow rate between approximately 100 and 200 mL per minute, using 1.4-liter batch-certified SUMMA canisters provided by C&T. Duplicate soil vapor samples were collected from SV-01 and SS-04 for quality control. The vacuum gauge was recorded prior to the start of sampling and at the end of sampling to confirm sample collection. Upon collection, the soil vapor samples were recorded on a chain-of-custody document that accompanied the samples from the point of collection to the analytical laboratory.

Upon collection, the sub-slab and soil vapor samples were recorded on a chain-of-custody document that accompanied the samples from the point of collection to the analytical laboratory. The collected samples were analyzed for VOCs by EPA Method TO-15.

## **6.0 RESULTS**

The following sections present and discuss the analytical soil and soil vapor data collected as part of this interim action.

### **6.1 Confirmation Soil Sample Analytical Results**

The results of the analytical soil confirmation testing are presented in Table 1 and on Figure 3. Copies of the analytical laboratory reports are presented in Appendix B. In summary, concentrations of VOCs were not detected in the analyzed confirmation soil samples with the exception of acetone and PCE. Acetone was only detected in sample 7102-GenEx-Floor-10.0 at a concentration of 0.14 mg/Kg. Acetone is a common laboratory artifact. PCE was detected at concentrations ranging from less than the laboratory reporting limit of 0.0072 mg/Kg (sample 7102-GenEx-Floor-10.0) to 0.036 mg/kg (sample 7104-GenEx-WS-5.0). Additionally the results for the samples collected from historical borings IE-19 and IE-29 at a depth of 10 feet are

within the boundaries of the excavation. The results from confirmation samples collected during excavation and historical borings IE-19 and IE-29 at 10 feet bgs are below the RAO established at 0.55 mg/kg.

## **6.2 5-Foot Soil Vapor Analytical Results**

A summary of the soil vapor analytical results before and after excavation is presented in Table 2. Soil vapor analytical results were compared to commercial use ESLs. Copies of the laboratory reports and chain-of-custody documentation are included in Appendix B.

Eight soil vapor wells (SV-01 to SV-08) initially monitored the vapor conditions from approximately five feet bgs. SV-02 was destroyed during excavation. The highest concentrations of PCE in the 5-foot vapor wells before excavation activities were detected at SV-02 ( $610,000 \mu\text{g}/\text{m}^3$ ) near the former dry cleaning machine. The soil and soil vapor at this location was successfully removed during the recently completed excavation activities. The surrounding soil vapor wells were sampled after the excavation activities were completed to evaluate conditions at depth post-excavation. The initial post-excavation analytical results for the 5-foot vapor wells indicate that concentrations of PCE in the northern portion of the Site (SV-01, SV-03 and SV-07) appear unchanged and are still below the RAO established at  $2,100 \mu\text{g}/\text{m}^3$ . The concentrations of PCE in the southern portions of the building and outside in proximity to the sanitary sewer line show both increasing and decreasing concentrations.

## **6.3 Sub-Slab Vapor Analytical Results**

A summary of the sub-slab soil vapor analytical results before, during and after excavation is presented in Table 3. The soil vapor analytical results were compared to theoretical calculated indoor air ESLs using a default attenuation factor of 0.05, as recommended by DTSC guidance. Copies of the laboratory reports and chain-of-custody documentation are included in Appendix B.

Five sub-slab vapor probes (SS-01 to SS-05) initially monitored the vapor conditions just beneath the concrete slab within Units 7102, 7104 and 7106 prior to excavation. SS-02 was destroyed during excavation; SS-05 was installed just to the north of this location. The highest concentrations of PCE just beneath the slab before (and during excavation activities) were detected in the vicinity of SS-02 ( $54,000 \mu\text{g}/\text{m}^3$ ) and SS-05 ( $8,200 \mu\text{g}/\text{m}^3$  and  $39,000 \mu\text{g}/\text{m}^3$ ) located near the former dry cleaning machine. The remaining probes were sampled after the excavation activities were completed to evaluate post-excavation conditions. The initial post-excavation analytical results for the sub-slab vapor probes indicate that the PCE concentration in the vicinity of the excavation (SS-05) decreased to  $740 \mu\text{g}/\text{m}^3$ . However, the concentrations of PCE in the samples collected from the sub-slab vapor probes further away from the completed excavation at SS-01 (Unit 7104), SS-03 (Unit 7102) and SS-04 (Unit 7106) increased to  $10,000 \mu\text{g}/\text{m}^3$ ,  $420 \mu\text{g}/\text{m}^3$  and  $490 \mu\text{g}/\text{m}^3$ , respectively, and above the pre-excavation concentrations of PCE of  $8.6 \mu\text{g}/\text{m}^3$  (SS-01),  $17 \mu\text{g}/\text{m}^3$  (SS-03) and  $140 \mu\text{g}/\text{m}^3$  (SS-04), respectively. The concentrations of PCE in the post-excavation samples are above the RAO established at  $42 \mu\text{g}/\text{m}^3$ .

#### **6.4 Quality Assurance/Quality Control**

No obvious signs of vapor leakage were observed during the sub-slab and soil vapor sampling activities. Helium (the leak check compound) was not detected during purging at concentrations above DTSC's leakage threshold recommendation of 5% indicating that significant leaks did not occur during collection of the samples.

The soil and soil vapor analytical laboratory data was reviewed by Iris Environmental to establish its validity and to ensure the laboratory data was complete and accurate. Iris Environmental verified that holding times for each analytical method were achieved and that the laboratory achieved the specific data quality objectives for each selected analytical method. A review of the data validation process indicates that the laboratories completed QA/QC activities required for the samples such as blanks, lab control samples, matrix spikes, and duplicates. The QA/QC parameters for the samples were within acceptable limits.

In addition, duplicate samples collected from SS-04 and SV-27 showed good precision. Based on the above information, the analytical data are useful for its intended purpose.

#### **7.0 DISCUSSION**

Iris Environmental oversaw the successful removal of approximately 410 cubic yards of PCE-impacted soils from the 7102 and 7104 tenant spaces from beneath and in the vicinity of the former dry cleaning machine (Figure 3). The excavation measured approximately 20 feet wide by 40 feet long and 10 feet deep. Confirmation soil sampling from the sidewalls and floor of the completed excavation indicates that the soil RAO of 0.55 mg/kg set upon in the IRAP were achieved. Based on the post-excavation soil analytical data, no further soil remediation appears warranted.

Prior to re-installing the concrete floor slab, Iris Environmental oversaw the installation of the potential sub-slab depressurization system just below the concrete slab within Units 7102 and 7104 in general accordance with the approved IRAP. This potential system may be used as an active or a passive system in the event the soil vapor concentrations beneath the slab do not continue to decrease. The potential sub-slab system was installed to the specifications presented in Figure 4.

The removal of PCE-impacted vadose soil appears to have resulted in decreasing concentrations of PCE in the soil vapor in the vicinity of the former PCE dry cleaning machine. It appears likely that fresh air was exposed to the sub-slab, soil and/or backfill material of the existing sanitary sewer line during excavation (as expected) and that the pressure gradients (circulation of fresh air and/or exothermic curing of concrete) caused PCE concentrations in anterior air spaces at distance away from the excavation to vary from location to location.

The initial elevated post-excavation soil vapor concentrations in anterior air spaces are likely temporary. We expect the soil vapor concentrations to decline over time because the post-excavation sub-slab soil vapor samples were collected only a few days after the newly poured concrete slab was completed. Based on the initial post-excavation soil vapor data, it appears that the soil vapor conditions beneath the newly completed concrete slab have not had sufficient time to fully equilibrate. Soil vapor conditions beneath the slab would likely be more favorable if additional time allowed for conditions to reach equilibrium.

## **8.0 RECOMMENDATIONS**

Based on the analytical data and interim removal action completed, Iris Environmental recommends the following:

- Collect indoor air samples and follow-up sub-slab soil vapor samples to further evaluate whether there are actual vapor intrusion levels of concern and if conditions beneath the slab are improving or are representative of stabilized conditions. A sub-slab depressurization system was recently installed beneath the slab to mitigate potential vapor intrusion concerns to building occupants (in the event that the above-recommended indoor air and follow-up sub-slab vapor sampling event are not favorable). For these reasons, we believe that future occupants would be adequately protected from potential vapor intrusion concerns once confirmatory indoor air samples are collected and/or after potential mitigation measures are implemented.

## **9.0 LIMITATIONS**

This report is based upon current Site conditions observed by Iris Environmental and current laws, policies, and regulations as of the date of this report. Iris Environmental will not distribute or publish this report without the prior express written consent of the Ready Family Partnership, L.P. except as required by law or court order. The information and opinions expressed in this report are based upon the information available to Iris Environmental and are given in response to a limited assignment and should be considered and implemented only in light of that assignment. The services provided by Iris Environmental in completing this project were consistent with normal standards of the profession. No other warranty, expressed or implied, is made.

## 10.0 SIGNATURES

This IRAR prepared by:



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Craig Pelletier, PG  
Senior Manager

This IRAR reviewed by:



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Christopher Alger, PG, CEG, ChG  
Principal

January 13, 2014

Iris Project No. 13-945C

## 11.0 REFERENCES

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- Iris Environmental. 2013b. *Interim Removal Action Plan, Former Park Avenue Cleaners at 7100-7120 Dublin Boulevard, Dublin, Alameda County, California*. ACEH Case No. RO3113. September 9.
- Iris Environmental. 2013c. *Revised Interim Removal Action Plan, Former Park Avenue Cleaners at 7100-7120 Dublin Boulevard, Dublin, Alameda County, California*. ACEH Case No. RO3113. September 19.

## **Tables**



**Table 1. Summary of Confirmation Soil Sample Analytical Results - VOCs**

Parameter	Units	Screening Level	Samples							
Location	–	–	7102	7102	7102	7102	7104	7104	7104	7104
Excavation Sidewall/Floor	–	–	North	South	East	Floor	North	South	West	Floor
Depth	feet bgs	–	5.0	5.0	5.0	10.0	5.0	5.0	5.0	10.0
Date	mm/dd/yy	–	10/29/13	10/18/13	10/28/13	10/28/13	11/05/13	11/01/13	11/01/13	11/05/13
Acetone	mg/kg	590,000	<0.018	<0.018	<0.018	<b>0.14</b>	<0.020	<0.016	<0.019	<0.019
Benzene	mg/kg	3.7	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
Bromobenzene	mg/kg	none	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
Bromodichloromethane	mg/kg	2.4	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
Bromoform	mg/kg	260	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
Bromomethane (methyl bromide)	mg/kg	38	<0.0092	<0.0090	<0.0092	<0.014	<0.0099	<0.0080	<0.0095	<0.0094
2-Butanone (methyl ethyl ketone)	mg/kg	250,000	<0.0092	<0.0090	<0.0092	<0.014	<0.0099	<0.0080	<0.0095	<0.0094
n-Butylbenzene	mg/kg	none	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
sec-Butylbenzene	mg/kg	none	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
tert-Butylbenzene	mg/kg	none	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
Carbon disulfide	mg/kg	none	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
Carbon tetrachloride	mg/kg	0.58	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
Chlorobenzene	mg/kg	12,000	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
Chlorobromomethane (bromochloromethane)	mg/kg	none	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
Chlorodibromomethane (dibromochloromethane)	mg/kg	34	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
Chloroethane (ethyl chloride)	mg/kg	170,000	<0.0092	<0.0090	<0.0092	<0.014	<0.0099	<0.0080	<0.0095	<0.0094
Chloroform	mg/kg	5.7	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
Chloromethane (methyl chloride)	mg/kg	450	<0.0092	<0.0090	<0.0092	<0.014	<0.0099	<0.0080	<0.0095	<0.0094
2-Chlorotoluene	mg/kg	none	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047

**Table 1. Summary of Confirmation Soil Sample Analytical Results - VOCs**

Parameter	Units	Screening Level	Samples							
Location	–	–	7102	7102	7102	7102	7104	7104	7104	7104
Excavation Sidewall/Floor	–	–	North	South	East	Floor	North	South	West	Floor
Depth	feet bgs	–	5.0	5.0	5.0	10.0	5.0	5.0	5.0	10.0
Date	mm/dd/yy	–	10/29/13	10/18/13	10/28/13	10/28/13	11/05/13	11/01/13	11/01/13	11/05/13
4-Chlorotoluene	mg/kg	none	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
Cumene	mg/kg	none	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
Cymene	mg/kg	none	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
1,2-Dibromo-3-chloropropane	mg/kg	0.41	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
1,2-Dibromoethane (ethylene dibromide)	mg/kg	0.53	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
1,2-Dichlorobenzene	mg/kg	11,000	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
1,3-Dichlorobenzene	mg/kg	none	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
1,4-Dichlorobenzene	mg/kg	14	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
Dichlorodifluoromethane (Freon 12)	mg/kg	none	<0.0092	<0.0090	<0.0092	<0.014	<0.0099	<0.0080	<0.0095	<0.0094
1,1-Dichloroethane (1,1-DCA)	mg/kg	18	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
1,2-Dichloroethane (1,2-DCA)	mg/kg	2.2	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
1,1-Dichloroethene (1,1-DCE)	mg/kg	1,200	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
cis-1,2-Dichloroethene (cis-1,2-DCE)	mg/kg	2,000	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
trans-1,2-Dichloroethene (trans-1,2-DCE)	mg/kg	590	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
1,2-Dichloropropane	mg/kg	4.1	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
1,3-Dichloropropane	mg/kg	none	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
2,2-Dichloropropane	mg/kg	none	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
1,1-Dichloropropene	mg/kg	none	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
cis-1,3-Dichloropropene	mg/kg	none	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047

**Table 1. Summary of Confirmation Soil Sample Analytical Results - VOCs**

Parameter	Units	Screening Level	Samples							
Location	–	–	7102	7102	7102	7102	7104	7104	7104	7104
Excavation Sidewall/Floor	–	–	North	South	East	Floor	North	South	West	Floor
Depth	feet bgs	–	5.0	5.0	5.0	10.0	5.0	5.0	5.0	10.0
Date	mm/dd/yy	–	10/29/13	10/18/13	10/28/13	10/28/13	11/05/13	11/01/13	11/01/13	11/05/13
trans-1,3-Dichloropropene	mg/kg	none	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
Ethylbenzene	mg/kg	24	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
Hexachlorobutadiene	mg/kg	37	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
2-Hexanone (methyl butyl ketone)	mg/kg	none	<0.0092	<0.0090	<0.0092	<0.014	<0.0099	<0.0080	<0.0095	<0.0094
Methyl tert-butyl ether (MTBE)	mg/kg	190	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
Methylene bromide	mg/kg	none	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
Methylene chloride	mg/kg	49	<0.018	<0.018	<0.018	<0.029	<0.020	<0.016	<0.019	<0.019
4-Methyl-2-pentanone (methyl isobutyl ketone)	mg/kg	240,000	<0.0092	<0.0090	<0.0092	<0.014	<0.0099	<0.0080	<0.0095	<0.0094
Naphthalene	mg/kg	15	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
n-Propylbenzene	mg/kg	none	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
Styrene	mg/kg	42,000	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
1,1,1,2-Tetrachloroethane	mg/kg	19	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
1,1,2,2-Tetrachloroethane	mg/kg	2.3	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
Tetrachloroethene (PCE)	mg/kg	0.55	<b>0.015</b>	<b>0.023</b>	<b>0.014</b>	<0.0072	<b>0.023</b>	<b>0.029</b>	<b>0.036</b>	<b>0.022</b>
Toluene	mg/kg	4,900	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
1,2,3-Trichlorobenzene	mg/kg	none	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
1,2,4-Trichlorobenzene	mg/kg	700	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
1,1,1-Trichloroethane (1,1,1-TCA)	mg/kg	47,000	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
1,1,2-Trichloroethane (1,1,2-TCA)	mg/kg	4.4	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047

**Table 1. Summary of Confirmation Soil Sample Analytical Results - VOCs**

Parameter	Units	Screening Level	Samples							
Location	–	–	7102	7102	7102	7102	7104	7104	7104	7104
Excavation Sidewall/Floor	–	–	North	South	East	Floor	North	South	West	Floor
Depth	feet bgs	–	5.0	5.0	5.0	10.0	5.0	5.0	5.0	10.0
Date	mm/dd/yy	–	10/29/13	10/18/13	10/28/13	10/28/13	11/05/13	11/01/13	11/01/13	11/05/13
Trichloroethene (TCE)	mg/kg	8.3	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
Trichlorofluoromethane (Freon 11)	mg/kg	none	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
1,2,3-Trichloropropane	mg/kg	none	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	mg/kg	none	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
1,2,4-Trimethylbenzene	mg/kg	none	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
1,3,5-Trimethylbenzene	mg/kg	none	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
Vinyl acetate	mg/kg	none	<0.046	<0.045	<0.046	<0.072	<0.049	<0.040	<0.048	<0.047
Vinyl chloride	mg/kg	0.16	<0.0092	<0.0090	<0.0092	<0.014	<0.0099	<0.0080	<0.0095	<0.0094
m-,p-Xylene	mg/kg	2,600	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047
o-Xylene	mg/kg	2,600	<0.0046	<0.0045	<0.0046	<0.0072	<0.0049	<0.0040	<0.0048	<0.0047

Notes:

- (1) Detections are shown in **bold font**.
- (2) Soil sampling results are compared to Environmental Screening Levels (ESLs) for direct exposure to soil under a commercial/industrial scenario; except tetrachloroethene (PCE), which is compared to ESLs for direct exposure to soil under a residential scenario (Cal/EPA, May 2013).

Definitions:

feet bgs    feet below ground surface

mg/kg      micrograms per kilogram

Table 2. Summary of Soil Vapor Analytical Results - VOCs

Parameter	Units	ESL	Samples																
			SV-01	SV-01	SV-01	SV-02	SV-03	SV-03	SV-04	SV-04	SV-05	SV-05	SV-06	SV-06	SV-07	SV-07	SV-08	SV-08	SV-08
Sample ID	–	–	SV-01	SV-01	SV-01	SV-02	SV-03	SV-03	SV-04	SV-04	SV-05	SV-05	SV-06	SV-06	SV-07	SV-07	SV-08	SV-08	SV-08
Boring ID	–	–	IE-08	IE-08	IE-08	IE-29	IE-11	IE-11	IE-26	IE-26	IE-05	IE-05	IE-25	IE-25	IE-14	IE-14	IE-27	IE-27	IE-27
Sample Type	–	–	–	Primary	Duplicate	–	–	–	–	–	–	–	–	–	–	–	Primary	Duplicate	–
Sample Date	mm/dd/yy	–	08/07/13	11/18/13	11/18/13	08/07/13	08/07/13	11/18/13	08/07/13	11/18/13	08/07/13	11/18/13	08/07/13	11/18/13	08/07/13	11/18/13	08/07/13	08/07/13	11/18/13
Occurrence Within Excavation Timeline	–	–	Pre	Post	Post	Pre	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Pre	Post
Acetone	µg/m3	140,000,000	9.9	<8.5	<8.7	<5,200	130	<8.3	39	<49	320	<180	<580	<500	460	<16	<55	<51	<180
Acrolein	µg/m3	none	<9.3	<8.2	<8.4	<5,100	<9.3	<8.0	<9.6	<47	<57	<170	<560	<480	<9.3	<16	<53	<50	<170
Benzene	µg/m3	420	<3.2	<2.8	<2.9	<1,800	52	<2.8	84	<16	48	<60	<190	<170	68	<5.5	48	45	<60
Benzyl chloride (alpha chlorotoluene)	µg/m3	none	<5.3	<4.6	<4.7	<2,900	<5.2	<4.5	<5.4	<27	<32	<97	<320	<270	<5.3	<9.0	<30	<28	<98
Bromodichloromethane	µg/m3	330	<6.8	<6.0	<6.1	<3,700	<6.8	<5.8	<7.0	<35	<41	<130	<410	<350	<6.8	<12	<39	<36	<130
Bromoform	µg/m3	none	<10	<9.2	<9.5	<5,700	<10	<9.0	<11	<53	<64	<190	<630	<540	<10	<18	<60	<56	<200
Bromomethane (methyl bromide)	µg/m3	22,000	<3.9	<3.5	<3.6	<2,100	<3.9	<3.4	<4.1	<20	<24	<73	<240	<200	<3.9	<6.7	<23	<21	<73
1,3-Butadiene	µg/m3	none	<2.2	<2.0	<2.0	<1,200	6.8	<1.9	<2.3	<11	<14	<42	<130	<120	<2.2	<3.8	<13	<12	<42
2-Butanone (methyl ethyl ketone)	µg/m3	22,000,000	<3.0	<2.6	<2.7	<1,600	69	<2.6	39	<15	29	<55	<180	<150	46	<5.1	<17	<16	<56
Carbon disulfide	µg/m3	none	<3.2	<2.8	<2.8	<1,700	7.0	2.7	12	<16	<19	<59	<190	<160	5.6	10	190	170	<59
Carbon tetrachloride	µg/m3	290	<6.4	<5.6	<5.8	<3,500	<6.4	<5.5	<6.6	<32	<39	<120	<380	<330	<6.4	<11	<37	<34	<120
Chlorobenzene	µg/m3	4,400,000	<4.7	<4.1	<4.2	<2,500	<4.6	<4.0	<4.8	<24	<28	<87	<280	<240	<4.7	<8.0	<27	<25	<87
Chlorodibromomethane (dibromochloromethane)	µg/m3	none	<8.6	<7.6	<7.8	<4,700	<8.6	<7.4	<8.9	<44	<53	<160	<520	<450	<8.6	<15	<50	<46	<160
Chloroethane (ethyl chloride)	µg/m3	130,000,000	<2.7	<2.3	<2.4	<1,500	<2.7	<2.3	<2.8	<14	<16	<50	<160	<140	<2.7	<4.6	<15	<14	<50
Chloroform	µg/m3	2,300	<5.0	<4.3	<4.5	<2,700	9.4	<4.2	<5.1	27	<30	<92	<300	<260	<5.0	<8.4	<28	<26	<92
Chloromethane (methyl chloride)	µg/m3	390,000	<2.1	<1.8	<1.9	<1,100	<2.1	<1.8	<2.2	<11	<13	<39	<130	<110	<2.1	<3.6	<12	<11	<39
Cyclohexane	µg/m3	none	3.6	<3.1	<3.1	<1,900	91	<3.0	100	<18	120	<65	<210	<180	63	<6.0	550	510	<65
1,2-Dibromoethane (ethylene dibromide)	µg/m3	170	<7.8	<6.8	<7.0	<4,200	<7.8	<6.7	<8.1	<40	<47	<140	<470	<400	<7.8	<13	<45	<41	<150
1,2-Dichlorobenzene	µg/m3	880,000	<6.1	<5.4	<5.5	<3,300	<6.1	<5.2	<6.3	<31	<37	<110	<370	<320	<6.1	<10	<35	<32	<110
1,3-Dichlorobenzene	µg/m3	none	<6.1	<5.4	<5.5	<3,300	<6.1	<5.2	<6.3	<31	<37	<110	<370	<320	<6.1	<10	<35	<32	<110
1,4-Dichlorobenzene	µg/m3	1,100	<6.1	<5.4	<5.5	<3,300	<6.1	<5.2	<6.3	<31	<37	<110	<370	<320	<6.1	<10	<35	<32	<110
Dichlorodifluoromethane (Freon 12)	µg/m3	none	<5.0	<4.4	<4.5	<2,700	<5.0	<4.3	<5.2	<26	<31	<93	<300	<260	<5.0	<8.6	<29	<27	<93
1,1-Dichloroethane (1,1-DCA)	µg/m3	7,700	<4.1	<3.6	<3.7	<2,200	<4.1	<3.5	<4.2	<21	<25	<76	<250	<210	<4.1	<7.0	<24	<22	<76
1,2-Dichloroethane (1,2-DCA)	µg/m3	580	<4.1	<3.6	<3.7	<2,200	<4.1	<3.5	<4.2	<21	<25	<76	<250	<210	<4.1	<7.0	<24	<22	<76
1,1-Dichloroethene (1,1-DCE)	µg/m3	880,000	<4.0	<3.5	<3.6	<2,200	<4.0	<3.4	<4.2	<20	<25	<75	<240	<210	<4.0	<6.9	<23	<21	<75
cis-1,2-Dichloroethene (cis-1,2-DCE)	µg/m3	none	<4.0	<3.5	<3.6	<2,200	<4.0	<3.4	<4.2	<20	<25	<75	<240	<210	<4.0	<6.9	<23	<21	<75
trans-1,2-Dichloroethene (trans-1,2-DCE)	µg/m3	260,000	<4.0	<3.5	<3.6	<2,200	<4.0	<3.4	<4.2	<20	<25	<75	<240	<210	<4.0	<6.9	<23	<21	<75
1,2-Dichloropropane	µg/m3	1,200	<4.7	<4.1	<4.2	<2,600	<4.7	<4.0	<4.9	<24	<29	<87	<280	<240	<4.7	<8.0	<27	<25	<87
cis-1,3-Dichloropropene	µg/m3	none	<4.6	<4.0	<4.2	<2,500	<4.6	<3.9	<4.8	<23	<28	<85	<280	<240	<4.6	<7.9	<26	<25	<86
trans-1,3-Dichloropropene	µg/m3	none	<4.6	<4.0	<4.2	<2,500	<4.6	<3.9	<4.8	<23	<28	<85	<280	<240	<4.6	<7.9	<26	<25	<86

Table 2. Summary of Soil Vapor Analytical Results - VOCs

Parameter	Units	ESL	Samples																
			SV-01	SV-01	SV-01	SV-02	SV-03	SV-03	SV-04	SV-04	SV-05	SV-05	SV-06	SV-06	SV-07	SV-07	SV-08	SV-08	SV-08
Sample ID	–	–	SV-01	SV-01	SV-01	SV-02	SV-03	SV-03	SV-04	SV-04	SV-05	SV-05	SV-06	SV-06	SV-07	SV-07	SV-08	SV-08	SV-08
Boring ID	–	–	IE-08	IE-08	IE-08	IE-29	IE-11	IE-11	IE-26	IE-26	IE-05	IE-05	IE-25	IE-25	IE-14	IE-14	IE-27	IE-27	IE-27
Sample Type	–	–	–	Primary	Duplicate	–	–	–	–	–	–	–	–	–	–	–	Primary	Duplicate	–
Sample Date	mm/dd/yy	–	08/07/13	11/18/13	11/18/13	08/07/13	08/07/13	11/18/13	08/07/13	11/18/13	08/07/13	11/18/13	08/07/13	11/18/13	08/07/13	11/18/13	08/07/13	08/07/13	11/18/13
Occurrence Within Excavation Timeline	–	–	Pre	Post	Post	Pre	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Pre	Post
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	µg/m3	none	<7.1	<6.2	<6.4	<3,900	<7.1	<6.1	<7.3	<36	<43	<130	<430	<370	<7.1	<12	<41	<38	<130
Ethyl acetate	µg/m3	none	<3.7	<3.2	<3.3	<2,000	<3.6	<3.1	<3.8	<19	<22	<68	<220	<190	<3.7	<6.2	<21	<19	<68
Ethylbenzene	µg/m3	4,900	<4.4	<3.9	<4.0	<2,400	<b>14</b>	<3.8	<b>18</b>	<22	<27	<82	<260	<230	<b>15</b>	<7.5	<b>120</b>	<b>110</b>	<82
4-Ethyltoluene	µg/m3	none	<5.0	<4.4	<4.5	<2,700	<b>6.5</b>	<4.3	<b>8.0</b>	<25	<30	<92	<300	<260	<b>7.0</b>	<8.5	<b>50</b>	<b>41</b>	<93
Heptane	µg/m3	none	<4.2	<3.6	<3.7	<2,300	<b>54</b>	<3.6	<b>87</b>	<21	<b>66</b>	<77	<250	<220	<b>69</b>	<7.1	<b>25</b>	<b>25</b>	<77
Hexachlorobutadiene	µg/m3	none	<11	<9.5	<9.8	<5,900	<11	<9.3	<11	<55	<66	<200	<650	<560	<11	<18	<62	<58	<200
Hexane	µg/m3	none	<3.6	<3.1	<3.2	<1,900	<b>29</b>	<3.1	<b>100</b>	<18	<b>29</b>	<66	<210	<190	<b>43</b>	<6.1	<21	<19	<67
2-Hexanone (methyl butyl ketone)	µg/m3	none	<4.2	<3.6	<3.7	<2,300	<4.1	<3.6	<4.3	<21	<25	<77	<250	<220	<4.2	<7.1	<24	<22	<77
Methyl tert-butyl ether (MTBE)	µg/m3	47,000	<3.7	<3.2	<3.3	<2,000	<3.6	<3.1	<3.8	<19	<22	<68	<220	<190	<3.7	<6.2	<21	<19	<68
Methylene chloride	µg/m3	26,000	<3.5	<3.1	<3.2	<1,900	<3.5	<3.0	<3.6	<18	<21	<65	<210	<180	<3.5	<6.0	<20	<19	<66
4-Methyl-2-pentanone (methyl isobutyl ketone)	µg/m3	13,000,000	<4.2	<3.6	<3.7	<2,300	<b>37</b>	<3.6	<b>41</b>	<21	<25	<77	<250	<220	<b>12</b>	<7.1	<24	<22	<77
Naphthalene	µg/m3	360	<21	<19	<19	<12,000	<21	<18	<22	<110	<130	<390	<1,300	<1,100	<21	<36	<120	<110	<400
Styrene	µg/m3	3,900,000	<4.3	<3.8	<3.9	<2,400	<4.3	<3.7	<4.5	<22	<26	<80	<260	<220	<4.3	<7.4	<25	<23	<81
1,1,2,2-Tetrachloroethane	µg/m3	210	<7.0	<6.1	<6.3	<3,800	<6.9	<6.0	<7.2	<35	<42	<130	<420	<360	<7.0	<12	<40	<37	<130
Tetrachloroethene (PCE)	µg/m3	2,100	<b>290</b>	<b>240</b>	<b>250</b>	<b>610,000</b>	<b>31</b>	<b>54</b>	<b>1,200</b>	<b>2,900</b>	<b>7,300</b>	<b>11,000</b>	<b>51,000</b>	<b>37,000</b>	<b>340</b>	<b>1,200</b>	<b>5,800</b>	<b>5,300</b>	<b>10,000</b>
Tetrahydrofuran	µg/m3	none	<b>3.3</b>	<2.6	<2.7	<1,600	<3.0	<2.6	<b>4.3</b>	<15	<b>560</b>	<55	<180	<150	<3.0	<5.1	<17	<16	<56
Toluene	µg/m3	1,300,000	<b>4.3</b>	<3.4	<3.4	<2,100	<b>140</b>	<3.3	<b>170</b>	<19	<b>290</b>	<71	<230	<200	<b>170</b>	<6.5	<b>570</b>	<b>530</b>	<71
1,2,4-Trichlorobenzene	µg/m3	18,000	<7.5	<6.6	<6.8	<4,100	<7.5	<6.5	<7.8	<38	<46	<140	<450	<390	<7.5	<13	<43	<40	<140
1,1,1-Trichloroethane (1,1,1-TCA)	µg/m3	22,000,000	<5.5	<4.9	<5.0	<3,000	<5.5	<4.7	<5.7	<28	<34	<100	<330	<290	<5.5	<9.4	<32	<29	<100
1,1,2-Trichloroethane (1,1,2-TCA)	µg/m3	770	<5.5	<4.9	<5.0	<3,000	<5.5	<4.7	<5.7	<28	<34	<100	<330	<290	<5.5	<9.4	<32	<29	<100
Trichloroethene (TCE)	µg/m3	3,000	<5.5	<4.8	<4.9	<3,000	<5.4	<4.7	<b>10</b>	<28	<33	<100	<b>980</b>	<b>3,000</b>	<5.5	<9.3	<31	<29	<100
Trichlorofluoromethane (Freon 11)	µg/m3	none	<5.7	<5.0	<5.1	<3,100	<5.7	<4.9	<5.9	<29	<35	<110	<340	<290	<5.7	<9.7	<33	<30	<110
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	µg/m3	none	<7.8	<6.8	<7.0	<4,200	<7.7	<6.7	<8.0	<40	<47	<140	<470	<400	<7.8	<13	<45	<41	<140
1,2,4-Trimethylbenzene	µg/m3	none	<5.0	<4.4	<4.5	<2,700	<b>22</b>	<4.3	<b>23</b>	<25	<30	<92	<300	<260	<b>23</b>	<8.5	<b>120</b>	<b>110</b>	<93
1,3,5-Trimethylbenzene	µg/m3	none	<5.0	<4.4	<4.5	<2,700	<b>5.0</b>	<4.3	<b>6.8</b>	<25	<30	<92	<300	<260	<b>5.4</b>	<8.5	<29	<27	<93
Vinyl acetate	µg/m3	none	<3.6	<3.1	<3.2	<1,900	<3.6	<3.1	<3.7	<18	<22	<66	<210	<180	<3.6	<6.1	<20	<19	<67
Vinyl chloride	µg/m3	160	<2.6	<2.3	<2.3	<1,400	<2.6	<2.2	<2.7	<13	<16	<48	<160	<130	<2.6	<4.4	<15	<14	<48
o-Xylene	µg/m3	440,000	<4.4	<3.9	<4.0	<2,400	<b>17</b>	<3.8	<b>21</b>	<22	<b>27</b>	<82	<260	<230	<b>19</b>	<7.5	<b>130</b>	<b>120</b>	<82
m-,p-Xylene	µg/m3	440,000	<b>4.7</b>	<3.9	<4.0	<2,400	<b>53</b>	<3.8	<b>69</b>	<22	<b>95</b>	<82	<260	<230	<b>59</b>	<7.5	<b>460</b>	<b>400</b>	<82

Table 2. Summary of Soil Vapor Analytical Results - VOCs

Parameter	Units	ESL	Samples																
Sample ID	–	–	SV-01	SV-01	SV-01	SV-02	SV-03	SV-03	SV-04	SV-04	SV-05	SV-05	SV-06	SV-06	SV-07	SV-07	SV-08	SV-08	SV-08
Boring ID	–	–	IE-08	IE-08	IE-08	IE-29	IE-11	IE-11	IE-26	IE-26	IE-05	IE-05	IE-25	IE-25	IE-14	IE-14	IE-27	IE-27	IE-27
Sample Type	–	–	–	Primary	Duplicate	–	–	–	–	–	–	–	–	–	–	–	Primary	Duplicate	–
Sample Date	mm/dd/yy	–	08/07/13	11/18/13	11/18/13	08/07/13	08/07/13	11/18/13	08/07/13	11/18/13	08/07/13	11/18/13	08/07/13	11/18/13	08/07/13	11/18/13	08/07/13	08/07/13	11/18/13
Occurrence Within Excavation Timeline	–	–	Pre	Post	Post	Pre	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Pre	Post

Notes:

- (1) Soil gas sampling results are reported in micrograms per cubic meter (µg/m<sup>3</sup>).
- (2) Detections are shown in **bold font**.
- (3)  Highlighted results indicate an exceedance over the screening level.
- (4) Sample results from location SV-02 are presented in gray font to indicate that the location was removed during excavation.
- (5) Soil gas sampling results are compared to published Environmental Screening Levels (ESLs) for shallow soil gas to evaluate potential vapor intrusion under a commercial/industrial land use scenario (Cal/EPA, 2013).
- (6) Elevated reporting limits were observed above the ESL in some samples due to significant concentrations of PCE in the analyzed sample; these samples required dilution to evaluate the concentration of PCE, which resulted in subsequent elevated reporting limits for other analyzed compounds.

Table 3. Summary of Sub-slab Soil Vapor Analytical Results

Parameter	Units	ESL	Samples											
Sample ID	–	–	SS-01	SS-01	SS-02	SS-03	SS-03	SS-04	SS-04	SS-04	SS-04	SS-05	SS-05	SS-05
Boring ID	–	–	IE-08	IE-08	IE-29	IE-11	IE-11	–	–	–	–	–	–	–
Sample Type	–	–	–	–	–	–	–	Primary	Duplicate	–	–	–	–	–
Sample Date	mm/dd/yy	–	08/02/13	11/18/13	08/02/13	08/02/13	11/18/13	10/08/13	10/08/13	10/21/13	11/18/13	10/08/13	10/21/13	11/18/13
Occurrence Within Excavation Timeline	–	–	Pre	Post	Pre	Pre	Post	Pre	Pre	During	Post	Pre	During	Post
Acetone	µg/m3	2,800,000	27	<110	<350	21	12	17	11	<18	20	<96	<420	18
Acrolein	µg/m3	none	<8.2	<110	<330	<8.5	<8.4	<7.8	<7.9	<17	<8.1	<92	<410	<7.9
Benzene	µg/m3	8.4	6.5	<37	340	5.3	<2.9	<2.7	<2.7	<5.9	<2.8	<32	<140	<2.8
Benzyl chloride (alpha chlorotoluene)	µg/m3	none	<4.6	<59	<190	<4.8	<4.7	<4.4	<4.5	<9.6	<4.6	<52	<230	<4.5
Bromodichloromethane	µg/m3	6.6	<6.0	<77	<240	<6.2	<6.1	16	16	22	<5.9	<68	<300	<5.8
Bromoform	µg/m3	220	<9.2	<120	<380	<9.6	<9.5	<8.8	<8.9	<19	<9.1	<100	<460	<8.9
Bromomethane (methyl bromide)	µg/m3	440	<3.5	<44	<140	<3.6	<3.6	<3.3	<3.3	<7.2	<3.4	<39	<170	<3.4
1,3-Butadiene	µg/m3	none	<2.0	<25	260	<2.1	<2.0	<1.9	<1.9	<4.1	<2.0	<22	<98	<1.9
2-Butanone (methyl ethyl ketone)	µg/m3	440,000	3.9	<34	<110	<2.7	<2.7	<2.5	<2.5	<5.5	5.2	<30	<130	<2.6
Carbon disulfide	µg/m3	none	<2.8	<36	<110	<2.9	<17	<2.7	<2.7	<5.8	<17	<31	<140	<16
Carbon tetrachloride	µg/m3	5.8	<5.6	<72	<230	<5.9	<5.8	<5.4	<5.4	<12	<5.6	<63	<280	<5.4
Chlorobenzene	µg/m3	88,000	<4.1	<53	<170	<4.3	<4.2	<3.9	<4.0	<8.5	<4.1	<46	<200	<4.0
Chlorodibromomethane (dibromochloromethane)	µg/m3	none	<7.6	<98	<310	<7.9	<7.8	20	20	16	<7.5	<86	<380	<7.4
Chloroethane (ethyl chloride)	µg/m3	2,600,000	<2.3	<30	<96	<2.5	<2.4	<2.3	<2.3	<4.9	<2.3	<27	<120	<2.3
Chloroform	µg/m3	46	<4.3	<56	<180	<4.5	<4.5	67	69	15	24	<49	<220	<4.2
Chloromethane (methyl chloride)	µg/m3	7,800	<1.8	<24	<75	<1.9	<1.9	<1.8	<1.8	<3.8	<1.8	<21	<91	<1.8
Cyclohexane	µg/m3	none	<3.1	<39	<130	<3.2	<3.1	<2.9	<3.0	<6.4	<3.0	<35	<150	<3.0
1,2-Dibromoethane (ethylene dibromide)	µg/m3	3.4	<6.8	<88	<280	<7.1	<7.0	<6.6	<6.6	<14	<6.8	<77	<340	<6.6
1,2-Dichlorobenzene	µg/m3	18,000	<5.4	<69	<220	<5.6	<5.5	<5.1	<5.2	<11	<5.3	<61	<270	<5.2
1,3-Dichlorobenzene	µg/m3	none	<5.4	<69	<220	<5.6	<5.5	<5.1	<5.2	<11	<5.3	<61	<270	<5.2
1,4-Dichlorobenzene	µg/m3	22	<5.4	<69	<220	<5.6	<5.5	<5.1	<5.2	<11	<5.3	<61	<270	<5.2
Dichlorodifluoromethane (Freon 12)	µg/m3	none	<4.4	<57	<180	<4.6	<4.5	<4.2	<4.3	<9.1	<4.4	<50	<220	<4.3
1,1-Dichloroethane (1,1-DCA)	µg/m3	150	<3.6	<46	<150	<3.8	<3.7	<3.5	<3.5	<7.5	<3.6	<41	<180	<3.5
1,2-Dichloroethane (1,2-DCA)	µg/m3	12	<3.6	<46	<150	<3.8	<3.7	<3.5	<3.5	<7.5	<3.6	<41	<180	<3.5
1,1-Dichloroethene (1,1-DCE)	µg/m3	18,000	<3.5	<45	<140	<3.7	<3.6	<3.4	<3.4	<7.3	<3.5	<40	<180	<3.4
cis-1,2-Dichloroethene (cis-1,2-DCE)	µg/m3	none	<3.5	<45	<140	<3.7	<3.6	<3.4	<3.4	<7.3	<3.5	<40	<180	<3.4
trans-1,2-Dichloroethene (trans-1,2-DCE)	µg/m3	5,200	<3.5	<45	<140	<3.7	<3.6	<3.4	<3.4	<7.3	<3.5	<40	<180	<3.4
1,2-Dichloropropane	µg/m3	24	<4.1	<53	<170	<4.3	<4.2	<4.0	<4.0	<8.5	<4.1	<47	<200	<4.0
cis-1,3-Dichloropropene	µg/m3	none	<4.0	<52	<170	<4.2	<4.2	<3.9	<3.9	<8.4	<4.0	<46	<200	<3.9
trans-1,3-Dichloropropene	µg/m3	none	<4.0	<52	<170	<4.2	<4.2	<3.9	<3.9	<8.4	<4.0	<46	<200	<3.9



Table 3. Summary of Sub-slab Soil Vapor Analytical Results

Parameter	Units	ESL	Samples											
Sample ID	–	–	SS-01	SS-01	SS-02	SS-03	SS-03	SS-04	SS-04	SS-04	SS-04	SS-05	SS-05	SS-05
Boring ID	–	–	IE-08	IE-08	IE-29	IE-11	IE-11	–	–	–	–	–	–	–
Sample Type	–	–	–	–	–	–	–	Primary	Duplicate	–	–	–	–	–
Sample Date	mm/dd/yy	–	08/02/13	11/18/13	08/02/13	08/02/13	11/18/13	10/08/13	10/08/13	10/21/13	11/18/13	10/08/13	10/21/13	11/18/13
Occurrence Within Excavation Timeline	–	–	Pre	Post	Pre	Pre	Post	Pre	Pre	During	Post	Pre	During	Post
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	µg/m3	none	<6.2	<80	<250	<6.5	<6.4	<6.0	<6.0	<13	<6.2	<70	<310	<6.0
Ethyl acetate	µg/m3	none	<3.2	<41	<130	<3.4	<3.3	<3.1	<3.1	<6.7	<3.2	<36	<160	<3.1
Ethylbenzene	µg/m3	98	<3.9	<50	<160	<4.0	<4.0	<3.7	<3.7	<8.0	<3.8	<44	<190	<3.8
4-Ethyltoluene	µg/m3	none	<4.4	<56	<180	<4.6	<4.5	<4.2	<4.2	<9.1	<4.4	<50	<220	<4.3
Heptane	µg/m3	none	<3.6	<47	<150	<3.8	<3.7	<3.5	<3.5	<7.6	<3.6	<41	<180	<3.5
Hexachlorobutadiene	µg/m3	none	<9.5	<120	<390	<9.9	<9.8	<9.1	<9.2	<20	<9.4	<110	<470	<9.2
Hexane	µg/m3	none	<3.1	<40	<130	<3.3	<3.2	<3.0	<3.0	<6.5	<3.1	<36	<160	<3.0
2-Hexanone (methyl butyl ketone)	µg/m3	none	<3.6	<47	<150	<3.8	<3.7	<3.5	<3.5	<7.6	<3.6	<41	<180	<3.5
Methyl tert-butyl ether (MTBE)	µg/m3	940	<3.2	<41	<130	<3.4	<3.3	<3.1	<3.1	<6.7	<3.2	<36	<160	<3.1
Methylene chloride	µg/m3	520	<3.1	<40	<130	<3.2	<3.2	10	10	<6.4	<3.1	<35	<150	<3.0
4-Methyl-2-pentanone (methyl isobutyl ketone)	µg/m3	260,000	<3.6	<47	<150	<3.8	<3.7	<3.5	<3.5	<7.6	<3.6	<41	<180	<3.5
Naphthalene	µg/m3	7.2	<19	<240	<760	<20	<19	<18	<18	<39	<19	<210	<930	<18
Styrene	µg/m3	78,000	<3.8	<49	<160	<4.0	<3.9	<3.6	<3.7	<7.9	<3.8	<43	<190	<3.7
1,1,2,2-Tetrachloroethane	µg/m3	4.2	<6.1	<79	<250	<6.4	<6.3	<5.9	<5.9	<13	<6.1	<69	<300	<5.9
Tetrachloroethene (PCE)	µg/m3	42	8.6	10,000	24,000	17	420	140	140	1,400	490	8,200	39,000	790
Tetrahydrofuran	µg/m3	none	<2.6	<34	<110	<2.7	<2.7	<2.5	<2.5	<5.5	<2.6	<30	<130	16
Toluene	µg/m3	26,000	4.6	<43	<140	<3.5	<3.4	<3.2	<3.2	<7.0	<3.3	<38	<170	<3.3
1,2,4-Trichlorobenzene	µg/m3	360	<6.6	<85	<270	<6.9	<6.8	<6.3	<6.4	<14	<6.6	<75	<330	<6.4
1,1,1-Trichloroethane (1,1,1-TCA)	µg/m3	440,000	<4.9	<63	<200	<5.1	<5.0	<4.7	<4.7	<10	<4.8	<55	<240	<4.7
1,1,2-Trichloroethane (1,1,2-TCA)	µg/m3	15	<4.9	<63	<200	<5.1	<5.0	<4.7	<4.7	<10	<4.8	<55	<240	<4.7
Trichloroethene (TCE)	µg/m3	60	<4.8	<62	<200	<5.0	<4.9	8.7	13	33	<4.8	<54	<240	<4.6
Trichlorofluoromethane (Freon 11)	µg/m3	none	<5.0	<64	<200	<5.2	<5.1	<4.8	<4.8	<10	<5.0	<57	<250	<4.9
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	µg/m3	none	<6.8	<88	<280	<7.1	<7.0	<6.6	<6.6	<14	<6.8	<77	<340	<6.6
1,2,4-Trimethylbenzene	µg/m3	none	<4.4	<56	<180	<4.6	<4.5	<4.2	<4.2	<9.1	<4.4	<50	<220	<4.3
1,3,5-Trimethylbenzene	µg/m3	none	<4.4	<56	<180	<4.6	<4.5	<4.2	<4.2	<9.1	<4.4	<50	<220	<4.3
Vinyl acetate	µg/m3	none	<3.1	<40	<130	<3.3	<3.2	<3.0	<3.0	<6.5	<3.1	<35	<160	<3.0
Vinyl chloride	µg/m3	3.2	<2.3	<29	<93	<2.4	<2.3	<2.2	<2.2	<4.7	<2.3	<26	<110	<2.2
m-,p-Xylene	µg/m3	8,800	<3.9	<50	<160	<4.0	<4.0	<3.7	<3.7	<8.0	<3.8	<44	<190	<3.8
o-Xylene	µg/m3	8,800	<3.9	<50	<160	<4.0	<4.0	<3.7	<3.7	<8.0	<3.8	<44	<190	<3.8

Table 3. Summary of Sub-slab Soil Vapor Analytical Results

Parameter	Units	ESL	Samples											
Sample ID	–	–	SS-01	SS-01	SS-02	SS-03	SS-03	SS-04	SS-04	SS-04	SS-04	SS-05	SS-05	SS-05
Boring ID	–	–	IE-08	IE-08	IE-29	IE-11	IE-11	–	–	–	–	–	–	–
Sample Type	–	–	–	–	–	–	–	Primary	Duplicate	–	–	–	–	–
Sample Date	mm/dd/yy	–	08/02/13	11/18/13	08/02/13	08/02/13	11/18/13	10/08/13	10/08/13	10/21/13	11/18/13	10/08/13	10/21/13	11/18/13
Occurrence Within Excavation Timeline	–	–	Pre	Post	Pre	Pre	Post	Pre	Pre	During	Post	Pre	During	Post

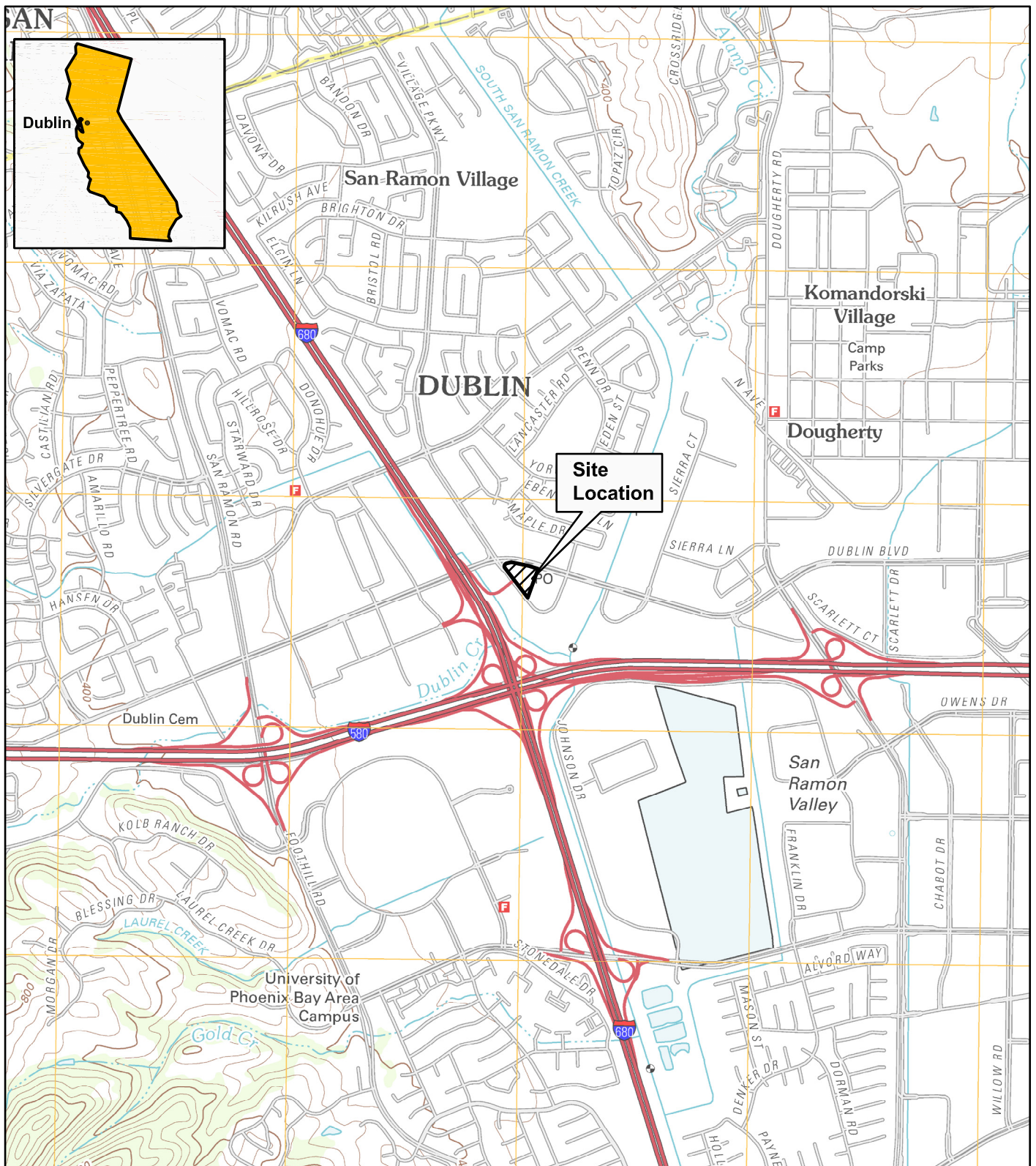
Notes:

- (1) Results are presented in micrograms per cubic meter (µg/m3).
- (2) Detections are shown in **bold font**.
- (3)  Highlighted results indicate an exceedance over the screening level.
- (4) Sample results from location SS-02 are presented in *gray font* to indicate that the location was removed during excavation.
- (5) Sub-slab sampling results are compared to published Environmental Screening Levels (ESLs) for ambient and indoor air under a commercial/industrial sccenario (Cal/EPA, May 2013). The screening levels presented are divided by an attenuation factor of 0.05 for existing commercial buildings with samples collected sub-slab, as per the Final Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrustion to Indoor Air (DTSC, October 2011).
- (6) Elevated reporting limits were observed above the ESL in some samples due to significant concentrations of PCE in the analyzed sample; these samples required dilution to evaluate the concentration of PCE, which resulted in subsequent elevated reporting limits for other analyzed compounds.

Definitions:

µg/m3      micrograms per cubic meter

## Figures



Source: USGS 7.5' Quadrangle, Dublin, California, 2012



0 2000  
SCALE IN FEET

**IRIS ENVIRONMENTAL**  
1438 Webster Street, Suite 302  
Oakland, California 94612  
Ph. (510) 834-4747 Fax: (510) 834-4199

**Site Location Map**  
7100 - 7120 Dublin Boulevard  
Dublin, California
















Figure

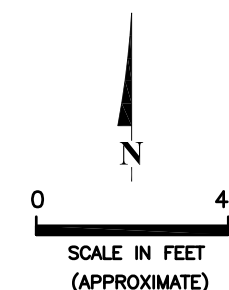
**1**





**EXPLANATION:**

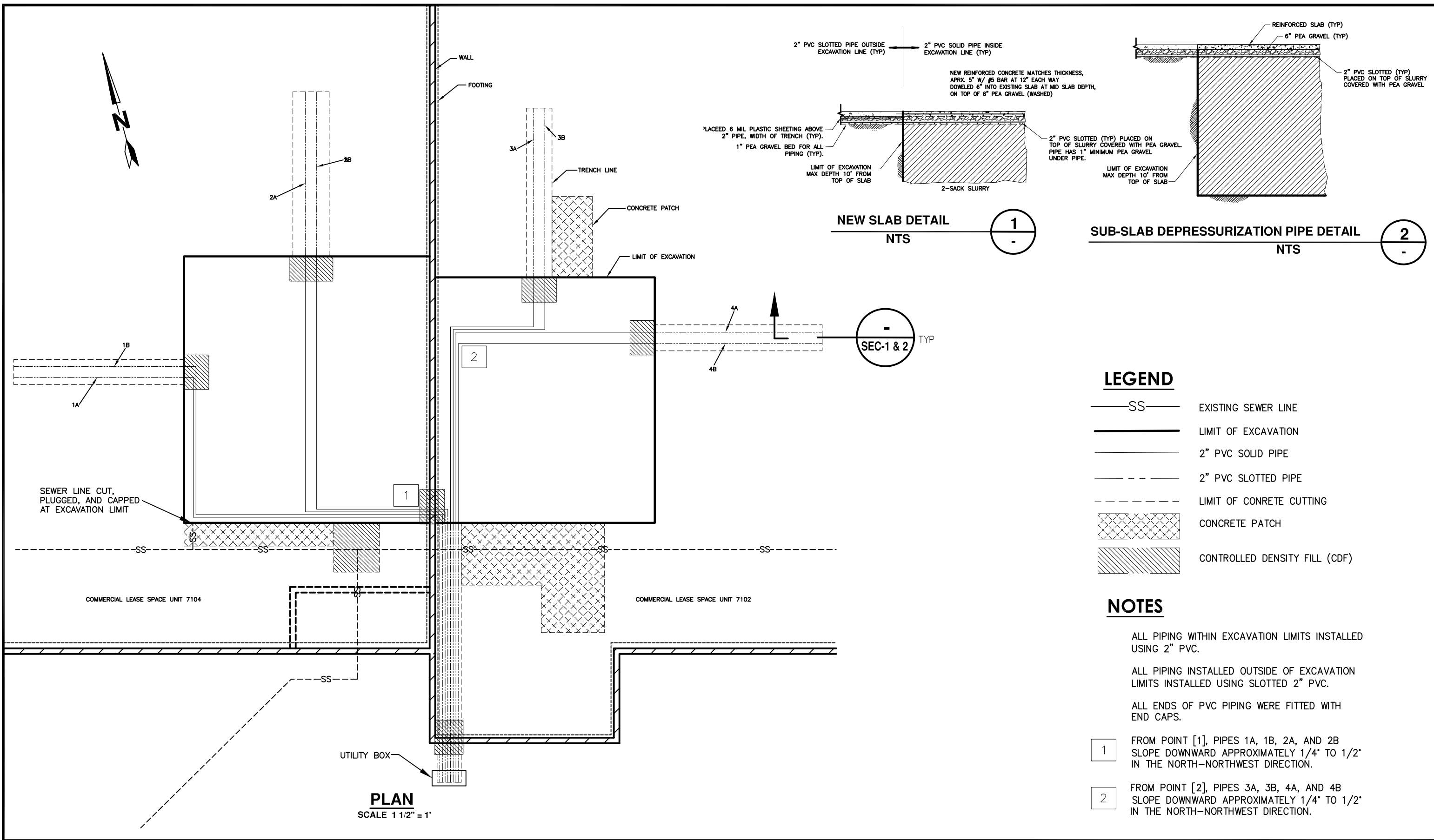
-  Approximate Site boundary
- B1  Previous soil sample location  
(Basics Environmental, 2012)
- SG1  Previous soil gas sample location  
(Basics Environmental, 2012)
- B4  Previous grab-groundwater sample location  
(Basics Environmental, 2012)
-  Previous soil sample location (Iris Environmental, 2013)
-  Grab-groundwater sample location
-  Soil vapor sample location  
(5.5 to 6.0 feet)
-  Subslab soil vapor sample location  
(6 to 9 inches)
-  Soil vapor and subslab soil vapor sample location
-  Former soil vapor and subslab soil vapor sample location
-  Location of sanitary sewer line (approximate  
depth of sanitary sewer line noted)
-  Presumed groundwater  
flow direction
- Former Dry Cleaning Machines
-  Approximate location of former  
PCE dry cleaning machine based on  
Appendix E of the Phase I report  
(Basics Environmental, 2012)
-  Approximate location of former  
petroleum-based dry cleaning machine
-  Approximate location of former  
PCE-based dry cleaning machine







I:\CAD\13\13-945-C\dwg Layout.dwg, 12/10/2013 10:24:17 AM



**IRIS ENVIRONMENTAL**  
1438 Webster Street, Suite 302  
Oakland, California 94612  
Ph. (510) 834-4747 Fax: (510) 834-4199

**Sub-Slab Depressurization System Plans**  
7100 - 7120 Dublin Boulevard  
Dublin, California







**Appendix A**  
**City of Dublin Excavation Permit**

Building	Date	Insp. Status
UNDERGROUND PLUMBING		
UNDER GROUND ELECTRICAL		
FOUNDATION / PIERS / SLAB		
FIRE SPRINKLERS - FIRE PREVENTIC		
ROUGH PLUMBING		
ROUGH MECHANICAL		
ROUGH ELECTRICAL		
ROUGH FRAME		
WALL INSULATION		
DRYWALL 1ST LAYER		
GAS TEST		
CEILING OR ROOF INSULATION		
ABOVE CEILING PLUMBING		
ABOVE CEILING ELECTRICAL		
ABOVE CEILING MECHANICAL		
ABOVE CEILING FRAMING		
T-BAR GRID		
ELECTRICAL METER RELEASE		
ENERGY REPORTS		
GREEN BUILDING DOCUMENTATION		
FINAL DSRSD 925-828-0515		
FINAL PUBLIC WORKS 925-833-6630		
FINAL PLANNING 925-833-6610		
FINAL FIRE 925-833-6606		
FINAL PLUMBING		
FINAL MECHANICAL		
FINAL ELECTRICAL		
FINAL BUILDING		
GAS METER RELEASE		
OCCUPANCY GRANTED		
PERMIT FINAL		

**Appendix B**  
**Certified Laboratory Analytical Reports**





**ct** Curtis & Tompkins, Ltd.  
Analytical Laboratories, Since 1878





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 250020  
ANALYTICAL REPORT**

Iris Environmental  
1438 Webster Street  
Oakland, CA 94612

Project : 13-945C  
Location : Park Avenue Cleaners  
Level : II

Sample ID  
7102-GENEX-SS-5.0

Lab ID  
250020-001

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: \_\_\_\_\_

Tracy Babjar  
Project Manager  
tracy.babjar@ctberk.com  
(510) 204-2226

Date: 10/21/2013

### CASE NARRATIVE

Laboratory number: 250020  
Client: Iris Environmental  
Project: 13-945C  
Location: Park Avenue Cleaners  
Request Date: 10/18/13  
Samples Received: 10/18/13

This data package contains sample and QC results for one soil sample, requested for the above referenced project on 10/18/13. The sample was received cold and intact.

**Volatile Organics by GC/MS (EPA 8260B):**

No analytical problems were encountered.

250020

I

## IRIS ENVIRONMENTAL

## CHAIN-OF-CUSTODY

1438 Webster Street, Suite 302

Oakland, California 94612

(510) 834-4747 tel

(510) 834-4199 fax

Date: 10/18/13

Page: 1 of 1

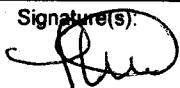
Nº 003646

## Analyses Required

Sampler Name(s):

Tiffany Kitzke

Signature(s):



Sample ID

Date

Time

Matrix

Pres.

VOCs by 821008  
with RUSH

7102 - GenEx-SS-5.0

10/18/13

1220

S

\*

X X

Number of Containers

4

## PROJECT INFORMATION

Project Name: Park Avenue Cleaners

Project Number: 13-945C

Contact Person: Tiffany Kitzke, Craig Pelletier

E-mail: tiffany@irisenv.com, craig@irisenv.com

Contact Telephone: 510 834 4747

Report: Routine (Level 2) Level 3 Level 4 EDD

TAT: 10-day 5-day 72-hr 48-hr (24-hr) Other:

## Special Instructions/Comments:

\* Preservatives include MeOH, DI water, none  
40 ml VOA 2 oz glass jar  
cold & seal

## RELINQUISHED BY:

Printed Name:

Signature:

Company:

Time/Date:

## RELINQUISHED BY:

Printed Name

Signature

Company

Time/Date

## RECEIVED BY:

Printed Name:

Signature:

Company:

Time/Date:

## RECEIVED BY:

Printed Name

Signature

Company

Time/Date

# COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 250000 Date Received 10/18/13 Number of coolers \_\_\_\_\_  
 Client IRIS Project PARK AVENUE CLEANERS (13-945C)

Date Opened 10/18/13 By (print) TR (sign) Tina Rankin  
 Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc) \_\_\_\_\_ YES (NO)

Shipping info \_\_\_\_\_

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO  
 How many \_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_

2B. Were custody seals intact upon arrival? \_\_\_\_\_ YES NO (N/A)

3. Were custody papers dry and intact when received? (YES) NO

4. Were custody papers filled out properly (ink, signed, etc)? (YES) NO

5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO

6. Indicate the packing in cooler: (if other, describe) \_\_\_\_\_

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None  
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: \* Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) \_\_\_\_\_

☒ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? (YES) (NO) TR

If YES, what time were they transferred to freezer? 1350

9. Did all bottles arrive unbroken/unopened? (YES) NO

10. Are there any missing / extra samples? (YES) (NO)

11. Are samples in the appropriate containers for indicated tests? (YES) NO

12. Are sample labels present, in good condition and complete? (YES) NO

13. Do the sample labels agree with custody papers? (YES) NO

14. Was sufficient amount of sample sent for tests requested? (YES) NO

15. Are the samples appropriately preserved? YES NO (N/A)

16. Did you check preservatives for all bottles for each sample? YES NO (N/A)

17. Did you document your preservative check? YES NO (N/A)

18. Did you change the hold time in LIMS for unpreserved VOAs? YES NO (N/A)

19. Did you change the hold time in LIMS for preserved terracores? (YES) NO (N/A)

20. Are bubbles > 6mm absent in VOA samples? YES NO (N/A)

21. Was the client contacted concerning this sample delivery? YES (NO)

If YES, Who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

## COMMENTS

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### Purgeable Organics by GC/MS

Lab #:	250020	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	EPA 5035
Project#:	13-945C	Analysis:	EPA 8260B
Field ID:	7102-GENEX-SS-5.0	Diln Fac:	0.9042
Lab ID:	250020-001	Batch#:	204228
Matrix:	Soil	Sampled:	10/18/13
Units:	ug/Kg	Received:	10/18/13
Basis:	as received	Analyzed:	10/20/13

Analyte	Result	RL
Freon 12	ND	9.0
Chloromethane	ND	9.0
Vinyl Chloride	ND	9.0
Bromomethane	ND	9.0
Chloroethane	ND	9.0
Trichlorofluoromethane	ND	4.5
Acetone	ND	18
Freon 113	ND	4.5
1,1-Dichloroethene	ND	4.5
Methylene Chloride	ND	18
Carbon Disulfide	ND	4.5
MTBE	ND	4.5
trans-1,2-Dichloroethene	ND	4.5
Vinyl Acetate	ND	45
1,1-Dichloroethane	ND	4.5
2-Butanone	ND	9.0
cis-1,2-Dichloroethene	ND	4.5
2,2-Dichloropropane	ND	4.5
Chloroform	ND	4.5
Bromochloromethane	ND	4.5
1,1,1-Trichloroethane	ND	4.5
1,1-Dichloropropene	ND	4.5
Carbon Tetrachloride	ND	4.5
1,2-Dichloroethane	ND	4.5
Benzene	ND	4.5
Trichloroethene	ND	4.5
1,2-Dichloropropane	ND	4.5
Bromodichloromethane	ND	4.5
Dibromomethane	ND	4.5
4-Methyl-2-Pentanone	ND	9.0
cis-1,3-Dichloropropene	ND	4.5
Toluene	ND	4.5
trans-1,3-Dichloropropene	ND	4.5
1,1,2-Trichloroethane	ND	4.5
2-Hexanone	ND	9.0
1,3-Dichloropropane	ND	4.5
Tetrachloroethene	23	4.5

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	250020	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	EPA 5035
Project#:	13-945C	Analysis:	EPA 8260B
Field ID:	7102-GENEX-SS-5.0	Diln Fac:	0.9042
Lab ID:	250020-001	Batch#:	204228
Matrix:	Soil	Sampled:	10/18/13
Units:	ug/Kg	Received:	10/18/13
Basis:	as received	Analyzed:	10/20/13

Analyte	Result	RL
Dibromochloromethane	ND	4.5
1,2-Dibromoethane	ND	4.5
Chlorobenzene	ND	4.5
1,1,1,2-Tetrachloroethane	ND	4.5
Ethylbenzene	ND	4.5
m,p-Xylenes	ND	4.5
o-Xylene	ND	4.5
Styrene	ND	4.5
Bromoform	ND	4.5
Isopropylbenzene	ND	4.5
1,1,2,2-Tetrachloroethane	ND	4.5
1,2,3-Trichloropropane	ND	4.5
Propylbenzene	ND	4.5
Bromobenzene	ND	4.5
1,3,5-Trimethylbenzene	ND	4.5
2-Chlorotoluene	ND	4.5
4-Chlorotoluene	ND	4.5
tert-Butylbenzene	ND	4.5
1,2,4-Trimethylbenzene	ND	4.5
sec-Butylbenzene	ND	4.5
para-Isopropyl Toluene	ND	4.5
1,3-Dichlorobenzene	ND	4.5
1,4-Dichlorobenzene	ND	4.5
n-Butylbenzene	ND	4.5
1,2-Dichlorobenzene	ND	4.5
1,2-Dibromo-3-Chloropropane	ND	4.5
1,2,4-Trichlorobenzene	ND	4.5
Hexachlorobutadiene	ND	4.5
Naphthalene	ND	4.5
1,2,3-Trichlorobenzene	ND	4.5

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-124
1,2-Dichloroethane-d4	114	80-137
Toluene-d8	106	80-120
Bromofluorobenzene	98	79-127

ND= Not Detected

RL= Reporting Limit

# Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	250020	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	EPA 5035
Project#:	13-945C	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC712685	Batch#:	204228
Matrix:	Soil	Analyzed:	10/20/13
Units:	ug/Kg		

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0

ND= Not Detected

RL= Reporting Limit

# Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	250020	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	EPA 5035
Project#:	13-945C	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC712685	Batch#:	204228
Matrix:	Soil	Analyzed:	10/20/13
Units:	ug/Kg		

Analyte	Result	RL
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-124
1,2-Dichloroethane-d4	108	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	96	79-127

ND= Not Detected

RL= Reporting Limit

## Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	250020	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	EPA 5035
Project#:	13-945C	Analysis:	EPA 8260B
Matrix:	Soil	Batch#:	204228
Units:	ug/Kg	Analyzed:	10/20/13
Diln Fac:	1.000		

Type: BS Lab ID: QC712686

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	21.29	106	67-132
Benzene	20.00	24.33	122	77-126
Trichloroethene	20.00	20.66	103	76-127
Toluene	20.00	21.97	110	76-124
Chlorobenzene	20.00	22.87	114	76-120

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-124
1,2-Dichloroethane-d4	111	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	90	79-127

Type: BSD Lab ID: QC712687

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	20.00	21.56	108	67-132	1	27
Benzene	20.00	23.05	115	77-126	5	20
Trichloroethene	20.00	20.71	104	76-127	0	22
Toluene	20.00	22.46	112	76-124	2	26
Chlorobenzene	20.00	23.27	116	76-120	2	21

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-124
1,2-Dichloroethane-d4	110	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	88	79-127

RPD= Relative Percent Difference

# Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	250020	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	EPA 5030B
Project#:	13-945C	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	204228
MSS Lab ID:	250024-002	Sampled:	10/18/13
Matrix:	Soil	Received:	10/18/13
Units:	ug/Kg	Analyzed:	10/20/13
Basis:	as received		

Type: MS Diln Fac: 0.9843  
 Lab ID: QC712699

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.9322	49.21	40.08	81	52-132
Benzene	<0.8951	49.21	41.98	85	54-121
Trichloroethene	<0.8285	49.21	38.14	77	46-138
Toluene	<0.7057	49.21	39.39	80	47-120
Chlorobenzene	<0.6806	49.21	40.03	81	41-120

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-124
1,2-Dichloroethane-d4	110	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	87	79-127

Type: MSD Diln Fac: 0.9709  
 Lab ID: QC712700

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	48.54	44.35	91	52-132	11	46
Benzene	48.54	46.40	96	54-121	11	43
Trichloroethene	48.54	42.81	88	46-138	13	50
Toluene	48.54	43.49	90	47-120	11	53
Chlorobenzene	48.54	44.04	91	41-120	11	50

Surrogate	%REC	Limits
Dibromofluoromethane	88	80-124
1,2-Dichloroethane-d4	108	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	85	79-127

RPD= Relative Percent Difference









Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 250257**  
**ANALYTICAL REPORT**

Iris Environmental  
1438 Webster Street  
Oakland, CA 94612

Project : 13-945C  
Location : Park Ave. Cleaners  
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
7102-GENEX-ES-5.0	250257-001
7102-GENEX-FLOOR-10.0	250257-002

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: \_\_\_\_\_

Tracy Babjar  
Project Manager  
tracy.babjar@ctberk.com  
(510) 204-2226

Date: 10/29/2013

NELAP # 01107CA



### CASE NARRATIVE

Laboratory number: 250257  
Client: Iris Environmental  
Project: 13-945C  
Location: Park Ave. Cleaners  
Request Date: 10/28/13  
Samples Received: 10/28/13

This data package contains sample and QC results for two soil samples, requested for the above referenced project on 10/28/13. The samples were received cold and intact.

#### Volatile Organics by GC/MS (EPA 8260B):

Low surrogate recovery was observed for dibromofluoromethane in 7102-GENEX-FLOOR-10.0 (lab # 250257-002). 7102-GENEX-FLOOR-10.0 (lab # 250257-002) was not diluted; the low sample weight is due to 5035 packaging. No other analytical problems were encountered.

250257

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IRIS ENVIRONMENTAL

1438 Webster Street, Suite 302

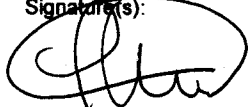
Oakland, California 94612

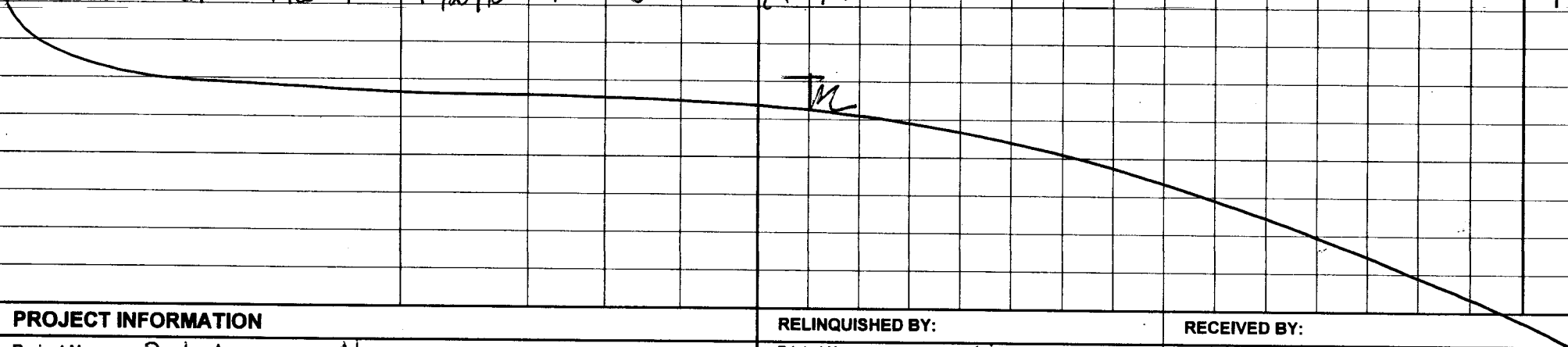
(510) 834-4747 tel

(510) 834-4199 fax

CHAIN-OF-CUSTODY

Date: 10 / 28 / 13      Page: 1 of 1      N<sup>o</sup>: 003654

Sampler Name(s): Tiffany Klitzke      Signature(s): 

Sample ID	Date	Time	Matrix	Pres.
7102-GenEx-ES-5.0	10/28/13	0905	S	*
7102-GenEx-Floor-ID.0	10/28/13	1100	S	*
				

VOCs by 8260  
24 Hour Rgt

Analyses Required


Number of Containers

4

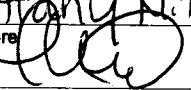
PROJECT INFORMATION

Project Name: Park Avenue Cleaners  
Project Number: 13-945C  
Contact Person: Craig Pelletier, Tiffany Klitzke  
E-mail: craig@irisenr.com, tiffany@irisenr.com  
Contact Telephone: 510-834-4747  
Report: Routine (Level 2) Level 3 Level 4 EDD  
TAT: 10-day 5-day 72-hr 48-hr (24-hr) Other:

Special Instructions/Comments:

\* Sample containers include: 2 oz glass jar, one 40mL VOA w/meOH, 2 40 mL VOAs with blank water  



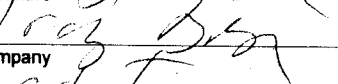
RELINQUISHED BY:

Printed Name: Tiffany Klitzke  
Signature:   
Company: IRTS  
Time/Date: 1400 10/28/13

RELINQUISHED BY:

Printed Name:  
Signature:  
Company:  
Time/Date:

RECEIVED BY:

Printed Name:   
Signature:   
Company: CPT  
Time/Date: 1400 10/28/13

RECEIVED BY:

Printed Name:  
Signature:  
Company:  
Time/Date:

# COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 250257 Date Received 10/26/13 Number of coolers 1  
 Client 1-15 Project Park Avenue Cleaners

Date Opened 10/26/13 By (print) ML (sign) [Signature]  
 Date Logged in 6 By (print) [Signature] (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) \_\_\_\_\_ YES ☒ NO  
 Shipping info \_\_\_\_\_

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO  
 How many \_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_

2B. Were custody seals intact upon arrival? \_\_\_\_\_ YES NO ☒ N/A

3. Were custody papers dry and intact when received? \_\_\_\_\_ YES NO

4. Were custody papers filled out properly (ink, signed, etc)? \_\_\_\_\_ YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) \_\_\_\_\_ YES NO

6. Indicate the packing in cooler: (if other, describe) \_\_\_\_\_

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None  
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: \* Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 4.6

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ☒ YES NO  
 If YES, what time were they transferred to freezer? 1405

9. Did all bottles arrive unbroken/unopened? \_\_\_\_\_ YES NO

10. Are there any missing / extra samples? \_\_\_\_\_ YES ☒ NO

11. Are samples in the appropriate containers for indicated tests? \_\_\_\_\_ YES NO

12. Are sample labels present, in good condition and complete? \_\_\_\_\_ YES NO

13. Do the sample labels agree with custody papers? \_\_\_\_\_ YES NO

14. Was sufficient amount of sample sent for tests requested? \_\_\_\_\_ YES NO

15. Are the samples appropriately preserved? \_\_\_\_\_ YES NO N/A

16. Did you check preservatives for all bottles for each sample? \_\_\_\_\_ YES NO ☒ N/A

17. Did you document your preservative check? \_\_\_\_\_ YES NO ☒ N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? \_\_\_\_\_ YES NO ☒ N/A

19. Did you change the hold time in LIMS for preserved terracores? \_\_\_\_\_ YES NO ☒ N/A

20. Are bubbles > 6mm absent in VOA samples? \_\_\_\_\_ YES NO ☒ N/A

21. Was the client contacted concerning this sample delivery? \_\_\_\_\_ YES ☒ NO

If YES, Who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

## COMMENTS

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### Purgeable Organics by GC/MS

Lab #:	250257	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	EPA 5035
Project#:	13-945C	Analysis:	EPA 8260B
Field ID:	7102-GENEX-ES-5.0	Diln Fac:	0.9158
Lab ID:	250257-001	Batch#:	204463
Matrix:	Soil	Sampled:	10/28/13
Units:	ug/Kg	Received:	10/28/13
Basis:	as received	Analyzed:	10/28/13

Analyte	Result	RL
Freon 12	ND	9.2
Chloromethane	ND	9.2
Vinyl Chloride	ND	9.2
Bromomethane	ND	9.2
Chloroethane	ND	9.2
Trichlorofluoromethane	ND	4.6
Acetone	ND	18
Freon 113	ND	4.6
1,1-Dichloroethene	ND	4.6
Methylene Chloride	ND	18
Carbon Disulfide	ND	4.6
MTBE	ND	4.6
trans-1,2-Dichloroethene	ND	4.6
Vinyl Acetate	ND	46
1,1-Dichloroethane	ND	4.6
2-Butanone	ND	9.2
cis-1,2-Dichloroethene	ND	4.6
2,2-Dichloropropane	ND	4.6
Chloroform	ND	4.6
Bromochloromethane	ND	4.6
1,1,1-Trichloroethane	ND	4.6
1,1-Dichloropropene	ND	4.6
Carbon Tetrachloride	ND	4.6
1,2-Dichloroethane	ND	4.6
Benzene	ND	4.6
Trichloroethene	ND	4.6
1,2-Dichloropropane	ND	4.6
Bromodichloromethane	ND	4.6
Dibromomethane	ND	4.6
4-Methyl-2-Pentanone	ND	9.2
cis-1,3-Dichloropropene	ND	4.6
Toluene	ND	4.6
trans-1,3-Dichloropropene	ND	4.6
1,1,2-Trichloroethane	ND	4.6
2-Hexanone	ND	9.2
1,3-Dichloropropane	ND	4.6
Tetrachloroethene	14	4.6

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	250257	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	EPA 5035
Project#:	13-945C	Analysis:	EPA 8260B
Field ID:	7102-GENEX-ES-5.0	Diln Fac:	0.9158
Lab ID:	250257-001	Batch#:	204463
Matrix:	Soil	Sampled:	10/28/13
Units:	ug/Kg	Received:	10/28/13
Basis:	as received	Analyzed:	10/28/13

Analyte	Result	RL
Dibromochloromethane	ND	4.6
1,2-Dibromoethane	ND	4.6
Chlorobenzene	ND	4.6
1,1,1,2-Tetrachloroethane	ND	4.6
Ethylbenzene	ND	4.6
m,p-Xylenes	ND	4.6
o-Xylene	ND	4.6
Styrene	ND	4.6
Bromoform	ND	4.6
Isopropylbenzene	ND	4.6
1,1,2,2-Tetrachloroethane	ND	4.6
1,2,3-Trichloropropane	ND	4.6
Propylbenzene	ND	4.6
Bromobenzene	ND	4.6
1,3,5-Trimethylbenzene	ND	4.6
2-Chlorotoluene	ND	4.6
4-Chlorotoluene	ND	4.6
tert-Butylbenzene	ND	4.6
1,2,4-Trimethylbenzene	ND	4.6
sec-Butylbenzene	ND	4.6
para-Isopropyl Toluene	ND	4.6
1,3-Dichlorobenzene	ND	4.6
1,4-Dichlorobenzene	ND	4.6
n-Butylbenzene	ND	4.6
1,2-Dichlorobenzene	ND	4.6
1,2-Dibromo-3-Chloropropane	ND	4.6
1,2,4-Trichlorobenzene	ND	4.6
Hexachlorobutadiene	ND	4.6
Naphthalene	ND	4.6
1,2,3-Trichlorobenzene	ND	4.6

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-124
1,2-Dichloroethane-d4	104	80-137
Toluene-d8	96	80-120
Bromofluorobenzene	105	79-127

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	250257	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	EPA 5035
Project#:	13-945C	Analysis:	EPA 8260B
Field ID:	7102-GENEX-FLOOR-10.0	Diln Fac:	1.449
Lab ID:	250257-002	Batch#:	204463
Matrix:	Soil	Sampled:	10/28/13
Units:	ug/Kg	Received:	10/28/13
Basis:	as received	Analyzed:	10/28/13

Analyte	Result	RL
Freon 12	ND	14
Chloromethane	ND	14
Vinyl Chloride	ND	14
Bromomethane	ND	14
Chloroethane	ND	14
Trichlorofluoromethane	ND	7.2
Acetone	140	29
Freon 113	ND	7.2
1,1-Dichloroethene	ND	7.2
Methylene Chloride	ND	29
Carbon Disulfide	ND	7.2
MTBE	ND	7.2
trans-1,2-Dichloroethene	ND	7.2
Vinyl Acetate	ND	72
1,1-Dichloroethane	ND	7.2
2-Butanone	ND	14
cis-1,2-Dichloroethene	ND	7.2
2,2-Dichloropropane	ND	7.2
Chloroform	ND	7.2
Bromochloromethane	ND	7.2
1,1,1-Trichloroethane	ND	7.2
1,1-Dichloropropene	ND	7.2
Carbon Tetrachloride	ND	7.2
1,2-Dichloroethane	ND	7.2
Benzene	ND	7.2
Trichloroethene	ND	7.2
1,2-Dichloropropane	ND	7.2
Bromodichloromethane	ND	7.2
Dibromomethane	ND	7.2
4-Methyl-2-Pentanone	ND	14
cis-1,3-Dichloropropene	ND	7.2
Toluene	ND	7.2
trans-1,3-Dichloropropene	ND	7.2
1,1,2-Trichloroethane	ND	7.2
2-Hexanone	ND	14
1,3-Dichloropropane	ND	7.2
Tetrachloroethene	ND	7.2
Dibromochloromethane	ND	7.2
1,2-Dibromoethane	ND	7.2
Chlorobenzene	ND	7.2
1,1,1,2-Tetrachloroethane	ND	7.2
Ethylbenzene	ND	7.2
m,p-Xylenes	ND	7.2
o-Xylene	ND	7.2
Styrene	ND	7.2
Bromoform	ND	7.2
Isopropylbenzene	ND	7.2
1,1,2,2-Tetrachloroethane	ND	7.2
1,2,3-Trichloropropane	ND	7.2
Propylbenzene	ND	7.2
Bromobenzene	ND	7.2
1,3,5-Trimethylbenzene	ND	7.2
2-Chlorotoluene	ND	7.2

\*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	250257	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	EPA 5035
Project#:	13-945C	Analysis:	EPA 8260B
Field ID:	7102-GENEX-FLOOR-10.0	Diln Fac:	1.449
Lab ID:	250257-002	Batch#:	204463
Matrix:	Soil	Sampled:	10/28/13
Units:	ug/Kg	Received:	10/28/13
Basis:	as received	Analyzed:	10/28/13

Analyte	Result	RL
4-Chlorotoluene	ND	7.2
tert-Butylbenzene	ND	7.2
1,2,4-Trimethylbenzene	ND	7.2
sec-Butylbenzene	ND	7.2
para-Isopropyl Toluene	ND	7.2
1,3-Dichlorobenzene	ND	7.2
1,4-Dichlorobenzene	ND	7.2
n-Butylbenzene	ND	7.2
1,2-Dichlorobenzene	ND	7.2
1,2-Dibromo-3-Chloropropane	ND	7.2
1,2,4-Trichlorobenzene	ND	7.2
Hexachlorobutadiene	ND	7.2
Naphthalene	ND	7.2
1,2,3-Trichlorobenzene	ND	7.2

Surrogate	%REC	Limits
Dibromofluoromethane	29 *	80-124
1,2-Dichloroethane-d4	104	80-137
Toluene-d8	95	80-120
Bromofluorobenzene	100	79-127

\*= Value outside of QC limits; see narrative  
 ND= Not Detected  
 RL= Reporting Limit  
 Page 2 of 2

## Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	250257	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	EPA 5035
Project#:	13-945C	Analysis:	EPA 8260B
Matrix:	Soil	Batch#:	204463
Units:	ug/Kg	Analyzed:	10/28/13
Diln Fac:	1.000		

Type: BS Lab ID: QC713643

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	24.51	98	67-132
Benzene	25.00	26.56	106	77-126
Trichloroethene	25.00	28.14	113	76-127
Toluene	25.00	26.03	104	76-124
Chlorobenzene	25.00	26.68	107	76-120

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-124
1,2-Dichloroethane-d4	104	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	103	79-127

Type: BSD Lab ID: QC713644

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	23.22	93	67-132	5	27
Benzene	25.00	26.00	104	77-126	2	20
Trichloroethene	25.00	27.58	110	76-127	2	22
Toluene	25.00	25.14	101	76-124	3	26
Chlorobenzene	25.00	26.57	106	76-120	0	21

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-124
1,2-Dichloroethane-d4	106	80-137
Toluene-d8	95	80-120
Bromofluorobenzene	99	79-127

RPD= Relative Percent Difference



# Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	250257	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	EPA 5035
Project#:	13-945C	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC713645	Batch#:	204463
Matrix:	Soil	Analyzed:	10/28/13
Units:	ug/Kg		

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0

ND= Not Detected

RL= Reporting Limit

## Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	250257	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	EPA 5035
Project#:	13-945C	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC713645	Batch#:	204463
Matrix:	Soil	Analyzed:	10/28/13
Units:	ug/Kg		

Analyte	Result	RL
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-124
1,2-Dichloroethane-d4	103	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	103	79-127

ND= Not Detected

RL= Reporting Limit

# Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	250257	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	EPA 5035
Project#:	13-945C	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	204463
MSS Lab ID:	250074-007	Sampled:	10/21/13
Matrix:	Soil	Received:	10/21/13
Units:	ug/Kg	Analyzed:	10/28/13
Basis:	as received		

Type: MS Diln Fac: 0.8865  
 Lab ID: QC713653

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.5574	44.33	33.97	77	52-132
Benzene	<0.6494	44.33	38.33	86	54-121
Trichloroethene	<0.6764	44.33	38.92	88	46-138
Toluene	<0.7114	44.33	35.78	81	47-120
Chlorobenzene	<0.5832	44.33	37.14	84	41-120

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-124
1,2-Dichloroethane-d4	105	80-137
Toluene-d8	95	80-120
Bromofluorobenzene	100	79-127

Type: MSD Diln Fac: 0.9470  
 Lab ID: QC713654

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	47.35	37.29	79	52-132	3	46
Benzene	47.35	41.09	87	54-121	0	43
Trichloroethene	47.35	41.81	88	46-138	1	50
Toluene	47.35	39.66	84	47-120	4	53
Chlorobenzene	47.35	40.20	85	41-120	1	50

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-124
1,2-Dichloroethane-d4	103	80-137
Toluene-d8	98	80-120
Bromofluorobenzene	103	79-127

RPD= Relative Percent Difference

# Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	250257	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	EPA 5035
Project#:	13-945C	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC713800	Batch#:	204463
Matrix:	Soil	Analyzed:	10/28/13
Units:	ug/Kg		

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0

ND= Not Detected

RL= Reporting Limit

## Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	250257	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	EPA 5035
Project#:	13-945C	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC713800	Batch#:	204463
Matrix:	Soil	Analyzed:	10/28/13
Units:	ug/Kg		

Analyte	Result	RL
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-124
1,2-Dichloroethane-d4	100	80-137
Toluene-d8	97	80-120
Bromofluorobenzene	101	79-127

ND= Not Detected

RL= Reporting Limit





**ct** Curtis & Tompkins, Ltd.  
Analytical Laboratories, Since 1878





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 250311  
ANALYTICAL REPORT**

Iris Environmental  
1438 Webster Street  
Oakland, CA 94612

Project : 13-945C  
Location : Park Avenue Cleaners  
Level : II

Sample ID  
7102-GENEX-NS-5.0

Lab ID  
250311-001

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: \_\_\_\_\_

Tracy Babjar  
Project Manager  
tracy.babjar@ctberk.com  
(510) 204-2226

Date: 10/30/2013

NELAP # 01107CA

### CASE NARRATIVE

Laboratory number: 250311  
Client: Iris Environmental  
Project: 13-945C  
Location: Park Avenue Cleaners  
Request Date: 10/29/13  
Samples Received: 10/29/13

This data package contains sample and QC results for one soil sample, requested for the above referenced project on 10/29/13. The sample was received cold and intact.

#### Volatile Organics by GC/MS (EPA 8260B):

High recovery was observed for trichloroethene in the MSD for batch 204505; the parent sample was not a project sample, the LCS was within limits, the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated sample. No other analytical problems were encountered.



250311



## IRIS ENVIRONMENTAL

## CHAIN-OF-CUSTODY

1438 Webster Street, Suite 302  
Oakland, California 94612  
(510) 834-4747 tel  
(510) 834-4199 fax

Date: 10 / 29 / 13

Page: 1 of 1

No 003651

## Analyses Required

Sampler Name(s):

Tiffany Kitzke

Signature(s):

Sample ID

Date

Time

Matrix

Pres.

7102-GenEx-1VS-5.0

10/29/13

0900

S

\*

X X

Number of Containers

4

## PROJECT INFORMATION

Project Name: Park Avenue Cleaners

Project Number: 13-945C

Contact Person: Craig Pelleher, Tiffany Kitzke

E-mail: craig@irisenv.com, tiffany@irisenv.com

Contact Telephone: 510-834-4747

Report: Routine (Level 2) Level 3 Level 4 EDD

TAT: 10-day 5-day 72-hr 48-hr (24-hr) Other:

## Special Instructions/Comments:

\* Sample containers include:  
one 40 mL vial w/ meth, two 40mL vials w/ black  
water, and one unpreserved 2oz glass jar

## RELINQUISHED BY:

Printed Name

Signature

Company

Time/Date

Tiffany Kitzke

IRIS

1100

10/29/13

## RECEIVED BY:

Printed Name

Signature

Company

Time/Date

M. Dahlhaus

CHT

1100

10/29

## RELINQUISHED BY:

Printed Name

Signature

Company

Time/Date

## RECEIVED BY:

Printed Name

Signature

Company

Time/Date

3 of 10

# COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 250311 Date Received 10/29/13 Number of coolers 1  
 Client IRIS Project PARK AVENUE CLEANERS (13-9450)

Date Opened 10/29/13 By (print) TR (sign) Tina Roukan  
 Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc) \_\_\_\_\_ YES (NO)  
 Shipping info \_\_\_\_\_

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO  
 How many \_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_

2B. Were custody seals intact upon arrival? \_\_\_\_\_ YES NO (N/A)

3. Were custody papers dry and intact when received? (YES) NO

4. Were custody papers filled out properly (ink, signed, etc)? (YES) NO

5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO

6. Indicate the packing in cooler: (if other, describe) \_\_\_\_\_

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None  
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: \* Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) \_\_\_\_\_

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? (YES) NO

If YES, what time were they transferred to freezer? 1110

9. Did all bottles arrive unbroken/unopened? (YES) NO

10. Are there any missing / extra samples? (YES) (NO)

11. Are samples in the appropriate containers for indicated tests? (YES) NO

12. Are sample labels present, in good condition and complete? (YES) NO

13. Do the sample labels agree with custody papers? (YES) NO

14. Was sufficient amount of sample sent for tests requested? (YES) NO

15. Are the samples appropriately preserved? YES NO (N/A)

16. Did you check preservatives for all bottles for each sample? YES NO (N/A)

17. Did you document your preservative check? YES NO (N/A)

18. Did you change the hold time in LIMS for unpreserved VOAs? YES NO (N/A)

19. Did you change the hold time in LIMS for preserved terracores? (YES) NO (N/A)

20. Are bubbles > 6mm absent in VOA samples? YES NO (N/A)

21. Was the client contacted concerning this sample delivery? YES (NO)

If YES, Who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

COMMENTS

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### Purgeable Organics by GC/MS

Lab #:	250311	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	EPA 5035
Project#:	13-945C	Analysis:	EPA 8260B
Field ID:	7102-GENEX-NS-5.0	Diln Fac:	0.9225
Lab ID:	250311-001	Batch#:	204505
Matrix:	Soil	Sampled:	10/29/13
Units:	ug/Kg	Received:	10/29/13
Basis:	as received	Analyzed:	10/29/13

Analyte	Result	RL
Freon 12	ND	9.2
Chloromethane	ND	9.2
Vinyl Chloride	ND	9.2
Bromomethane	ND	9.2
Chloroethane	ND	9.2
Trichlorofluoromethane	ND	4.6
Acetone	ND	18
Freon 113	ND	4.6
1,1-Dichloroethene	ND	4.6
Methylene Chloride	ND	18
Carbon Disulfide	ND	4.6
MTBE	ND	4.6
trans-1,2-Dichloroethene	ND	4.6
Vinyl Acetate	ND	46
1,1-Dichloroethane	ND	4.6
2-Butanone	ND	9.2
cis-1,2-Dichloroethene	ND	4.6
2,2-Dichloropropane	ND	4.6
Chloroform	ND	4.6
Bromochloromethane	ND	4.6
1,1,1-Trichloroethane	ND	4.6
1,1-Dichloropropene	ND	4.6
Carbon Tetrachloride	ND	4.6
1,2-Dichloroethane	ND	4.6
Benzene	ND	4.6
Trichloroethene	ND	4.6
1,2-Dichloropropane	ND	4.6
Bromodichloromethane	ND	4.6
Dibromomethane	ND	4.6
4-Methyl-2-Pentanone	ND	9.2
cis-1,3-Dichloropropene	ND	4.6
Toluene	ND	4.6
trans-1,3-Dichloropropene	ND	4.6
1,1,2-Trichloroethane	ND	4.6
2-Hexanone	ND	9.2
1,3-Dichloropropane	ND	4.6
Tetrachloroethene	15	4.6

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	250311	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	EPA 5035
Project#:	13-945C	Analysis:	EPA 8260B
Field ID:	7102-GENEX-NS-5.0	Diln Fac:	0.9225
Lab ID:	250311-001	Batch#:	204505
Matrix:	Soil	Sampled:	10/29/13
Units:	ug/Kg	Received:	10/29/13
Basis:	as received	Analyzed:	10/29/13

Analyte	Result	RL
Dibromochloromethane	ND	4.6
1,2-Dibromoethane	ND	4.6
Chlorobenzene	ND	4.6
1,1,1,2-Tetrachloroethane	ND	4.6
Ethylbenzene	ND	4.6
m,p-Xylenes	ND	4.6
o-Xylene	ND	4.6
Styrene	ND	4.6
Bromoform	ND	4.6
Isopropylbenzene	ND	4.6
1,1,2,2-Tetrachloroethane	ND	4.6
1,2,3-Trichloropropane	ND	4.6
Propylbenzene	ND	4.6
Bromobenzene	ND	4.6
1,3,5-Trimethylbenzene	ND	4.6
2-Chlorotoluene	ND	4.6
4-Chlorotoluene	ND	4.6
tert-Butylbenzene	ND	4.6
1,2,4-Trimethylbenzene	ND	4.6
sec-Butylbenzene	ND	4.6
para-Isopropyl Toluene	ND	4.6
1,3-Dichlorobenzene	ND	4.6
1,4-Dichlorobenzene	ND	4.6
n-Butylbenzene	ND	4.6
1,2-Dichlorobenzene	ND	4.6
1,2-Dibromo-3-Chloropropane	ND	4.6
1,2,4-Trichlorobenzene	ND	4.6
Hexachlorobutadiene	ND	4.6
Naphthalene	ND	4.6
1,2,3-Trichlorobenzene	ND	4.6

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-124
1,2-Dichloroethane-d4	104	80-137
Toluene-d8	95	80-120
Bromofluorobenzene	104	79-127

ND= Not Detected

RL= Reporting Limit

# Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	250311	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	EPA 5035
Project#:	13-945C	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC713817	Batch#:	204505
Matrix:	Soil	Analyzed:	10/29/13
Units:	ug/Kg		

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0

ND= Not Detected

RL= Reporting Limit

# Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	250311	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	EPA 5035
Project#:	13-945C	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC713817	Batch#:	204505
Matrix:	Soil	Analyzed:	10/29/13
Units:	ug/Kg		

Analyte	Result	RL
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-124
1,2-Dichloroethane-d4	101	80-137
Toluene-d8	93	80-120
Bromofluorobenzene	98	79-127

ND= Not Detected

RL= Reporting Limit



## Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	250311	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	EPA 5030B
Project#:	13-945C	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	204505
MSS Lab ID:	250278-005	Sampled:	10/28/13
Matrix:	Soil	Received:	10/28/13
Units:	ug/Kg	Analyzed:	10/29/13
Basis:	as received		

Type: MS Diln Fac: 0.9785  
Lab ID: QC713859

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.5812	48.92	47.81	98	52-132
Benzene	<0.6772	48.92	49.38	101	54-121
Trichloroethene	<0.7053	48.92	64.97	133	46-138
Toluene	<0.7417	48.92	43.60	89	47-120
Chlorobenzene	<0.6081	48.92	42.46	87	41-120

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-124
1,2-Dichloroethane-d4	105	80-137
Toluene-d8	92	80-120
Bromofluorobenzene	100	79-127

Type: MSD Diln Fac: 0.9728  
Lab ID: QC713860

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	48.64	50.52	104	52-132	6	46
Benzene	48.64	50.36	104	54-121	3	43
Trichloroethene	48.64	69.57	143 *	46-138	7	50
Toluene	48.64	45.35	93	47-120	5	53
Chlorobenzene	48.64	44.81	92	41-120	6	50

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-124
1,2-Dichloroethane-d4	105	80-137
Toluene-d8	93	80-120
Bromofluorobenzene	101	79-127

\*= Value outside of QC limits; see narrative  
RPD= Relative Percent Difference

## Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	250311	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	EPA 5035
Project#:	13-945C	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC714029	Batch#:	204505
Matrix:	Soil	Analyzed:	10/29/13
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	25.50	102	67-132
Benzene	25.00	26.79	107	77-126
Trichloroethene	25.00	28.34	113	76-127
Toluene	25.00	24.68	99	76-124
Chlorobenzene	25.00	25.70	103	76-120

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-124
1,2-Dichloroethane-d4	102	80-137
Toluene-d8	95	80-120
Bromofluorobenzene	97	79-127









Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 250455**  
**ANALYTICAL REPORT**

Iris Environmental  
1438 Webster Street  
Oakland, CA 94612

Project : 13-945C  
Location : Park Ave. Cleaners  
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
7104-GENEX-SS-5.0	250455-001
7104-GENEX-WS-5.0	250455-002

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: \_\_\_\_\_

Tracy Babjar  
Project Manager  
tracy.babjar@ctberk.com  
(510) 204-2226

Date: 11/05/2013

NELAP # 01107CA

#### CASE NARRATIVE

Laboratory number: 250455  
Client: Iris Environmental  
Project: 13-945C  
Location: Park Ave. Cleaners  
Request Date: 11/01/13  
Samples Received: 11/01/13

This data package contains sample and QC results for two soil samples, requested for the above referenced project on 11/01/13. The samples were received cold and intact.

**Volatile Organics by GC/MS (EPA 8260B):**

No analytical problems were encountered.

250455



# IRIS ENVIRONMENTAL

1438 Webster Street, Suite 302  
Oakland, California 94612  
(510) 834-4747 tel  
(510) 834-4199 fax

## CHAIN-OF-CUSTODY

Date: 11 / 1 / 13

Page: 1 of 1

No 003650

### Analyses Required

Sampler Name(s):

Tiffany Klitzke

Signature(s):

Sample ID

Date

Time

Matrix

Pres.

7104-GenEx-SS-5.0

11/1/13

1111

S

\*

7104-GenEx-WS-5.0

11/1/13

1400

S

\*

VOCs by 8240B

48 hr RUSH

Number of Containers

4  
4

TK

### PROJECT INFORMATION

Project Name:

Park Avenue Cleaners

Project Number:

13-945C

Contact Person:

Tiffany Klitzke, Craig Pelletier

E-mail:

tiffany@irisenv.com, craig@irisenv.com

Contact Telephone:

510-834-4747

Report: Routine

(Level 2)

Level 3

Level 4

EDD

TAT: 10-day

5-day

72-hr

(48-hr)

24-hr

Other:

### Special Instructions/Comments:

\* Sample bottles include: one 40mL VOA w/ mecit,  
2 40 mL VOAs w/ blank water, 1 unpreserved  
2 oz glass jar.

### RELINQUISHED BY:

Printed Name

Tiffany Klitzke

Signature

Company

IRIS

Time/Date

1510 11/1/13

### RELINQUISHED BY:

Printed Name

Signature

Company

Time/Date

### RECEIVED BY:

Printed Name

Pat Gonzalez

Signature

Company

C & T

Time/Date

11/1/13 1510

### RECEIVED BY:

Printed Name

Signature

Company

Time/Date



# COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 250455 Date Received 11-01-13 Number of coolers 1  
 Client IRB Project PAC

Date Opened 11-01-13 By (print) FW (sign) FW  
 Date Logged in 1 By (print) MA (sign) MA

1. Did cooler come with a shipping slip (airbill, etc) \_\_\_\_\_ YES NO  
 Shipping info \_\_\_\_\_

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO  
 How many \_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_

2B. Were custody seals intact upon arrival? \_\_\_\_\_ YES NO N/A

3. Were custody papers dry and intact when received? \_\_\_\_\_ YES NO

4. Were custody papers filled out properly (ink, signed, etc)? \_\_\_\_\_ YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) \_\_\_\_\_ YES NO

6. Indicate the packing in cooler: (if other, describe) \_\_\_\_\_

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None  
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: \* Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) \_\_\_\_\_

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? \_\_\_\_\_ YES NO

If YES, what time were they transferred to freezer? 15:10

9. Did all bottles arrive unbroken/unopened? \_\_\_\_\_ YES NO

10. Are there any missing / extra samples? \_\_\_\_\_ YES NO

11. Are samples in the appropriate containers for indicated tests? \_\_\_\_\_ YES NO

12. Are sample labels present, in good condition and complete? \_\_\_\_\_ YES NO

13. Do the sample labels agree with custody papers? \_\_\_\_\_ YES NO

14. Was sufficient amount of sample sent for tests requested? \_\_\_\_\_ YES NO

15. Are the samples appropriately preserved? \_\_\_\_\_ YES NO N/A

16. Did you check preservatives for all bottles for each sample? \_\_\_\_\_ YES NO N/A

17. Did you document your preservative check? \_\_\_\_\_ YES NO N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? \_\_\_\_\_ YES NO N/A

19. Did you change the hold time in LIMS for preserved terracores? \_\_\_\_\_ YES NO N/A

20. Are bubbles > 6mm absent in VOA samples? \_\_\_\_\_ YES NO N/A

21. Was the client contacted concerning this sample delivery? \_\_\_\_\_ YES NO

If YES, Who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

COMMENTS

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### Purgeable Organics by GC/MS

Lab #:	250455	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	EPA 5035
Project#:	13-945C	Analysis:	EPA 8260B
Field ID:	7104-GENEX-SS-5.0	Diln Fac:	0.7974
Lab ID:	250455-001	Batch#:	204708
Matrix:	Soil	Sampled:	11/01/13
Units:	ug/Kg	Received:	11/01/13
Basis:	as received	Analyzed:	11/04/13

Analyte	Result	RL
Freon 12	ND	8.0
Chloromethane	ND	8.0
Vinyl Chloride	ND	8.0
Bromomethane	ND	8.0
Chloroethane	ND	8.0
Trichlorofluoromethane	ND	4.0
Acetone	ND	16
Freon 113	ND	4.0
1,1-Dichloroethene	ND	4.0
Methylene Chloride	ND	16
Carbon Disulfide	ND	4.0
MTBE	ND	4.0
trans-1,2-Dichloroethene	ND	4.0
Vinyl Acetate	ND	40
1,1-Dichloroethane	ND	4.0
2-Butanone	ND	8.0
cis-1,2-Dichloroethene	ND	4.0
2,2-Dichloropropane	ND	4.0
Chloroform	ND	4.0
Bromochloromethane	ND	4.0
1,1,1-Trichloroethane	ND	4.0
1,1-Dichloropropene	ND	4.0
Carbon Tetrachloride	ND	4.0
1,2-Dichloroethane	ND	4.0
Benzene	ND	4.0
Trichloroethene	ND	4.0
1,2-Dichloropropane	ND	4.0
Bromodichloromethane	ND	4.0
Dibromomethane	ND	4.0
4-Methyl-2-Pentanone	ND	8.0
cis-1,3-Dichloropropene	ND	4.0
Toluene	ND	4.0
trans-1,3-Dichloropropene	ND	4.0
1,1,2-Trichloroethane	ND	4.0
2-Hexanone	ND	8.0
1,3-Dichloropropane	ND	4.0
Tetrachloroethene	29	4.0

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	250455	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	EPA 5035
Project#:	13-945C	Analysis:	EPA 8260B
Field ID:	7104-GENEX-SS-5.0	Diln Fac:	0.7974
Lab ID:	250455-001	Batch#:	204708
Matrix:	Soil	Sampled:	11/01/13
Units:	ug/Kg	Received:	11/01/13
Basis:	as received	Analyzed:	11/04/13

Analyte	Result	RL
Dibromochloromethane	ND	4.0
1,2-Dibromoethane	ND	4.0
Chlorobenzene	ND	4.0
1,1,1,2-Tetrachloroethane	ND	4.0
Ethylbenzene	ND	4.0
m,p-Xylenes	ND	4.0
o-Xylene	ND	4.0
Styrene	ND	4.0
Bromoform	ND	4.0
Isopropylbenzene	ND	4.0
1,1,2,2-Tetrachloroethane	ND	4.0
1,2,3-Trichloropropane	ND	4.0
Propylbenzene	ND	4.0
Bromobenzene	ND	4.0
1,3,5-Trimethylbenzene	ND	4.0
2-Chlorotoluene	ND	4.0
4-Chlorotoluene	ND	4.0
tert-Butylbenzene	ND	4.0
1,2,4-Trimethylbenzene	ND	4.0
sec-Butylbenzene	ND	4.0
para-Isopropyl Toluene	ND	4.0
1,3-Dichlorobenzene	ND	4.0
1,4-Dichlorobenzene	ND	4.0
n-Butylbenzene	ND	4.0
1,2-Dichlorobenzene	ND	4.0
1,2-Dibromo-3-Chloropropane	ND	4.0
1,2,4-Trichlorobenzene	ND	4.0
Hexachlorobutadiene	ND	4.0
Naphthalene	ND	4.0
1,2,3-Trichlorobenzene	ND	4.0

Surrogate	%REC	Limits
Dibromofluoromethane	87	80-124
1,2-Dichloroethane-d4	82	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	112	79-127

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	250455	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	EPA 5035
Project#:	13-945C	Analysis:	EPA 8260B
Field ID:	7104-GENEX-WS-5.0	Diln Fac:	0.9542
Lab ID:	250455-002	Batch#:	204708
Matrix:	Soil	Sampled:	11/01/13
Units:	ug/Kg	Received:	11/01/13
Basis:	as received	Analyzed:	11/04/13

Analyte	Result	RL
Freon 12	ND	9.5
Chloromethane	ND	9.5
Vinyl Chloride	ND	9.5
Bromomethane	ND	9.5
Chloroethane	ND	9.5
Trichlorofluoromethane	ND	4.8
Acetone	ND	19
Freon 113	ND	4.8
1,1-Dichloroethene	ND	4.8
Methylene Chloride	ND	19
Carbon Disulfide	ND	4.8
MTBE	ND	4.8
trans-1,2-Dichloroethene	ND	4.8
Vinyl Acetate	ND	48
1,1-Dichloroethane	ND	4.8
2-Butanone	ND	9.5
cis-1,2-Dichloroethene	ND	4.8
2,2-Dichloropropane	ND	4.8
Chloroform	ND	4.8
Bromochloromethane	ND	4.8
1,1,1-Trichloroethane	ND	4.8
1,1-Dichloropropene	ND	4.8
Carbon Tetrachloride	ND	4.8
1,2-Dichloroethane	ND	4.8
Benzene	ND	4.8
Trichloroethene	ND	4.8
1,2-Dichloropropane	ND	4.8
Bromodichloromethane	ND	4.8
Dibromomethane	ND	4.8
4-Methyl-2-Pentanone	ND	9.5
cis-1,3-Dichloropropene	ND	4.8
Toluene	ND	4.8
trans-1,3-Dichloropropene	ND	4.8
1,1,2-Trichloroethane	ND	4.8
2-Hexanone	ND	9.5
1,3-Dichloropropane	ND	4.8
Tetrachloroethene	36	4.8

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	250455	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	EPA 5035
Project#:	13-945C	Analysis:	EPA 8260B
Field ID:	7104-GENEX-WS-5.0	Diln Fac:	0.9542
Lab ID:	250455-002	Batch#:	204708
Matrix:	Soil	Sampled:	11/01/13
Units:	ug/Kg	Received:	11/01/13
Basis:	as received	Analyzed:	11/04/13

Analyte	Result	RL
Dibromochloromethane	ND	4.8
1,2-Dibromoethane	ND	4.8
Chlorobenzene	ND	4.8
1,1,1,2-Tetrachloroethane	ND	4.8
Ethylbenzene	ND	4.8
m,p-Xylenes	ND	4.8
o-Xylene	ND	4.8
Styrene	ND	4.8
Bromoform	ND	4.8
Isopropylbenzene	ND	4.8
1,1,2,2-Tetrachloroethane	ND	4.8
1,2,3-Trichloropropane	ND	4.8
Propylbenzene	ND	4.8
Bromobenzene	ND	4.8
1,3,5-Trimethylbenzene	ND	4.8
2-Chlorotoluene	ND	4.8
4-Chlorotoluene	ND	4.8
tert-Butylbenzene	ND	4.8
1,2,4-Trimethylbenzene	ND	4.8
sec-Butylbenzene	ND	4.8
para-Isopropyl Toluene	ND	4.8
1,3-Dichlorobenzene	ND	4.8
1,4-Dichlorobenzene	ND	4.8
n-Butylbenzene	ND	4.8
1,2-Dichlorobenzene	ND	4.8
1,2-Dibromo-3-Chloropropane	ND	4.8
1,2,4-Trichlorobenzene	ND	4.8
Hexachlorobutadiene	ND	4.8
Naphthalene	ND	4.8
1,2,3-Trichlorobenzene	ND	4.8

Surrogate	%REC	Limits
Dibromofluoromethane	89	80-124
1,2-Dichloroethane-d4	95	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	108	79-127

ND= Not Detected

RL= Reporting Limit

# Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	250455	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	EPA 5035
Project#:	13-945C	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC714676	Batch#:	204708
Matrix:	Soil	Analyzed:	11/04/13
Units:	ug/Kg		

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0

ND= Not Detected

RL= Reporting Limit



## Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	250455	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	EPA 5035
Project#:	13-945C	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC714676	Batch#:	204708
Matrix:	Soil	Analyzed:	11/04/13
Units:	ug/Kg		

Analyte	Result	RL
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	90	80-124
1,2-Dichloroethane-d4	93	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	100	79-127

ND= Not Detected

RL= Reporting Limit

## Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	250455	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	EPA 5035
Project#:	13-945C	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC714677	Batch#:	204708
Matrix:	Soil	Analyzed:	11/04/13
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	20.00	18.72	94	67-132
Benzene	20.00	20.34	102	77-126
Trichloroethene	20.00	19.35	97	76-127
Toluene	20.00	20.77	104	76-124
Chlorobenzene	20.00	22.13	111	76-120

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-124
1,2-Dichloroethane-d4	95	80-137
Toluene-d8	99	80-120
Bromofluorobenzene	98	79-127





**ct** Curtis & Tompkins, Ltd.  
Analytical Laboratories, Since 1878





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 250526  
ANALYTICAL REPORT**

Iris Environmental  
1438 Webster Street  
Oakland, CA 94612

Project : 13-945C  
Location : Park Ave. Cleaners  
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
7104-GENEX-NS-5.0	250526-001
7104-GENEX-FLOOR-10.0	250526-002

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: \_\_\_\_\_

Tracy Babjar  
Project Manager  
tracy.babjar@ctberk.com  
(510) 204-2226

Date: 11/06/2013

NELAP # 01107CA

#### CASE NARRATIVE

Laboratory number: 250526  
Client: Iris Environmental  
Project: 13-945C  
Location: Park Ave. Cleaners  
Request Date: 11/05/13  
Samples Received: 11/05/13

This data package contains sample and QC results for two soil samples, requested for the above referenced project on 11/05/13. The samples were received cold and intact.

**Volatile Organics by GC/MS (EPA 8260B):**

No analytical problems were encountered.

250526


**IRIS ENVIRONMENTAL**

1438 Webster Street, Suite 302  
Oakland, California 94612  
(510) 834-4747 tel  
(510) 834-4199 fax

**CHAIN-OF-CUSTODY**

Date: 11/5/13

Page: 1 of 1

No: 003656

**Analyses Required**

Sampler Name(s):

Tiffany Klitzke

Signature(s):

VOCs by 8200B

24 Hour RUSH

Number of Containers

Sample ID

Date

Time

Matrix

Pres.

1 7104-GenEx-NS-5.0

11/5/13

1230

S

\*

X

X

4

2 7104-GenEx-Floor-10.0

11/5/13

1230

S

\*

X

X

4

**PROJECT INFORMATION**

Project Name:

Park Avenue Cleaners

Project Number:

13-945C

Contact Person:

Tiffany Klitzke Craig Pollcher

E-mail:

tiffany@irisenv.com craig@irisenv.com

Contact Telephone:

510-834-4747

Report: Routine (Level 2) Level 3 Level 4 EDD

TAT: 10-day 5-day 72-hr 48-hr (24-hr) Other:

**Special Instructions/Comments:**

\* Sample containers include:

one 2 oz unpreserved glass jar

One 40mL vial w/meat

two 40mL vial w/black water

24 Hour

RUSH

**RELINQUISHED BY:**

Printed Name

Tiffany Klitzke

Signature

Company

IRIS

Time/Date

1510 11/5/13

**RECEIVED BY:**

Printed Name

T. B. 17

Signature

Company

E. S. 17

Time/Date

1510 11/5/13

**RELINQUISHED BY:**

Printed Name

Signature

Company

Time/Date

**RECEIVED BY:**

Printed Name

Signature

Company

Time/Date

# COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 250526 Date Received 11-5-13 Number of coolers 1  
 Client IRIS Project Park Avenue Cleaners

Date Opened 11-5-13 By (print) PV (sign) [Signature]  
 Date Logged in 11/5/13 By (print) TK (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) \_\_\_\_\_ YES ☒ NO  
 Shipping info \_\_\_\_\_

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO  
 How many \_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_

2B. Were custody seals intact upon arrival? \_\_\_\_\_ YES NO ☒ N/A

3. Were custody papers dry and intact when received? \_\_\_\_\_ YES NO

4. Were custody papers filled out properly (ink, signed, etc)? \_\_\_\_\_ YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) \_\_\_\_\_ YES NO

6. Indicate the packing in cooler: (if other, describe) \_\_\_\_\_

☐ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None  
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: \* Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 39

☒ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☒ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? \_\_\_\_\_ YES NO  
 If YES, what time were they transferred to freezer? 1515

9. Did all bottles arrive unbroken/unopened? \_\_\_\_\_ YES NO

10. Are there any missing / extra samples? \_\_\_\_\_ YES ☒ NO

11. Are samples in the appropriate containers for indicated tests? \_\_\_\_\_ YES NO

12. Are sample labels present, in good condition and complete? \_\_\_\_\_ YES NO

13. Do the sample labels agree with custody papers? \_\_\_\_\_ YES NO

14. Was sufficient amount of sample sent for tests requested? \_\_\_\_\_ YES NO

15. Are the samples appropriately preserved? \_\_\_\_\_ YES NO N/A

16. Did you check preservatives for all bottles for each sample? \_\_\_\_\_ YES NO ☒ N/A

17. Did you document your preservative check? \_\_\_\_\_ YES NO ☒ N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? \_\_\_\_\_ YES NO ☒ N/A

19. Did you change the hold time in LIMS for preserved terracores? \_\_\_\_\_ YES NO N/A

20. Are bubbles > 6mm absent in VOA samples? \_\_\_\_\_ YES NO ☒ N/A

21. Was the client contacted concerning this sample delivery? \_\_\_\_\_ YES ☒ NO  
 If YES, Who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

## COMMENTS

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### Purgeable Organics by GC/MS

Lab #:	250526	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	EPA 5035
Project#:	13-945C	Analysis:	EPA 8260B
Field ID:	7104-GENEX-NS-5.0	Diln Fac:	0.9881
Lab ID:	250526-001	Batch#:	204747
Matrix:	Soil	Sampled:	11/05/13
Units:	ug/Kg	Received:	11/05/13
Basis:	as received	Analyzed:	11/05/13

Analyte	Result	RL
Freon 12	ND	9.9
Chloromethane	ND	9.9
Vinyl Chloride	ND	9.9
Bromomethane	ND	9.9
Chloroethane	ND	9.9
Trichlorofluoromethane	ND	4.9
Acetone	ND	20
Freon 113	ND	4.9
1,1-Dichloroethene	ND	4.9
Methylene Chloride	ND	20
Carbon Disulfide	ND	4.9
MTBE	ND	4.9
trans-1,2-Dichloroethene	ND	4.9
Vinyl Acetate	ND	49
1,1-Dichloroethane	ND	4.9
2-Butanone	ND	9.9
cis-1,2-Dichloroethene	ND	4.9
2,2-Dichloropropane	ND	4.9
Chloroform	ND	4.9
Bromochloromethane	ND	4.9
1,1,1-Trichloroethane	ND	4.9
1,1-Dichloropropene	ND	4.9
Carbon Tetrachloride	ND	4.9
1,2-Dichloroethane	ND	4.9
Benzene	ND	4.9
Trichloroethene	ND	4.9
1,2-Dichloropropane	ND	4.9
Bromodichloromethane	ND	4.9
Dibromomethane	ND	4.9
4-Methyl-2-Pentanone	ND	9.9
cis-1,3-Dichloropropene	ND	4.9
Toluene	ND	4.9
trans-1,3-Dichloropropene	ND	4.9
1,1,2-Trichloroethane	ND	4.9
2-Hexanone	ND	9.9
1,3-Dichloropropane	ND	4.9
Tetrachloroethene	23	4.9

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	250526	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	EPA 5035
Project#:	13-945C	Analysis:	EPA 8260B
Field ID:	7104-GENEX-NS-5.0	Diln Fac:	0.9881
Lab ID:	250526-001	Batch#:	204747
Matrix:	Soil	Sampled:	11/05/13
Units:	ug/Kg	Received:	11/05/13
Basis:	as received	Analyzed:	11/05/13

Analyte	Result	RL
Dibromochloromethane	ND	4.9
1,2-Dibromoethane	ND	4.9
Chlorobenzene	ND	4.9
1,1,1,2-Tetrachloroethane	ND	4.9
Ethylbenzene	ND	4.9
m,p-Xylenes	ND	4.9
o-Xylene	ND	4.9
Styrene	ND	4.9
Bromoform	ND	4.9
Isopropylbenzene	ND	4.9
1,1,2,2-Tetrachloroethane	ND	4.9
1,2,3-Trichloropropane	ND	4.9
Propylbenzene	ND	4.9
Bromobenzene	ND	4.9
1,3,5-Trimethylbenzene	ND	4.9
2-Chlorotoluene	ND	4.9
4-Chlorotoluene	ND	4.9
tert-Butylbenzene	ND	4.9
1,2,4-Trimethylbenzene	ND	4.9
sec-Butylbenzene	ND	4.9
para-Isopropyl Toluene	ND	4.9
1,3-Dichlorobenzene	ND	4.9
1,4-Dichlorobenzene	ND	4.9
n-Butylbenzene	ND	4.9
1,2-Dichlorobenzene	ND	4.9
1,2-Dibromo-3-Chloropropane	ND	4.9
1,2,4-Trichlorobenzene	ND	4.9
Hexachlorobutadiene	ND	4.9
Naphthalene	ND	4.9
1,2,3-Trichlorobenzene	ND	4.9

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-124
1,2-Dichloroethane-d4	112	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	100	79-127

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	250526	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	EPA 5035
Project#:	13-945C	Analysis:	EPA 8260B
Field ID:	7104-GENEX-FLOOR-10.0	Diln Fac:	0.9398
Lab ID:	250526-002	Batch#:	204747
Matrix:	Soil	Sampled:	11/05/13
Units:	ug/Kg	Received:	11/05/13
Basis:	as received	Analyzed:	11/05/13

Analyte	Result	RL
Freon 12	ND	9.4
Chloromethane	ND	9.4
Vinyl Chloride	ND	9.4
Bromomethane	ND	9.4
Chloroethane	ND	9.4
Trichlorofluoromethane	ND	4.7
Acetone	ND	19
Freon 113	ND	4.7
1,1-Dichloroethene	ND	4.7
Methylene Chloride	ND	19
Carbon Disulfide	ND	4.7
MTBE	ND	4.7
trans-1,2-Dichloroethene	ND	4.7
Vinyl Acetate	ND	47
1,1-Dichloroethane	ND	4.7
2-Butanone	ND	9.4
cis-1,2-Dichloroethene	ND	4.7
2,2-Dichloropropane	ND	4.7
Chloroform	ND	4.7
Bromochloromethane	ND	4.7
1,1,1-Trichloroethane	ND	4.7
1,1-Dichloropropene	ND	4.7
Carbon Tetrachloride	ND	4.7
1,2-Dichloroethane	ND	4.7
Benzene	ND	4.7
Trichloroethene	ND	4.7
1,2-Dichloropropane	ND	4.7
Bromodichloromethane	ND	4.7
Dibromomethane	ND	4.7
4-Methyl-2-Pentanone	ND	9.4
cis-1,3-Dichloropropene	ND	4.7
Toluene	ND	4.7
trans-1,3-Dichloropropene	ND	4.7
1,1,2-Trichloroethane	ND	4.7
2-Hexanone	ND	9.4
1,3-Dichloropropane	ND	4.7
Tetrachloroethene	22	4.7

ND= Not Detected

RL= Reporting Limit

### Purgeable Organics by GC/MS

Lab #:	250526	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	EPA 5035
Project#:	13-945C	Analysis:	EPA 8260B
Field ID:	7104-GENEX-FLOOR-10.0	Diln Fac:	0.9398
Lab ID:	250526-002	Batch#:	204747
Matrix:	Soil	Sampled:	11/05/13
Units:	ug/Kg	Received:	11/05/13
Basis:	as received	Analyzed:	11/05/13

Analyte	Result	RL
Dibromochloromethane	ND	4.7
1,2-Dibromoethane	ND	4.7
Chlorobenzene	ND	4.7
1,1,1,2-Tetrachloroethane	ND	4.7
Ethylbenzene	ND	4.7
m,p-Xylenes	ND	4.7
o-Xylene	ND	4.7
Styrene	ND	4.7
Bromoform	ND	4.7
Isopropylbenzene	ND	4.7
1,1,2,2-Tetrachloroethane	ND	4.7
1,2,3-Trichloropropane	ND	4.7
Propylbenzene	ND	4.7
Bromobenzene	ND	4.7
1,3,5-Trimethylbenzene	ND	4.7
2-Chlorotoluene	ND	4.7
4-Chlorotoluene	ND	4.7
tert-Butylbenzene	ND	4.7
1,2,4-Trimethylbenzene	ND	4.7
sec-Butylbenzene	ND	4.7
para-Isopropyl Toluene	ND	4.7
1,3-Dichlorobenzene	ND	4.7
1,4-Dichlorobenzene	ND	4.7
n-Butylbenzene	ND	4.7
1,2-Dichlorobenzene	ND	4.7
1,2-Dibromo-3-Chloropropane	ND	4.7
1,2,4-Trichlorobenzene	ND	4.7
Hexachlorobutadiene	ND	4.7
Naphthalene	ND	4.7
1,2,3-Trichlorobenzene	ND	4.7

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-124
1,2-Dichloroethane-d4	114	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	99	79-127

ND= Not Detected

RL= Reporting Limit

## Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	250526	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	EPA 5035
Project#:	13-945C	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC714833	Batch#:	204747
Matrix:	Soil	Analyzed:	11/05/13
Units:	ug/Kg		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	23.93	96	67-132
Benzene	25.00	24.75	99	77-126
Trichloroethene	25.00	25.75	103	76-127
Toluene	25.00	25.55	102	76-124
Chlorobenzene	25.00	27.09	108	76-120

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-124
1,2-Dichloroethane-d4	105	80-137
Toluene-d8	102	80-120
Bromofluorobenzene	97	79-127

# Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	250526	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	EPA 5035
Project#:	13-945C	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC714834	Batch#:	204747
Matrix:	Soil	Analyzed:	11/05/13
Units:	ug/Kg		

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0

ND= Not Detected

RL= Reporting Limit



# Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	250526	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	EPA 5035
Project#:	13-945C	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC714834	Batch#:	204747
Matrix:	Soil	Analyzed:	11/05/13
Units:	ug/Kg		

Analyte	Result	RL
Dibromochloromethane	ND	5.0
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-124
1,2-Dichloroethane-d4	108	80-137
Toluene-d8	104	80-120
Bromofluorobenzene	98	79-127

ND= Not Detected

RL= Reporting Limit

# Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	250526	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	EPA 5030B
Project#:	13-945C	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	204747
MSS Lab ID:	250476-001	Sampled:	10/31/13
Matrix:	Soil	Received:	11/04/13
Units:	ug/Kg	Analyzed:	11/05/13
Basis:	as received		

Type: MS Diln Fac: 0.9311  
 Lab ID: QC714835

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.5756	46.55	43.23	93	52-132
Benzene	<0.6707	46.55	44.89	96	54-121
Trichloroethene	<0.6985	46.55	46.98	101	46-138
Toluene	<0.7346	46.55	44.81	96	47-120
Chlorobenzene	<0.6022	46.55	44.84	96	41-120

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-124
1,2-Dichloroethane-d4	111	80-137
Toluene-d8	103	80-120
Bromofluorobenzene	96	79-127

Type: MSD Diln Fac: 0.9398  
 Lab ID: QC714836

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	46.99	42.91	91	52-132	2	46
Benzene	46.99	44.48	95	54-121	2	43
Trichloroethene	46.99	45.68	97	46-138	4	50
Toluene	46.99	43.83	93	47-120	3	53
Chlorobenzene	46.99	44.44	95	41-120	2	50

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-124
1,2-Dichloroethane-d4	109	80-137
Toluene-d8	101	80-120
Bromofluorobenzene	93	79-127

RPD= Relative Percent Difference









Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 249693  
ANALYTICAL REPORT**

Iris Environmental  
1438 Webster Street  
Oakland, CA 94612

Project : 13-945C  
Location : Park Avenue Cleaners  
Level : II

Sample ID

SS-04

SS-05

X-DUP

Lab ID

249693-001

249693-002

249693-003

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: \_\_\_\_\_

Tracy Babjar  
Project Manager  
tracy.babjar@ctberk.com  
(510) 204-2226

Date: 10/15/2013

NELAP # 01107CA

### CASE NARRATIVE

Laboratory number: 249693  
Client: Iris Environmental  
Project: 13-945C  
Location: Park Avenue Cleaners  
Request Date: 10/08/13  
Samples Received: 10/08/13

This data package contains sample and QC results for three air samples, requested for the above referenced project on 10/08/13. The samples were received intact.

**Volatile Organics in Air by MS (EPA TO-15):**

No analytical problems were encountered.





# COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 249693 Date Received 10/8/13 Number of coolers 1  
 Client IRIS Project PARK AVENUE CLEANERS (13-945C)

Date Opened 10/8/13 By (print) TR (sign) Ima Raka  
 Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc) \_\_\_\_\_ YES (NO)  
 Shipping info \_\_\_\_\_

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples (X) NO  
 How many \_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_

2B. Were custody seals intact upon arrival? \_\_\_\_\_ YES NO (N/A)

3. Were custody papers dry and intact when received? (YES) YES NO

4. Were custody papers filled out properly (ink, signed, etc)? (YES) YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) YES NO

6. Indicate the packing in cooler: (if other, describe) \_\_\_\_\_

☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☒ None  
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: \* Notify PM if temperature exceeds 6°C

Type of ice used: ☐ Wet ☐ Blue/Gel ☒ None Temp(°C) \_\_\_\_\_

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? \_\_\_\_\_ YES (NO)

If YES, what time were they transferred to freezer? \_\_\_\_\_

9. Did all bottles arrive unbroken/unopened? (YES) YES NO

10. Are there any missing / extra samples? (NO) YES NO

11. Are samples in the appropriate containers for indicated tests? (YES) YES NO

12. Are sample labels present, in good condition and complete? (YES) YES NO

13. Do the sample labels agree with custody papers? (YES) YES NO

14. Was sufficient amount of sample sent for tests requested? (YES) YES NO

15. Are the samples appropriately preserved? \_\_\_\_\_ YES NO (N/A)

16. Did you check preservatives for all bottles for each sample? \_\_\_\_\_ YES NO (N/A)

17. Did you document your preservative check? \_\_\_\_\_ YES NO (N/A)

18. Did you change the hold time in LIMS for unpreserved VOAs? \_\_\_\_\_ YES NO (N/A)

19. Did you change the hold time in LIMS for preserved terracores? \_\_\_\_\_ YES NO (N/A)

20. Are bubbles > 6mm absent in VOA samples? \_\_\_\_\_ YES NO (N/A)

21. Was the client contacted concerning this sample delivery? \_\_\_\_\_ YES (NO)

If YES, Who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

## COMMENTS

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### Volatile Organics in Air

Lab #:	249693	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Field ID:	SS-04	Diln Fac:	1.710
Lab ID:	249693-001	Batch#:	203937
Matrix:	Air	Sampled:	10/08/13
Units (V):	ppbv	Received:	10/08/13
Units (M):	ug/m3	Analyzed:	10/11/13

Analyte	Result (V)	RL	Result (M)	RL
Freon 12	ND	0.86	ND	4.2
Freon 114	ND	0.86	ND	6.0
Chloromethane	ND	0.86	ND	1.8
Vinyl Chloride	ND	0.86	ND	2.2
1,3-Butadiene	ND	0.86	ND	1.9
Bromomethane	ND	0.86	ND	3.3
Chloroethane	ND	0.86	ND	2.3
Trichlorofluoromethane	ND	0.86	ND	4.8
Acrolein	ND	3.4	ND	7.8
1,1-Dichloroethene	ND	0.86	ND	3.4
Freon 113	ND	0.86	ND	6.6
Acetone	7.2	3.4	17	8.1
Carbon Disulfide	ND	0.86	ND	2.7
Methylene Chloride	2.9	0.86	10	3.0
trans-1,2-Dichloroethene	ND	0.86	ND	3.4
MTBE	ND	0.86	ND	3.1
n-Hexane	ND	0.86	ND	3.0
1,1-Dichloroethane	ND	0.86	ND	3.5
Vinyl Acetate	ND	0.86	ND	3.0
cis-1,2-Dichloroethene	ND	0.86	ND	3.4
2-Butanone	ND	0.86	ND	2.5
Ethyl Acetate	ND	0.86	ND	3.1
Tetrahydrofuran	ND	0.86	ND	2.5
Chloroform	14	0.86	67	4.2
1,1,1-Trichloroethane	ND	0.86	ND	4.7
Cyclohexane	ND	0.86	ND	2.9
Carbon Tetrachloride	ND	0.86	ND	5.4
Benzene	ND	0.86	ND	2.7
1,2-Dichloroethane	ND	0.86	ND	3.5
n-Heptane	ND	0.86	ND	3.5
Trichloroethene	1.6	0.86	8.7	4.6
1,2-Dichloropropane	ND	0.86	ND	4.0
Bromodichloromethane	2.5	0.86	16	5.7
cis-1,3-Dichloropropene	ND	0.86	ND	3.9
4-Methyl-2-Pentanone	ND	0.86	ND	3.5

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

### Volatile Organics in Air

Lab #:	249693	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Field ID:	SS-04	Diln Fac:	1.710
Lab ID:	249693-001	Batch#:	203937
Matrix:	Air	Sampled:	10/08/13
Units (V):	ppbv	Received:	10/08/13
Units (M):	ug/m3	Analyzed:	10/11/13

Analyte	Result (V)	RL	Result (M)	RL
Toluene	ND	0.86	ND	3.2
trans-1,3-Dichloropropene	ND	0.86	ND	3.9
1,1,2-Trichloroethane	ND	0.86	ND	4.7
Tetrachloroethene	21	0.86	140	5.8
2-Hexanone	ND	0.86	ND	3.5
Dibromochloromethane	2.4	0.86	20	7.3
1,2-Dibromoethane	ND	0.86	ND	6.6
Chlorobenzene	ND	0.86	ND	3.9
Ethylbenzene	ND	0.86	ND	3.7
m,p-Xylenes	ND	0.86	ND	3.7
o-Xylene	ND	0.86	ND	3.7
Styrene	ND	0.86	ND	3.6
Bromoform	ND	0.86	ND	8.8
1,1,2,2-Tetrachloroethane	ND	0.86	ND	5.9
4-Ethyltoluene	ND	0.86	ND	4.2
1,3,5-Trimethylbenzene	ND	0.86	ND	4.2
1,2,4-Trimethylbenzene	ND	0.86	ND	4.2
1,3-Dichlorobenzene	ND	0.86	ND	5.1
1,4-Dichlorobenzene	ND	0.86	ND	5.1
Benzyl chloride	ND	0.86	ND	4.4
1,2-Dichlorobenzene	ND	0.86	ND	5.1
1,2,4-Trichlorobenzene	ND	0.86	ND	6.3
Hexachlorobutadiene	ND	0.86	ND	9.1
Naphthalene	ND	3.4	ND	18

Surrogate	%REC	Limits
Bromofluorobenzene	101	70-130

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

### Volatile Organics in Air

Lab #:	249693	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Field ID:	SS-05	Diln Fac:	20.16
Lab ID:	249693-002	Batch#:	203937
Matrix:	Air	Sampled:	10/08/13
Units (V):	ppbv	Received:	10/08/13
Units (M):	ug/m3	Analyzed:	10/11/13

Analyte	Result (V)	RL	Result (M)	RL
Freon 12	ND	10	ND	50
Freon 114	ND	10	ND	70
Chloromethane	ND	10	ND	21
Vinyl Chloride	ND	10	ND	26
1,3-Butadiene	ND	10	ND	22
Bromomethane	ND	10	ND	39
Chloroethane	ND	10	ND	27
Trichlorofluoromethane	ND	10	ND	57
Acrolein	ND	40	ND	92
1,1-Dichloroethene	ND	10	ND	40
Freon 113	ND	10	ND	77
Acetone	ND	40	ND	96
Carbon Disulfide	ND	10	ND	31
Methylene Chloride	ND	10	ND	35
trans-1,2-Dichloroethene	ND	10	ND	40
MTBE	ND	10	ND	36
n-Hexane	ND	10	ND	36
1,1-Dichloroethane	ND	10	ND	41
Vinyl Acetate	ND	10	ND	35
cis-1,2-Dichloroethene	ND	10	ND	40
2-Butanone	ND	10	ND	30
Ethyl Acetate	ND	10	ND	36
Tetrahydrofuran	ND	10	ND	30
Chloroform	ND	10	ND	49
1,1,1-Trichloroethane	ND	10	ND	55
Cyclohexane	ND	10	ND	35
Carbon Tetrachloride	ND	10	ND	63
Benzene	ND	10	ND	32
1,2-Dichloroethane	ND	10	ND	41
n-Heptane	ND	10	ND	41
Trichloroethene	ND	10	ND	54
1,2-Dichloropropane	ND	10	ND	47
Bromodichloromethane	ND	10	ND	68
cis-1,3-Dichloropropene	ND	10	ND	46
4-Methyl-2-Pentanone	ND	10	ND	41

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

### Volatile Organics in Air

Lab #:	249693	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Field ID:	SS-05	Diln Fac:	20.16
Lab ID:	249693-002	Batch#:	203937
Matrix:	Air	Sampled:	10/08/13
Units (V):	ppbv	Received:	10/08/13
Units (M):	ug/m3	Analyzed:	10/11/13

Analyte	Result (V)	RL	Result (M)	RL
Toluene	ND	10	ND	38
trans-1,3-Dichloropropene	ND	10	ND	46
1,1,2-Trichloroethane	ND	10	ND	55
Tetrachloroethene	1,200	10	8,200	68
2-Hexanone	ND	10	ND	41
Dibromochloromethane	ND	10	ND	86
1,2-Dibromoethane	ND	10	ND	77
Chlorobenzene	ND	10	ND	46
Ethylbenzene	ND	10	ND	44
m,p-Xylenes	ND	10	ND	44
o-Xylene	ND	10	ND	44
Styrene	ND	10	ND	43
Bromoform	ND	10	ND	100
1,1,2,2-Tetrachloroethane	ND	10	ND	69
4-Ethyltoluene	ND	10	ND	50
1,3,5-Trimethylbenzene	ND	10	ND	50
1,2,4-Trimethylbenzene	ND	10	ND	50
1,3-Dichlorobenzene	ND	10	ND	61
1,4-Dichlorobenzene	ND	10	ND	61
Benzyl chloride	ND	10	ND	52
1,2-Dichlorobenzene	ND	10	ND	61
1,2,4-Trichlorobenzene	ND	10	ND	75
Hexachlorobutadiene	ND	10	ND	110
Naphthalene	ND	40	ND	210

Surrogate	%REC	Limits
Bromofluorobenzene	103	70-130

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

### Volatile Organics in Air

Lab #:	249693	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Field ID:	X-DUP	Diln Fac:	1.720
Lab ID:	249693-003	Batch#:	203937
Matrix:	Air	Sampled:	10/08/13
Units (V):	ppbv	Received:	10/08/13
Units (M):	ug/m3	Analyzed:	10/11/13

Analyte	Result (V)	RL	Result (M)	RL
Freon 12	ND	0.86	ND	4.3
Freon 114	ND	0.86	ND	6.0
Chloromethane	ND	0.86	ND	1.8
Vinyl Chloride	ND	0.86	ND	2.2
1,3-Butadiene	ND	0.86	ND	1.9
Bromomethane	ND	0.86	ND	3.3
Chloroethane	ND	0.86	ND	2.3
Trichlorofluoromethane	ND	0.86	ND	4.8
Acrolein	ND	3.4	ND	7.9
1,1-Dichloroethene	ND	0.86	ND	3.4
Freon 113	ND	0.86	ND	6.6
Acetone	4.5	3.4	11	8.2
Carbon Disulfide	ND	0.86	ND	2.7
Methylene Chloride	3.0	0.86	10	3.0
trans-1,2-Dichloroethene	ND	0.86	ND	3.4
MTBE	ND	0.86	ND	3.1
n-Hexane	ND	0.86	ND	3.0
1,1-Dichloroethane	ND	0.86	ND	3.5
Vinyl Acetate	ND	0.86	ND	3.0
cis-1,2-Dichloroethene	ND	0.86	ND	3.4
2-Butanone	ND	0.86	ND	2.5
Ethyl Acetate	ND	0.86	ND	3.1
Tetrahydrofuran	ND	0.86	ND	2.5
Chloroform	14	0.86	69	4.2
1,1,1-Trichloroethane	ND	0.86	ND	4.7
Cyclohexane	ND	0.86	ND	3.0
Carbon Tetrachloride	ND	0.86	ND	5.4
Benzene	ND	0.86	ND	2.7
1,2-Dichloroethane	ND	0.86	ND	3.5
n-Heptane	ND	0.86	ND	3.5
Trichloroethene	2.3	0.86	13	4.6
1,2-Dichloropropane	ND	0.86	ND	4.0
Bromodichloromethane	2.4	0.86	16	5.8
cis-1,3-Dichloropropene	ND	0.86	ND	3.9
4-Methyl-2-Pentanone	ND	0.86	ND	3.5

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units



### Volatile Organics in Air

Lab #:	249693	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Field ID:	X-DUP	Diln Fac:	1.720
Lab ID:	249693-003	Batch#:	203937
Matrix:	Air	Sampled:	10/08/13
Units (V):	ppbv	Received:	10/08/13
Units (M):	ug/m3	Analyzed:	10/11/13

Analyte	Result (V)	RL	Result (M)	RL
Toluene	ND	0.86	ND	3.2
trans-1,3-Dichloropropene	ND	0.86	ND	3.9
1,1,2-Trichloroethane	ND	0.86	ND	4.7
Tetrachloroethene	21	0.86	140	5.8
2-Hexanone	ND	0.86	ND	3.5
Dibromochloromethane	2.3	0.86	20	7.3
1,2-Dibromoethane	ND	0.86	ND	6.6
Chlorobenzene	ND	0.86	ND	4.0
Ethylbenzene	ND	0.86	ND	3.7
m,p-Xylenes	ND	0.86	ND	3.7
o-Xylene	ND	0.86	ND	3.7
Styrene	ND	0.86	ND	3.7
Bromoform	ND	0.86	ND	8.9
1,1,2,2-Tetrachloroethane	ND	0.86	ND	5.9
4-Ethyltoluene	ND	0.86	ND	4.2
1,3,5-Trimethylbenzene	ND	0.86	ND	4.2
1,2,4-Trimethylbenzene	ND	0.86	ND	4.2
1,3-Dichlorobenzene	ND	0.86	ND	5.2
1,4-Dichlorobenzene	ND	0.86	ND	5.2
Benzyl chloride	ND	0.86	ND	4.5
1,2-Dichlorobenzene	ND	0.86	ND	5.2
1,2,4-Trichlorobenzene	ND	0.86	ND	6.4
Hexachlorobutadiene	ND	0.86	ND	9.2
Naphthalene	ND	3.4	ND	18

Surrogate	%REC	Limits
Bromofluorobenzene	102	70-130

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

# Batch QC Report

Volatile Organics in Air			
Lab #:	249693	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	203937
Units (V):	ppbv	Analyzed:	10/10/13
Diln Fac:	1.000		

Type: BS Lab ID: QC711435

Analyte	Spiked	Result (V)	%REC	Limits
Freon 12	16.67	18.59	112	70-130
Freon 114	16.67	19.07	114	70-130
Chloromethane	16.67	19.92	120	70-130
Vinyl Chloride	16.67	18.81	113	70-130
1,3-Butadiene	16.67	18.97	114	70-130
Bromomethane	16.67	20.06	120	70-130
Chloroethane	16.67	21.24	127	70-130
Trichlorofluoromethane	16.67	18.81	113	70-130
Acrolein	16.67	17.82	107	61-130
1,1-Dichloroethene	16.67	21.26	128	70-130
Freon 113	16.67	18.31	110	70-130
Acetone	16.67	17.18	103	70-130
Carbon Disulfide	16.67	18.13	109	70-130
Methylene Chloride	16.67	17.23	103	70-130
trans-1,2-Dichloroethene	16.67	18.97	114	70-130
MTBE	16.67	18.99	114	70-130
n-Hexane	16.67	18.26	110	70-130
1,1-Dichloroethane	16.67	19.41	116	70-130
Vinyl Acetate	16.67	21.24	127	70-130
cis-1,2-Dichloroethene	16.67	18.24	109	70-130
2-Butanone	16.67	18.71	112	70-130
Ethyl Acetate	16.67	18.24	109	70-130
Tetrahydrofuran	16.67	15.80	95	70-130
Chloroform	16.67	18.47	111	70-130
1,1,1-Trichloroethane	16.67	18.13	109	70-130
Cyclohexane	16.67	19.27	116	70-130
Carbon Tetrachloride	16.67	19.35	116	70-130
Benzene	16.67	18.26	110	70-130
1,2-Dichloroethane	16.67	18.89	113	70-130
n-Heptane	16.67	18.66	112	70-130
Trichloroethene	16.67	18.05	108	70-130
1,2-Dichloropropane	16.67	19.01	114	70-130
Bromodichloromethane	16.67	18.44	111	70-130
cis-1,3-Dichloropropene	16.67	18.92	114	70-130

RPD= Relative Percent Difference

Result V= Result in volume units

# Batch QC Report

Volatile Organics in Air			
Lab #:	249693	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	203937
Units (V):	ppbv	Analyzed:	10/10/13
Diln Fac:	1.000		

Analyte	Spiked	Result (V)	%REC	Limits
4-Methyl-2-Pentanone	16.67	18.18	109	70-130
Toluene	16.67	17.79	107	70-130
trans-1,3-Dichloropropene	16.67	19.03	114	70-130
1,1,2-Trichloroethane	16.67	18.01	108	70-130
Tetrachloroethene	16.67	18.11	109	70-130
2-Hexanone	16.67	18.60	112	70-130
Dibromochloromethane	16.67	18.68	112	70-130
1,2-Dibromoethane	16.67	18.74	112	70-130
Chlorobenzene	16.67	17.56	105	70-130
Ethylbenzene	16.67	16.70	100	70-130
m,p-Xylenes	33.33	33.81	101	70-130
o-Xylene	16.67	16.63	100	70-130
Styrene	16.67	19.86	119	70-130
Bromoform	16.67	20.62	124	70-130
1,1,2,2-Tetrachloroethane	16.67	16.70	100	70-130
4-Ethyltoluene	16.67	17.23	103	70-130
1,3,5-Trimethylbenzene	16.67	16.19	97	70-130
1,2,4-Trimethylbenzene	16.67	16.54	99	70-130
1,3-Dichlorobenzene	16.67	16.44	99	70-130
1,4-Dichlorobenzene	16.67	16.13	97	70-130
Benzyl chloride	16.67	17.82	107	70-130
1,2-Dichlorobenzene	16.67	16.32	98	70-130
1,2,4-Trichlorobenzene	16.67	17.86	107	70-130
Hexachlorobutadiene	16.67	14.16	85	70-130
Naphthalene	16.67	18.04	108	67-130

Surrogate	%REC	Limits
Bromofluorobenzene	98	70-130

RPD= Relative Percent Difference  
 Result V= Result in volume units

# Batch QC Report

Volatile Organics in Air			
Lab #:	249693	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	203937
Units (V):	ppbv	Analyzed:	10/10/13
Diln Fac:	1.000		

Type: BSD Lab ID: QC711436

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim
Freon 12	16.67	18.99	114	70-130	2	20
Freon 114	16.67	18.74	112	70-130	2	20
Chloromethane	16.67	19.88	119	70-130	0	24
Vinyl Chloride	16.67	18.86	113	70-130	0	24
1,3-Butadiene	16.67	19.20	115	70-130	1	22
Bromomethane	16.67	20.17	121	70-130	1	20
Chloroethane	16.67	20.67	124	70-130	3	20
Trichlorofluoromethane	16.67	18.74	112	70-130	0	21
Acrolein	16.67	18.68	112	61-130	5	36
1,1-Dichloroethene	16.67	20.92	126	70-130	2	20
Freon 113	16.67	18.26	110	70-130	0	24
Acetone	16.67	17.03	102	70-130	1	21
Carbon Disulfide	16.67	18.17	109	70-130	0	21
Methylene Chloride	16.67	17.01	102	70-130	1	24
trans-1,2-Dichloroethene	16.67	19.00	114	70-130	0	20
MTBE	16.67	19.08	114	70-130	0	20
n-Hexane	16.67	18.43	111	70-130	1	20
1,1-Dichloroethane	16.67	19.29	116	70-130	1	20
Vinyl Acetate	16.67	21.01	126	70-130	1	21
cis-1,2-Dichloroethene	16.67	18.12	109	70-130	1	20
2-Butanone	16.67	18.37	110	70-130	2	20
Ethyl Acetate	16.67	18.09	109	70-130	1	22
Tetrahydrofuran	16.67	15.72	94	70-130	1	20
Chloroform	16.67	18.25	109	70-130	1	21
1,1,1-Trichloroethane	16.67	18.23	109	70-130	1	21
Cyclohexane	16.67	19.22	115	70-130	0	20
Carbon Tetrachloride	16.67	19.25	116	70-130	0	20
Benzene	16.67	18.48	111	70-130	1	20
1,2-Dichloroethane	16.67	19.00	114	70-130	1	20
n-Heptane	16.67	18.94	114	70-130	1	20
Trichloroethene	16.67	18.15	109	70-130	1	20
1,2-Dichloropropane	16.67	19.46	117	70-130	2	20
Bromodichloromethane	16.67	18.47	111	70-130	0	20
cis-1,3-Dichloropropene	16.67	18.96	114	70-130	0	20

RPD= Relative Percent Difference

Result V= Result in volume units

# Batch QC Report

Volatile Organics in Air			
Lab #:	249693	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	203937
Units (V):	ppbv	Analyzed:	10/10/13
Diln Fac:	1.000		

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim
4-Methyl-2-Pentanone	16.67	18.61	112	70-130	2	20
Toluene	16.67	17.65	106	70-130	1	23
trans-1,3-Dichloropropene	16.67	19.59	118	70-130	3	20
1,1,2-Trichloroethane	16.67	18.14	109	70-130	1	20
Tetrachloroethene	16.67	18.10	109	70-130	0	20
2-Hexanone	16.67	18.45	111	70-130	1	20
Dibromochloromethane	16.67	18.51	111	70-130	1	20
1,2-Dibromoethane	16.67	18.50	111	70-130	1	20
Chlorobenzene	16.67	17.31	104	70-130	1	21
Ethylbenzene	16.67	16.36	98	70-130	2	20
m,p-Xylenes	33.33	32.47	97	70-130	4	20
o-Xylene	16.67	16.47	99	70-130	1	20
Styrene	16.67	19.30	116	70-130	3	22
Bromoform	16.67	19.48	117	70-130	6	20
1,1,2,2-Tetrachloroethane	16.67	16.43	99	70-130	2	24
4-Ethyltoluene	16.67	16.98	102	70-130	1	22
1,3,5-Trimethylbenzene	16.67	15.92	96	70-130	2	22
1,2,4-Trimethylbenzene	16.67	16.24	97	70-130	2	23
1,3-Dichlorobenzene	16.67	16.23	97	70-130	1	21
1,4-Dichlorobenzene	16.67	16.06	96	70-130	0	22
Benzyl chloride	16.67	17.05	102	70-130	4	21
1,2-Dichlorobenzene	16.67	15.85	95	70-130	3	22
1,2,4-Trichlorobenzene	16.67	19.43	117	70-130	8	24
Hexachlorobutadiene	16.67	14.21	85	70-130	0	25
Naphthalene	16.67	20.44	123	67-130	12	24

Surrogate	%REC	Limits
Bromofluorobenzene	105	70-130

RPD= Relative Percent Difference  
 Result V= Result in volume units

# Batch QC Report

Volatile Organics in Air			
Lab #:	249693	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC711437	Diln Fac:	1.000
Matrix:	Air	Batch#:	203937
Units (V):	ppbv	Analyzed:	10/10/13

Analyte	Result (V)	RL	Result (M)	RL
Freon 12	ND	0.50	ND	2.5
Freon 114	ND	0.50	ND	3.5
Chloromethane	ND	0.50	ND	1.0
Vinyl Chloride	ND	0.50	ND	1.3
1,3-Butadiene	ND	0.50	ND	1.1
Bromomethane	ND	0.50	ND	1.9
Chloroethane	ND	0.50	ND	1.3
Trichlorofluoromethane	ND	0.50	ND	2.8
Acrolein	ND	2.0	ND	4.6
1,1-Dichloroethene	ND	0.50	ND	2.0
Freon 113	ND	0.50	ND	3.8
Acetone	ND	2.0	ND	4.8
Carbon Disulfide	ND	0.50	ND	1.6
Methylene Chloride	ND	0.50	ND	1.7
trans-1,2-Dichloroethene	ND	0.50	ND	2.0
MTBE	ND	0.50	ND	1.8
n-Hexane	ND	0.50	ND	1.8
1,1-Dichloroethane	ND	0.50	ND	2.0
Vinyl Acetate	ND	0.50	ND	1.8
cis-1,2-Dichloroethene	ND	0.50	ND	2.0
2-Butanone	ND	0.50	ND	1.5
Ethyl Acetate	ND	0.50	ND	1.8
Tetrahydrofuran	ND	0.50	ND	1.5
Chloroform	ND	0.50	ND	2.4
1,1,1-Trichloroethane	ND	0.50	ND	2.7
Cyclohexane	ND	0.50	ND	1.7
Carbon Tetrachloride	ND	0.50	ND	3.1
Benzene	ND	0.50	ND	1.6
1,2-Dichloroethane	ND	0.50	ND	2.0
n-Heptane	ND	0.50	ND	2.0
Trichloroethene	ND	0.50	ND	2.7
1,2-Dichloropropane	ND	0.50	ND	2.3
Bromodichloromethane	ND	0.50	ND	3.4
cis-1,3-Dichloropropene	ND	0.50	ND	2.3
4-Methyl-2-Pentanone	ND	0.50	ND	2.0

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units



# Batch QC Report

Volatile Organics in Air			
Lab #:	249693	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC711437	Diln Fac:	1.000
Matrix:	Air	Batch#:	203937
Units (V):	ppbv	Analyzed:	10/10/13

Analyte	Result (V)	RL	Result (M)	RL
Toluene	ND	0.50	ND	1.9
trans-1,3-Dichloropropene	ND	0.50	ND	2.3
1,1,2-Trichloroethane	ND	0.50	ND	2.7
Tetrachloroethene	ND	0.50	ND	3.4
2-Hexanone	ND	0.50	ND	2.0
Dibromochloromethane	ND	0.50	ND	4.3
1,2-Dibromoethane	ND	0.50	ND	3.8
Chlorobenzene	ND	0.50	ND	2.3
Ethylbenzene	ND	0.50	ND	2.2
m,p-Xylenes	ND	0.50	ND	2.2
o-Xylene	ND	0.50	ND	2.2
Styrene	ND	0.50	ND	2.1
Bromoform	ND	0.50	ND	5.2
1,1,2,2-Tetrachloroethane	ND	0.50	ND	3.4
4-Ethyltoluene	ND	0.50	ND	2.5
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5
1,3-Dichlorobenzene	ND	0.50	ND	3.0
1,4-Dichlorobenzene	ND	0.50	ND	3.0
Benzyl chloride	ND	0.50	ND	2.6
1,2-Dichlorobenzene	ND	0.50	ND	3.0
1,2,4-Trichlorobenzene	ND	0.50	ND	3.7
Hexachlorobutadiene	ND	0.50	ND	5.3
Naphthalene	ND	2.0	ND	10

Surrogate	%REC	Limits
Bromofluorobenzene	105	70-130

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units





**ct** Curtis & Tompkins, Ltd.  
Analytical Laboratories, Since 1878





Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 250058**  
**ANALYTICAL REPORT**

Iris Environmental  
1438 Webster Street  
Oakland, CA 94612

Project : 13-945C  
Location : Park Avenue Cleaners  
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
SS-05-102113	250058-001
SS-04-102113	250058-002

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: \_\_\_\_\_

Tracy Babjar  
Project Manager  
tracy.babjar@ctberk.com  
(510) 204-2226

Date: 10/23/2013

NELAP # 01107CA

### CASE NARRATIVE

Laboratory number: 250058  
Client: Iris Environmental  
Project: 13-945C  
Location: Park Avenue Cleaners  
Request Date: 10/21/13  
Samples Received: 10/21/13

This data package contains sample and QC results for two air samples, requested for the above referenced project on 10/21/13. The samples were received cold and intact.

**Volatile Organics in Air by MS (EPA TO-15):**

No analytical problems were encountered.

250058



## IRIS ENVIRONMENTAL

1438 Webster Street, Suite 302  
Oakland, California 94612  
(510) 834-4747 tel  
(510) 834-4199 fax

## CHAIN-OF-CUSTODY

Date: 10/21/13

Page: 1 of 1

Nº 003653

## Analyses Required

Sampler Name(s):

Tiffany Kitzke

Signature(s):

Sample ID

Date

Time

Matrix

Pres.

VOCs by TO-15

48 Hour Rush

Number of Containers

1 SS-05-102113

10/21/13

1002

SV

—

X

X

1

2 SS-04-102113

10/21/13

1054

SV

—

X

X

1

TW

## PROJECT INFORMATION

Project Name:

Park Avenue Cleaners

Project Number:

13-045C

Contact Person:

Craig Pelletier, Tiffany Kitzke

E-mail:

craig@irisenv.com, tiffany@irisenv.com

Contact Telephone:

510-834-4747

Report: Routine (Level 2) Level 3 Level 4 EDD

TAT: 10-day 5-day 72-hr (48-hr) 24-hr Other:

## Special Instructions/Comments:

48 HR RUSH

canister #87 initial vacuum -30, final vacuum -5

canister #161 initial vacuum -30, final vacuum -5

## RELINQUISHED BY:

Printed Name

Tiffany Kitzke

Signature

Company

IRIS ENVIRONMENTAL

Time/Date

10/21/13

1345

## RECEIVED BY:

Printed Name

Tiffany Kitzke

Signature

Company

C#T

Time/Date

10/21/13

1345

## RELINQUISHED BY:

Printed Name

Signature

Company

Time/Date

## RECEIVED BY:

Printed Name

Signature

Company

Time/Date

# COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 250058 Date Received 10/21/13 Number of coolers 1  
 Client IRIS Project PARK AVENUE CLEANERS (13-9450)

Date Opened 10/21/13 By (print) TR (sign) Tina Ranka  
 Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc) \_\_\_\_\_ YES (NO)  
 Shipping info \_\_\_\_\_

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO  
 How many \_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_

2B. Were custody seals intact upon arrival? \_\_\_\_\_ YES NO (N/A)

3. Were custody papers dry and intact when received? \_\_\_\_\_ YES NO

4. Were custody papers filled out properly (ink, signed, etc)? \_\_\_\_\_ YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) \_\_\_\_\_ YES NO

6. Indicate the packing in cooler: (if other, describe) \_\_\_\_\_

☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☒ None  
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: \* Notify PM if temperature exceeds 6°C

Type of ice used: ☐ Wet ☐ Blue/Gel ☒ None Temp(°C) \_\_\_\_\_

☐ Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? \_\_\_\_\_ YES (NO)  
 If YES, what time were they transferred to freezer? \_\_\_\_\_

9. Did all bottles arrive unbroken/unopened? \_\_\_\_\_ YES NO

10. Are there any missing / extra samples? \_\_\_\_\_ YES (NO)

11. Are samples in the appropriate containers for indicated tests? \_\_\_\_\_ YES NO

12. Are sample labels present, in good condition and complete? \_\_\_\_\_ YES NO

13. Do the sample labels agree with custody papers? \_\_\_\_\_ YES NO

14. Was sufficient amount of sample sent for tests requested? \_\_\_\_\_ YES NO

15. Are the samples appropriately preserved? \_\_\_\_\_ YES NO (N/A)

16. Did you check preservatives for all bottles for each sample? \_\_\_\_\_ YES NO (N/A)

17. Did you document your preservative check? \_\_\_\_\_ YES NO (N/A)

18. Did you change the hold time in LIMS for unpreserved VOAs? \_\_\_\_\_ YES NO (N/A)

19. Did you change the hold time in LIMS for preserved terracores? \_\_\_\_\_ YES NO (N/A)

20. Are bubbles > 6mm absent in VOA samples? \_\_\_\_\_ YES NO (N/A)

21. Was the client contacted concerning this sample delivery? \_\_\_\_\_ YES (NO)

If YES, Who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

## COMMENTS

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### Volatile Organics in Air

Lab #:	250058	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Field ID:	SS-05-102113	Diln Fac:	88.50
Lab ID:	250058-001	Batch#:	204297
Matrix:	Air	Sampled:	10/21/13
Units (V):	ppbv	Received:	10/21/13
Units (M):	ug/m3	Analyzed:	10/22/13

Analyte	Result (V)	RL	Result (M)	RL
Freon 12	ND	44	ND	220
Freon 114	ND	44	ND	310
Chloromethane	ND	44	ND	91
Vinyl Chloride	ND	44	ND	110
1,3-Butadiene	ND	44	ND	98
Bromomethane	ND	44	ND	170
Chloroethane	ND	44	ND	120
Trichlorofluoromethane	ND	44	ND	250
Acrolein	ND	180	ND	410
1,1-Dichloroethene	ND	44	ND	180
Freon 113	ND	44	ND	340
Acetone	ND	180	ND	420
Carbon Disulfide	ND	44	ND	140
Methylene Chloride	ND	44	ND	150
trans-1,2-Dichloroethene	ND	44	ND	180
MTBE	ND	44	ND	160
n-Hexane	ND	44	ND	160
1,1-Dichloroethane	ND	44	ND	180
Vinyl Acetate	ND	44	ND	160
cis-1,2-Dichloroethene	ND	44	ND	180
2-Butanone	ND	44	ND	130
Ethyl Acetate	ND	44	ND	160
Tetrahydrofuran	ND	44	ND	130
Chloroform	ND	44	ND	220
1,1,1-Trichloroethane	ND	44	ND	240
Cyclohexane	ND	44	ND	150
Carbon Tetrachloride	ND	44	ND	280
Benzene	ND	44	ND	140
1,2-Dichloroethane	ND	44	ND	180
n-Heptane	ND	44	ND	180
Trichloroethene	ND	44	ND	240
1,2-Dichloropropane	ND	44	ND	200
Bromodichloromethane	ND	44	ND	300
cis-1,3-Dichloropropene	ND	44	ND	200
4-Methyl-2-Pentanone	ND	44	ND	180

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

### Volatile Organics in Air

Lab #:	250058	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Field ID:	SS-05-102113	Diln Fac:	88.50
Lab ID:	250058-001	Batch#:	204297
Matrix:	Air	Sampled:	10/21/13
Units (V):	ppbv	Received:	10/21/13
Units (M):	ug/m3	Analyzed:	10/22/13

Analyte	Result (V)	RL	Result (M)	RL
Toluene	ND	44	ND	170
trans-1,3-Dichloropropene	ND	44	ND	200
1,1,2-Trichloroethane	ND	44	ND	240
Tetrachloroethene	5,800	44	39,000	300
2-Hexanone	ND	44	ND	180
Dibromochloromethane	ND	44	ND	380
1,2-Dibromoethane	ND	44	ND	340
Chlorobenzene	ND	44	ND	200
Ethylbenzene	ND	44	ND	190
m,p-Xylenes	ND	44	ND	190
o-Xylene	ND	44	ND	190
Styrene	ND	44	ND	190
Bromoform	ND	44	ND	460
1,1,2,2-Tetrachloroethane	ND	44	ND	300
4-Ethyltoluene	ND	44	ND	220
1,3,5-Trimethylbenzene	ND	44	ND	220
1,2,4-Trimethylbenzene	ND	44	ND	220
1,3-Dichlorobenzene	ND	44	ND	270
1,4-Dichlorobenzene	ND	44	ND	270
Benzyl chloride	ND	44	ND	230
1,2-Dichlorobenzene	ND	44	ND	270
1,2,4-Trichlorobenzene	ND	44	ND	330
Hexachlorobutadiene	ND	44	ND	470
Naphthalene	ND	180	ND	930

Surrogate	%REC	Limits
Bromofluorobenzene	99	70-130

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

### Volatile Organics in Air

Lab #:	250058	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Field ID:	SS-04-102113	Diln Fac:	3.700
Lab ID:	250058-002	Batch#:	204256
Matrix:	Air	Sampled:	10/21/13
Units (V):	ppbv	Received:	10/21/13
Units (M):	ug/m3	Analyzed:	10/21/13

Analyte	Result (V)	RL	Result (M)	RL
Freon 12	ND	1.9	ND	9.1
Freon 114	ND	1.9	ND	13
Chloromethane	ND	1.9	ND	3.8
Vinyl Chloride	ND	1.9	ND	4.7
1,3-Butadiene	ND	1.9	ND	4.1
Bromomethane	ND	1.9	ND	7.2
Chloroethane	ND	1.9	ND	4.9
Trichlorofluoromethane	ND	1.9	ND	10
Acrolein	ND	7.4	ND	17
1,1-Dichloroethene	ND	1.9	ND	7.3
Freon 113	ND	1.9	ND	14
Acetone	ND	7.4	ND	18
Carbon Disulfide	ND	1.9	ND	5.8
Methylene Chloride	ND	1.9	ND	6.4
trans-1,2-Dichloroethene	ND	1.9	ND	7.3
MTBE	ND	1.9	ND	6.7
n-Hexane	ND	1.9	ND	6.5
1,1-Dichloroethane	ND	1.9	ND	7.5
Vinyl Acetate	ND	1.9	ND	6.5
cis-1,2-Dichloroethene	ND	1.9	ND	7.3
2-Butanone	ND	1.9	ND	5.5
Ethyl Acetate	ND	1.9	ND	6.7
Tetrahydrofuran	ND	1.9	ND	5.5
Chloroform	3.0	1.9	15	9.0
1,1,1-Trichloroethane	ND	1.9	ND	10
Cyclohexane	ND	1.9	ND	6.4
Carbon Tetrachloride	ND	1.9	ND	12
Benzene	ND	1.9	ND	5.9
1,2-Dichloroethane	ND	1.9	ND	7.5
n-Heptane	ND	1.9	ND	7.6
Trichloroethene	6.1	1.9	33	9.9
1,2-Dichloropropane	ND	1.9	ND	8.5
Bromodichloromethane	3.3	1.9	22	12
cis-1,3-Dichloropropene	ND	1.9	ND	8.4
4-Methyl-2-Pentanone	ND	1.9	ND	7.6

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

### Volatile Organics in Air

Lab #:	250058	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Field ID:	SS-04-102113	Diln Fac:	3.700
Lab ID:	250058-002	Batch#:	204256
Matrix:	Air	Sampled:	10/21/13
Units (V):	ppbv	Received:	10/21/13
Units (M):	ug/m3	Analyzed:	10/21/13

Analyte	Result (V)	RL	Result (M)	RL
Toluene	ND	1.9	ND	7.0
trans-1,3-Dichloropropene	ND	1.9	ND	8.4
1,1,2-Trichloroethane	ND	1.9	ND	10
Tetrachloroethene	210	1.9	1,400	13
2-Hexanone	ND	1.9	ND	7.6
Dibromochloromethane	1.9	1.9	16	16
1,2-Dibromoethane	ND	1.9	ND	14
Chlorobenzene	ND	1.9	ND	8.5
Ethylbenzene	ND	1.9	ND	8.0
m,p-Xylenes	ND	1.9	ND	8.0
o-Xylene	ND	1.9	ND	8.0
Styrene	ND	1.9	ND	7.9
Bromoform	ND	1.9	ND	19
1,1,2,2-Tetrachloroethane	ND	1.9	ND	13
4-Ethyltoluene	ND	1.9	ND	9.1
1,3,5-Trimethylbenzene	ND	1.9	ND	9.1
1,2,4-Trimethylbenzene	ND	1.9	ND	9.1
1,3-Dichlorobenzene	ND	1.9	ND	11
1,4-Dichlorobenzene	ND	1.9	ND	11
Benzyl chloride	ND	1.9	ND	9.6
1,2-Dichlorobenzene	ND	1.9	ND	11
1,2,4-Trichlorobenzene	ND	1.9	ND	14
Hexachlorobutadiene	ND	1.9	ND	20
Naphthalene	ND	7.4	ND	39

Surrogate	%REC	Limits
Bromofluorobenzene	100	70-130

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

# Batch QC Report

Volatile Organics in Air			
Lab #:	250058	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	204256
Units (V):	ppbv	Analyzed:	10/21/13
Diln Fac:	1.000		

Type: BS Lab ID: QC712805

Analyte	Spiked	Result (V)	%REC	Limits
Freon 12	16.67	18.07	108	70-130
Freon 114	16.67	18.18	109	70-130
Chloromethane	16.67	20.26	122	70-130
Vinyl Chloride	16.67	17.82	107	70-130
1,3-Butadiene	16.67	18.26	110	70-130
Bromomethane	16.67	18.56	111	70-130
Chloroethane	16.67	21.18	127	70-130
Trichlorofluoromethane	16.67	18.03	108	70-130
Acrolein	16.67	17.21	103	61-130
1,1-Dichloroethene	16.67	21.48	129	70-130
Freon 113	16.67	17.82	107	70-130
Acetone	16.67	18.06	108	70-130
Carbon Disulfide	16.67	18.06	108	70-130
Methylene Chloride	16.67	16.89	101	70-130
trans-1,2-Dichloroethene	16.67	18.91	113	70-130
MTBE	16.67	18.20	109	70-130
n-Hexane	16.67	18.20	109	70-130
1,1-Dichloroethane	16.67	19.34	116	70-130
Vinyl Acetate	16.67	19.30	116	70-130
cis-1,2-Dichloroethene	16.67	18.47	111	70-130
2-Butanone	16.67	18.54	111	70-130
Ethyl Acetate	16.67	17.58	105	70-130
Tetrahydrofuran	16.67	16.08	96	70-130
Chloroform	16.67	17.55	105	70-130
1,1,1-Trichloroethane	16.67	17.98	108	70-130
Cyclohexane	16.67	19.56	117	70-130
Carbon Tetrachloride	16.67	16.25	97	70-130
Benzene	16.67	18.22	109	70-130
1,2-Dichloroethane	16.67	19.39	116	70-130
n-Heptane	16.67	18.74	112	70-130
Trichloroethene	16.67	18.05	108	70-130
1,2-Dichloropropane	16.67	19.88	119	70-130
Bromodichloromethane	16.67	18.43	111	70-130
cis-1,3-Dichloropropene	16.67	19.58	117	70-130

RPD= Relative Percent Difference  
Result V= Result in volume units

# Batch QC Report

Volatile Organics in Air			
Lab #:	250058	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	204256
Units (V):	ppbv	Analyzed:	10/21/13
Diln Fac:	1.000		

Analyte	Spiked	Result (V)	%REC	Limits
4-Methyl-2-Pentanone	16.67	18.84	113	70-130
Toluene	16.67	16.53	99	70-130
trans-1,3-Dichloropropene	16.67	19.24	115	70-130
1,1,2-Trichloroethane	16.67	17.17	103	70-130
Tetrachloroethene	16.67	16.83	101	70-130
2-Hexanone	16.67	17.84	107	70-130
Dibromochloromethane	16.67	17.19	103	70-130
1,2-Dibromoethane	16.67	17.38	104	70-130
Chlorobenzene	16.67	16.65	100	70-130
Ethylbenzene	16.67	16.03	96	70-130
m,p-Xylenes	33.33	30.65	92	70-130
o-Xylene	16.67	15.67	94	70-130
Styrene	16.67	18.51	111	70-130
Bromoform	16.67	16.69	100	70-130
1,1,2,2-Tetrachloroethane	16.67	15.65	94	70-130
4-Ethyltoluene	16.67	16.05	96	70-130
1,3,5-Trimethylbenzene	16.67	14.76	89	70-130
1,2,4-Trimethylbenzene	16.67	15.22	91	70-130
1,3-Dichlorobenzene	16.67	15.40	92	70-130
1,4-Dichlorobenzene	16.67	15.17	91	70-130
Benzyl chloride	16.67	16.08	96	70-130
1,2-Dichlorobenzene	16.67	14.93	90	70-130
1,2,4-Trichlorobenzene	16.67	18.65	112	70-130
Hexachlorobutadiene	16.67	13.90	83	70-130
Naphthalene	16.67	19.74	118	67-130

Surrogate	%REC	Limits
Bromofluorobenzene	99	70-130

RPD= Relative Percent Difference  
Result V= Result in volume units



# Batch QC Report

Volatile Organics in Air			
Lab #:	250058	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	204256
Units (V):	ppbv	Analyzed:	10/21/13
Diln Fac:	1.000		

Type: BSD Lab ID: QC712806

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim
Freon 12	16.67	18.17	109	70-130	1	20
Freon 114	16.67	18.52	111	70-130	2	20
Chloromethane	16.67	20.21	121	70-130	0	24
Vinyl Chloride	16.67	18.40	110	70-130	3	24
1,3-Butadiene	16.67	18.68	112	70-130	2	22
Bromomethane	16.67	18.98	114	70-130	2	20
Chloroethane	16.67	21.07	126	70-130	1	20
Trichlorofluoromethane	16.67	18.38	110	70-130	2	21
Acrolein	16.67	17.85	107	61-130	4	36
1,1-Dichloroethene	16.67	21.58	130	70-130	0	20
Freon 113	16.67	18.72	112	70-130	5	24
Acetone	16.67	18.71	112	70-130	4	21
Carbon Disulfide	16.67	18.13	109	70-130	0	21
Methylene Chloride	16.67	16.93	102	70-130	0	24
trans-1,2-Dichloroethene	16.67	19.32	116	70-130	2	20
MTBE	16.67	18.58	111	70-130	2	20
n-Hexane	16.67	18.59	112	70-130	2	20
1,1-Dichloroethane	16.67	19.66	118	70-130	2	20
Vinyl Acetate	16.67	19.89	119	70-130	3	21
cis-1,2-Dichloroethene	16.67	18.75	113	70-130	2	20
2-Butanone	16.67	18.86	113	70-130	2	20
Ethyl Acetate	16.67	17.82	107	70-130	1	22
Tetrahydrofuran	16.67	15.79	95	70-130	2	20
Chloroform	16.67	17.82	107	70-130	2	21
1,1,1-Trichloroethane	16.67	18.23	109	70-130	1	21
Cyclohexane	16.67	19.19	115	70-130	2	20
Carbon Tetrachloride	16.67	16.51	99	70-130	2	20
Benzene	16.67	18.50	111	70-130	2	20
1,2-Dichloroethane	16.67	19.75	119	70-130	2	20
n-Heptane	16.67	18.77	113	70-130	0	20
Trichloroethene	16.67	18.35	110	70-130	2	20
1,2-Dichloropropane	16.67	19.19	115	70-130	4	20
Bromodichloromethane	16.67	18.40	110	70-130	0	20
cis-1,3-Dichloropropene	16.67	19.07	114	70-130	3	20

RPD= Relative Percent Difference  
Result V= Result in volume units

# Batch QC Report

Volatile Organics in Air			
Lab #:	250058	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	204256
Units (V):	ppbv	Analyzed:	10/21/13
Diln Fac:	1.000		

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim
4-Methyl-2-Pentanone	16.67	19.03	114	70-130	1	20
Toluene	16.67	17.44	105	70-130	5	23
trans-1,3-Dichloropropene	16.67	19.19	115	70-130	0	20
1,1,2-Trichloroethane	16.67	18.31	110	70-130	6	20
Tetrachloroethene	16.67	17.50	105	70-130	4	20
2-Hexanone	16.67	18.61	112	70-130	4	20
Dibromochloromethane	16.67	17.92	108	70-130	4	20
1,2-Dibromoethane	16.67	18.26	110	70-130	5	20
Chlorobenzene	16.67	16.73	100	70-130	1	21
Ethylbenzene	16.67	16.31	98	70-130	2	20
m,p-Xylenes	33.33	32.42	97	70-130	6	20
o-Xylene	16.67	16.24	97	70-130	4	20
Styrene	16.67	18.88	113	70-130	2	22
Bromoform	16.67	17.36	104	70-130	4	20
1,1,2,2-Tetrachloroethane	16.67	16.43	99	70-130	5	24
4-Ethyltoluene	16.67	17.02	102	70-130	6	22
1,3,5-Trimethylbenzene	16.67	15.75	94	70-130	6	22
1,2,4-Trimethylbenzene	16.67	15.95	96	70-130	5	23
1,3-Dichlorobenzene	16.67	15.76	95	70-130	2	21
1,4-Dichlorobenzene	16.67	15.59	94	70-130	3	22
Benzyl chloride	16.67	17.01	102	70-130	6	21
1,2-Dichlorobenzene	16.67	15.86	95	70-130	6	22
1,2,4-Trichlorobenzene	16.67	19.52	117	70-130	5	24
Hexachlorobutadiene	16.67	14.68	88	70-130	5	25
Naphthalene	16.67	20.47	123	67-130	4	24

Surrogate	%REC	Limits
Bromofluorobenzene	101	70-130

RPD= Relative Percent Difference  
Result V= Result in volume units

# Batch QC Report

Volatile Organics in Air			
Lab #:	250058	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC712807	Diln Fac:	1.000
Matrix:	Air	Batch#:	204256
Units (V):	ppbv	Analyzed:	10/21/13

Analyte	Result (V)	RL	Result (M)	RL
Freon 12	ND	0.50	ND	2.5
Freon 114	ND	0.50	ND	3.5
Chloromethane	ND	0.50	ND	1.0
Vinyl Chloride	ND	0.50	ND	1.3
1,3-Butadiene	ND	0.50	ND	1.1
Bromomethane	ND	0.50	ND	1.9
Chloroethane	ND	0.50	ND	1.3
Trichlorofluoromethane	ND	0.50	ND	2.8
Acrolein	ND	2.0	ND	4.6
1,1-Dichloroethene	ND	0.50	ND	2.0
Freon 113	ND	0.50	ND	3.8
Acetone	ND	2.0	ND	4.8
Carbon Disulfide	ND	0.50	ND	1.6
Methylene Chloride	ND	0.50	ND	1.7
trans-1,2-Dichloroethene	ND	0.50	ND	2.0
MTBE	ND	0.50	ND	1.8
n-Hexane	ND	0.50	ND	1.8
1,1-Dichloroethane	ND	0.50	ND	2.0
Vinyl Acetate	ND	0.50	ND	1.8
cis-1,2-Dichloroethene	ND	0.50	ND	2.0
2-Butanone	ND	0.50	ND	1.5
Ethyl Acetate	ND	0.50	ND	1.8
Tetrahydrofuran	ND	0.50	ND	1.5
Chloroform	ND	0.50	ND	2.4
1,1,1-Trichloroethane	ND	0.50	ND	2.7
Cyclohexane	ND	0.50	ND	1.7
Carbon Tetrachloride	ND	0.50	ND	3.1
Benzene	ND	0.50	ND	1.6
1,2-Dichloroethane	ND	0.50	ND	2.0
n-Heptane	ND	0.50	ND	2.0
Trichloroethene	ND	0.50	ND	2.7
1,2-Dichloropropane	ND	0.50	ND	2.3
Bromodichloromethane	ND	0.50	ND	3.4
cis-1,3-Dichloropropene	ND	0.50	ND	2.3
4-Methyl-2-Pentanone	ND	0.50	ND	2.0

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

# Batch QC Report

Volatile Organics in Air			
Lab #:	250058	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC712807	Diln Fac:	1.000
Matrix:	Air	Batch#:	204256
Units (V):	ppbv	Analyzed:	10/21/13

Analyte	Result (V)	RL	Result (M)	RL
Toluene	ND	0.50	ND	1.9
trans-1,3-Dichloropropene	ND	0.50	ND	2.3
1,1,2-Trichloroethane	ND	0.50	ND	2.7
Tetrachloroethene	ND	0.50	ND	3.4
2-Hexanone	ND	0.50	ND	2.0
Dibromochloromethane	ND	0.50	ND	4.3
1,2-Dibromoethane	ND	0.50	ND	3.8
Chlorobenzene	ND	0.50	ND	2.3
Ethylbenzene	ND	0.50	ND	2.2
m,p-Xylenes	ND	0.50	ND	2.2
o-Xylene	ND	0.50	ND	2.2
Styrene	ND	0.50	ND	2.1
Bromoform	ND	0.50	ND	5.2
1,1,2,2-Tetrachloroethane	ND	0.50	ND	3.4
4-Ethyltoluene	ND	0.50	ND	2.5
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5
1,3-Dichlorobenzene	ND	0.50	ND	3.0
1,4-Dichlorobenzene	ND	0.50	ND	3.0
Benzyl chloride	ND	0.50	ND	2.6
1,2-Dichlorobenzene	ND	0.50	ND	3.0
1,2,4-Trichlorobenzene	ND	0.50	ND	3.7
Hexachlorobutadiene	ND	0.50	ND	5.3
Naphthalene	ND	2.0	ND	10

Surrogate	%REC	Limits
Bromofluorobenzene	91	70-130

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

# Batch QC Report

Volatile Organics in Air			
Lab #:	250058	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	204297
Units (V):	ppbv	Analyzed:	10/22/13
Diln Fac:	1.000		

Type: BS Lab ID: QC712972

Analyte	Spiked	Result (V)	%REC	Limits
Freon 12	16.67	18.49	111	70-130
Freon 114	16.67	18.73	112	70-130
Chloromethane	16.67	20.44	123	70-130
Vinyl Chloride	16.67	18.63	112	70-130
1,3-Butadiene	16.67	19.05	114	70-130
Bromomethane	16.67	19.29	116	70-130
Chloroethane	16.67	20.74	124	70-130
Trichlorofluoromethane	16.67	18.40	110	70-130
Acrolein	16.67	17.70	106	61-130
1,1-Dichloroethene	16.67	21.35	128	70-130
Freon 113	16.67	19.07	114	70-130
Acetone	16.67	18.37	110	70-130
Carbon Disulfide	16.67	18.56	111	70-130
Methylene Chloride	16.67	17.00	102	70-130
trans-1,2-Dichloroethene	16.67	19.18	115	70-130
MTBE	16.67	18.76	113	70-130
n-Hexane	16.67	18.40	110	70-130
1,1-Dichloroethane	16.67	20.05	120	70-130
Vinyl Acetate	16.67	20.64	124	70-130
cis-1,2-Dichloroethene	16.67	18.75	113	70-130
2-Butanone	16.67	18.83	113	70-130
Ethyl Acetate	16.67	18.33	110	70-130
Tetrahydrofuran	16.67	16.34	98	70-130
Chloroform	16.67	18.23	109	70-130
1,1,1-Trichloroethane	16.67	18.56	111	70-130
Cyclohexane	16.67	19.71	118	70-130
Carbon Tetrachloride	16.67	16.53	99	70-130
Benzene	16.67	19.02	114	70-130
1,2-Dichloroethane	16.67	19.81	119	70-130
n-Heptane	16.67	19.09	115	70-130
Trichloroethene	16.67	18.73	112	70-130
1,2-Dichloropropane	16.67	20.00	120	70-130
Bromodichloromethane	16.67	18.49	111	70-130
cis-1,3-Dichloropropene	16.67	19.83	119	70-130

RPD= Relative Percent Difference

Result V= Result in volume units

# Batch QC Report

Volatile Organics in Air			
Lab #:	250058	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	204297
Units (V):	ppbv	Analyzed:	10/22/13
Diln Fac:	1.000		

Analyte	Spiked	Result (V)	%REC	Limits
4-Methyl-2-Pentanone	16.67	19.20	115	70-130
Toluene	16.67	17.99	108	70-130
trans-1,3-Dichloropropene	16.67	19.44	117	70-130
1,1,2-Trichloroethane	16.67	18.43	111	70-130
Tetrachloroethene	16.67	17.62	106	70-130
2-Hexanone	16.67	18.97	114	70-130
Dibromochloromethane	16.67	18.27	110	70-130
1,2-Dibromoethane	16.67	18.63	112	70-130
Chlorobenzene	16.67	17.42	104	70-130
Ethylbenzene	16.67	16.32	98	70-130
m,p-Xylenes	33.33	32.95	99	70-130
o-Xylene	16.67	16.94	102	70-130
Styrene	16.67	19.14	115	70-130
Bromoform	16.67	17.15	103	70-130
1,1,2,2-Tetrachloroethane	16.67	16.39	98	70-130
4-Ethyltoluene	16.67	16.99	102	70-130
1,3,5-Trimethylbenzene	16.67	15.73	94	70-130
1,2,4-Trimethylbenzene	16.67	15.97	96	70-130
1,3-Dichlorobenzene	16.67	15.92	96	70-130
1,4-Dichlorobenzene	16.67	16.09	97	70-130
Benzyl chloride	16.67	16.89	101	70-130
1,2-Dichlorobenzene	16.67	15.46	93	70-130
1,2,4-Trichlorobenzene	16.67	12.90	77	70-130
Hexachlorobutadiene	16.67	13.27	80	70-130
Naphthalene	16.67	12.49	75	67-130

Surrogate	%REC	Limits
Bromofluorobenzene	103	70-130

RPD= Relative Percent Difference  
Result V= Result in volume units



# Batch QC Report

Volatile Organics in Air			
Lab #:	250058	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	204297
Units (V):	ppbv	Analyzed:	10/22/13
Diln Fac:	1.000		

Type: BSD Lab ID: QC712973

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim
Freon 12	16.67	17.86	107	70-130	3	20
Freon 114	16.67	18.07	108	70-130	4	20
Chloromethane	16.67	19.97	120	70-130	2	24
Vinyl Chloride	16.67	17.70	106	70-130	5	24
1,3-Butadiene	16.67	18.31	110	70-130	4	22
Bromomethane	16.67	18.56	111	70-130	4	20
Chloroethane	16.67	19.63	118	70-130	5	20
Trichlorofluoromethane	16.67	18.15	109	70-130	1	21
Acrolein	16.67	18.05	108	61-130	2	36
1,1-Dichloroethene	16.67	20.62	124	70-130	3	20
Freon 113	16.67	17.55	105	70-130	8	24
Acetone	16.67	17.99	108	70-130	2	21
Carbon Disulfide	16.67	17.78	107	70-130	4	21
Methylene Chloride	16.67	16.60	100	70-130	2	24
trans-1,2-Dichloroethene	16.67	18.55	111	70-130	3	20
MTBE	16.67	18.28	110	70-130	3	20
n-Hexane	16.67	18.15	109	70-130	1	20
1,1-Dichloroethane	16.67	19.02	114	70-130	5	20
Vinyl Acetate	16.67	19.50	117	70-130	6	21
cis-1,2-Dichloroethene	16.67	18.01	108	70-130	4	20
2-Butanone	16.67	18.08	109	70-130	4	20
Ethyl Acetate	16.67	17.68	106	70-130	4	22
Tetrahydrofuran	16.67	16.07	96	70-130	2	20
Chloroform	16.67	17.40	104	70-130	5	21
1,1,1-Trichloroethane	16.67	18.06	108	70-130	3	21
Cyclohexane	16.67	19.72	118	70-130	0	20
Carbon Tetrachloride	16.67	15.96	96	70-130	4	20
Benzene	16.67	18.57	111	70-130	2	20
1,2-Dichloroethane	16.67	19.74	118	70-130	0	20
n-Heptane	16.67	19.36	116	70-130	1	20
Trichloroethene	16.67	18.08	108	70-130	3	20
1,2-Dichloropropane	16.67	19.70	118	70-130	2	20
Bromodichloromethane	16.67	18.54	111	70-130	0	20
cis-1,3-Dichloropropene	16.67	19.28	116	70-130	3	20

RPD= Relative Percent Difference  
Result V= Result in volume units

# Batch QC Report

Volatile Organics in Air			
Lab #:	250058	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	204297
Units (V):	ppbv	Analyzed:	10/22/13
Diln Fac:	1.000		

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim
4-Methyl-2-Pentanone	16.67	19.11	115	70-130	0	20
Toluene	16.67	17.57	105	70-130	2	23
trans-1,3-Dichloropropene	16.67	19.69	118	70-130	1	20
1,1,2-Trichloroethane	16.67	17.56	105	70-130	5	20
Tetrachloroethene	16.67	17.67	106	70-130	0	20
2-Hexanone	16.67	18.66	112	70-130	2	20
Dibromochloromethane	16.67	17.70	106	70-130	3	20
1,2-Dibromoethane	16.67	18.46	111	70-130	1	20
Chlorobenzene	16.67	16.94	102	70-130	3	21
Ethylbenzene	16.67	16.70	100	70-130	2	20
m,p-Xylenes	33.33	32.24	97	70-130	2	20
o-Xylene	16.67	16.55	99	70-130	2	20
Styrene	16.67	19.46	117	70-130	2	22
Bromoform	16.67	16.78	101	70-130	2	20
1,1,2,2-Tetrachloroethane	16.67	16.45	99	70-130	0	24
4-Ethyltoluene	16.67	16.92	101	70-130	0	22
1,3,5-Trimethylbenzene	16.67	15.84	95	70-130	1	22
1,2,4-Trimethylbenzene	16.67	16.03	96	70-130	0	23
1,3-Dichlorobenzene	16.67	15.83	95	70-130	1	21
1,4-Dichlorobenzene	16.67	15.39	92	70-130	4	22
Benzyl chloride	16.67	16.33	98	70-130	3	21
1,2-Dichlorobenzene	16.67	15.05	90	70-130	3	22
1,2,4-Trichlorobenzene	16.67	11.98	72	70-130	7	24
Hexachlorobutadiene	16.67	12.74	76	70-130	4	25
Naphthalene	16.67	11.51	69	67-130	8	24

Surrogate	%REC	Limits
Bromofluorobenzene	100	70-130

RPD= Relative Percent Difference  
 Result V= Result in volume units

# Batch QC Report

Volatile Organics in Air			
Lab #:	250058	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC712974	Diln Fac:	1.000
Matrix:	Air	Batch#:	204297
Units (V):	ppbv	Analyzed:	10/22/13

Analyte	Result (V)	RL	Result (M)	RL
Freon 12	ND	0.50	ND	2.5
Freon 114	ND	0.50	ND	3.5
Chloromethane	ND	0.50	ND	1.0
Vinyl Chloride	ND	0.50	ND	1.3
1,3-Butadiene	ND	0.50	ND	1.1
Bromomethane	ND	0.50	ND	1.9
Chloroethane	ND	0.50	ND	1.3
Trichlorofluoromethane	ND	0.50	ND	2.8
Acrolein	ND	2.0	ND	4.6
1,1-Dichloroethene	ND	0.50	ND	2.0
Freon 113	ND	0.50	ND	3.8
Acetone	ND	2.0	ND	4.8
Carbon Disulfide	ND	0.50	ND	1.6
Methylene Chloride	ND	0.50	ND	1.7
trans-1,2-Dichloroethene	ND	0.50	ND	2.0
MTBE	ND	0.50	ND	1.8
n-Hexane	ND	0.50	ND	1.8
1,1-Dichloroethane	ND	0.50	ND	2.0
Vinyl Acetate	ND	0.50	ND	1.8
cis-1,2-Dichloroethene	ND	0.50	ND	2.0
2-Butanone	ND	0.50	ND	1.5
Ethyl Acetate	ND	0.50	ND	1.8
Tetrahydrofuran	ND	0.50	ND	1.5
Chloroform	ND	0.50	ND	2.4
1,1,1-Trichloroethane	ND	0.50	ND	2.7
Cyclohexane	ND	0.50	ND	1.7
Carbon Tetrachloride	ND	0.50	ND	3.1
Benzene	ND	0.50	ND	1.6
1,2-Dichloroethane	ND	0.50	ND	2.0
n-Heptane	ND	0.50	ND	2.0
Trichloroethene	ND	0.50	ND	2.7
1,2-Dichloropropane	ND	0.50	ND	2.3
Bromodichloromethane	ND	0.50	ND	3.4
cis-1,3-Dichloropropene	ND	0.50	ND	2.3
4-Methyl-2-Pentanone	ND	0.50	ND	2.0

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

## Batch QC Report

Volatile Organics in Air			
Lab #:	250058	Location:	Park Avenue Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC712974	Diln Fac:	1.000
Matrix:	Air	Batch#:	204297
Units (V):	ppbv	Analyzed:	10/22/13

Analyte	Result (V)	RL	Result (M)	RL
Toluene	ND	0.50	ND	1.9
trans-1,3-Dichloropropene	ND	0.50	ND	2.3
1,1,2-Trichloroethane	ND	0.50	ND	2.7
Tetrachloroethene	ND	0.50	ND	3.4
2-Hexanone	ND	0.50	ND	2.0
Dibromochloromethane	ND	0.50	ND	4.3
1,2-Dibromoethane	ND	0.50	ND	3.8
Chlorobenzene	ND	0.50	ND	2.3
Ethylbenzene	ND	0.50	ND	2.2
m,p-Xylenes	ND	0.50	ND	2.2
o-Xylene	ND	0.50	ND	2.2
Styrene	ND	0.50	ND	2.1
Bromoform	ND	0.50	ND	5.2
1,1,2,2-Tetrachloroethane	ND	0.50	ND	3.4
4-Ethyltoluene	ND	0.50	ND	2.5
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5
1,3-Dichlorobenzene	ND	0.50	ND	3.0
1,4-Dichlorobenzene	ND	0.50	ND	3.0
Benzyl chloride	ND	0.50	ND	2.6
1,2-Dichlorobenzene	ND	0.50	ND	3.0
1,2,4-Trichlorobenzene	ND	0.50	ND	3.7
Hexachlorobutadiene	ND	0.50	ND	5.3
Naphthalene	ND	2.0	ND	10

Surrogate	%REC	Limits
Bromofluorobenzene	105	70-130

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units





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2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 250914**  
**ANALYTICAL REPORT**

Iris Environmental  
1438 Webster Street  
Oakland, CA 94612

Project : 13-945C  
Location : Park Ave. Cleaners  
Level : II

Sample ID

SS-05

SS-01

SS-03

SS-04

Lab ID

250914-001

250914-002

250914-003

250914-004

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: \_\_\_\_\_

Tracy Babjar  
Project Manager  
tracy.babjar@ctberk.com  
(510) 204-2226

Date: 11/21/2013

NELAP # 01107CA



## CASE NARRATIVE

Laboratory number: 250914  
Client: Iris Environmental  
Project: 13-945C  
Location: Park Ave. Cleaners  
Request Date: 11/19/13  
Samples Received: 11/18/13

This data package contains sample and QC results for four air samples, requested for the above referenced project on 11/19/13. The samples were received cold and intact.

### Volatile Organics in Air by MS (EPA TO-15):

Low response was observed for acetone in the CCV analyzed 11/20/13 14:54; affected data was qualified with "b". High responses were observed for naphthalene and 1,2,4-trichlorobenzene; affected data was qualified with "b". Low response was observed for acetone in the CCV analyzed 11/21/13 09:33; affected data was qualified with "b". High recoveries were observed for naphthalene and 1,2,4-trichlorobenzene in the BS/BSD for batch 205287; the associated RPDs were within limits, and these analytes were not detected at or above the RL in the associated samples. No other analytical problems were encountered.

**IRIS ENVIRONMENTAL**

1438 Webster Street, Suite 302  
Oakland, California 94612  
(510) 834-4747 tel  
(510) 834-4199 fax

**CHAIN-OF-CUSTODY**

250914

Date: 11/18/13

Page: 1 of 1

No 003618

**Analyses Required**

Sampler Name(s):

Signature(s):

Tiffany Kitzke

TO-15  
24 hr  
48 Hour Rush

Sample ID	Date	Time	Matrix	Pres.
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Number of Containers

SS-05

11/18/13

1430

SG

-

X

X

1

SS-01

11/18/13

1457

SG

-

X

X

1

SS-03

11/18/13

1520

SG

-

X

X

1

SS-04

11/18/13

1551

SG

-

X

X

1

**PROJECT INFORMATION**

Project Name: Park Avenue Cleaners

Project Number: 13-945C

Contact Person: Craig Pelletier Tiffany Kitzke

E-mail: craig@irisenv.com, tiffany@irisenv.com

Contact Telephone: 510 834 4747

Report: Routine (Level 2) Level 3 Level 4 EDD

TAT: 10-day 5-day 72-hr 48-hr 24-hr Other:

**Special Instructions/Comments:**

48 hour Rush

**RELINQUISHED BY:**

Printed Name

Signature

Company

Time/Date

**RELINQUISHED BY:**

Printed Name

Signature

Company

Time/Date

**RECEIVED BY:**

Printed Name

Signature

Company

Time/Date

**RECEIVED BY:**

Printed Name

Signature

Company

Time/Date

# COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 250914 Date Received 11/18/13 Number of coolers 0  
 Client FRIS Project Park Ave

Date Opened 11/18/13 By (print) [Signature] (sign) [Signature]  
 Date Logged in 11/18/13 By (print) [Signature] (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc) \_\_\_\_\_ YES (NO)  
 Shipping info \_\_\_\_\_

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO  
 How many \_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_

2B. Were custody seals intact upon arrival? \_\_\_\_\_ YES NO N/A

3. Were custody papers dry and intact when received? \_\_\_\_\_ YES NO

4. Were custody papers filled out properly (ink, signed, etc)? \_\_\_\_\_ YES NO

5. Is the project identifiable from custody papers? (If so fill out top of form) \_\_\_\_\_ YES NO

6. Indicate the packing in cooler: (if other, describe) \_\_\_\_\_

☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☐ None  
☐ Cloth material ☒ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: \* Notify PM if temperature exceeds 6°C

Type of ice used: ☐ Wet ☐ Blue/Gel ☒ None Temp(°C) \_\_\_\_\_

☐ Samples Received on ice & cold without a temperature blank

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? \_\_\_\_\_ YES (NO)  
 If YES, what time were they transferred to freezer? \_\_\_\_\_

9. Did all bottles arrive unbroken/unopened? \_\_\_\_\_ YES NO

10. Are there any missing / extra samples? \_\_\_\_\_ YES (NO)

11. Are samples in the appropriate containers for indicated tests? \_\_\_\_\_ YES NO

12. Are sample labels present, in good condition and complete? \_\_\_\_\_ YES NO

13. Do the sample labels agree with custody papers? \_\_\_\_\_ YES NO

14. Was sufficient amount of sample sent for tests requested? \_\_\_\_\_ YES NO

15. Are the samples appropriately preserved? \_\_\_\_\_ YES NO N/A

16. Did you check preservatives for all bottles for each sample? \_\_\_\_\_ YES NO N/A

17. Did you document your preservative check? \_\_\_\_\_ YES NO N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? \_\_\_\_\_ YES NO N/A

19. Did you change the hold time in LIMS for preserved terracores? \_\_\_\_\_ YES NO N/A

20. Are bubbles > 6mm absent in VOA samples? \_\_\_\_\_ YES NO N/A

21. Was the client contacted concerning this sample delivery? \_\_\_\_\_ YES (NO)

If YES, Who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

## COMMENTS

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Rev 9, 10/11

### Volatile Organics in Air

Lab #:	250914	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Field ID:	SS-05	Units (M):	ug/m3
Lab ID:	250914-001	Batch#:	205287
Matrix:	Air	Sampled:	11/18/13
Units (V):	ppbv	Received:	11/18/13

Analyte	Result (V)	RL	Result (M)	RL	Diln Fac	Analyzed
Freon 12	ND	0.87	ND	4.3	1.730	11/21/13
Freon 114	ND	0.87	ND	6.0	1.730	11/21/13
Chloromethane	ND	0.87	ND	1.8	1.730	11/21/13
Vinyl Chloride	ND	0.87	ND	2.2	1.730	11/21/13
1,3-Butadiene	ND	0.87	ND	1.9	1.730	11/21/13
Bromomethane	ND	0.87	ND	3.4	1.730	11/21/13
Chloroethane	ND	0.87	ND	2.3	1.730	11/21/13
Trichlorofluoromethane	ND	0.87	ND	4.9	1.730	11/21/13
Acrolein	ND	3.5	ND	7.9	1.730	11/21/13
1,1-Dichloroethene	ND	0.87	ND	3.4	1.730	11/21/13
Freon 113	ND	0.87	ND	6.6	1.730	11/21/13
Acetone	7.7 b	3.5	18	8.2	1.730	11/21/13
Carbon Disulfide	ND	5.2	ND	16	10.38	11/20/13
Methylene Chloride	ND	0.87	ND	3.0	1.730	11/21/13
trans-1,2-Dichloroethene	ND	0.87	ND	3.4	1.730	11/21/13
MTBE	ND	0.87	ND	3.1	1.730	11/21/13
n-Hexane	ND	0.87	ND	3.0	1.730	11/21/13
1,1-Dichloroethane	ND	0.87	ND	3.5	1.730	11/21/13
Vinyl Acetate	ND	0.87	ND	3.0	1.730	11/21/13
cis-1,2-Dichloroethene	ND	0.87	ND	3.4	1.730	11/21/13
2-Butanone	ND	0.87	ND	2.6	1.730	11/21/13
Ethyl Acetate	ND	0.87	ND	3.1	1.730	11/21/13
Tetrahydrofuran	5.5	0.87	16	2.6	1.730	11/21/13
Chloroform	ND	0.87	ND	4.2	1.730	11/21/13
1,1,1-Trichloroethane	ND	0.87	ND	4.7	1.730	11/21/13
Cyclohexane	ND	0.87	ND	3.0	1.730	11/21/13
Carbon Tetrachloride	ND	0.87	ND	5.4	1.730	11/21/13
Benzene	ND	0.87	ND	2.8	1.730	11/21/13
1,2-Dichloroethane	ND	0.87	ND	3.5	1.730	11/21/13
n-Heptane	ND	0.87	ND	3.5	1.730	11/21/13
Trichloroethene	ND	0.87	ND	4.6	1.730	11/21/13
1,2-Dichloropropane	ND	0.87	ND	4.0	1.730	11/21/13
Bromodichloromethane	ND	0.87	ND	5.8	1.730	11/21/13
cis-1,3-Dichloropropene	ND	0.87	ND	3.9	1.730	11/21/13
4-Methyl-2-Pentanone	ND	0.87	ND	3.5	1.730	11/21/13

b= See narrative

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

### Volatile Organics in Air

Lab #:	250914	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Field ID:	SS-05	Units (M):	ug/m3
Lab ID:	250914-001	Batch#:	205287
Matrix:	Air	Sampled:	11/18/13
Units (V):	ppbv	Received:	11/18/13

Analyte	Result (V)	RL	Result (M)	RL	Diln Fac	Analyzed
Toluene	ND	0.87	ND	3.3	1.730	11/21/13
trans-1,3-Dichloropropene	ND	0.87	ND	3.9	1.730	11/21/13
1,1,2-Trichloroethane	ND	0.87	ND	4.7	1.730	11/21/13
Tetrachloroethene	120	0.87	790	5.9	1.730	11/21/13
2-Hexanone	ND	0.87	ND	3.5	1.730	11/21/13
Dibromochloromethane	ND	0.87	ND	7.4	1.730	11/21/13
1,2-Dibromoethane	ND	0.87	ND	6.6	1.730	11/21/13
Chlorobenzene	ND	0.87	ND	4.0	1.730	11/21/13
Ethylbenzene	ND	0.87	ND	3.8	1.730	11/21/13
m,p-Xylenes	ND	0.87	ND	3.8	1.730	11/21/13
o-Xylene	ND	0.87	ND	3.8	1.730	11/21/13
Styrene	ND	0.87	ND	3.7	1.730	11/21/13
Bromoform	ND	0.87	ND	8.9	1.730	11/21/13
1,1,2,2-Tetrachloroethane	ND	0.87	ND	5.9	1.730	11/21/13
4-Ethyltoluene	ND	0.87	ND	4.3	1.730	11/21/13
1,3,5-Trimethylbenzene	ND	0.87	ND	4.3	1.730	11/21/13
1,2,4-Trimethylbenzene	ND	0.87	ND	4.3	1.730	11/21/13
1,3-Dichlorobenzene	ND	0.87	ND	5.2	1.730	11/21/13
1,4-Dichlorobenzene	ND	0.87	ND	5.2	1.730	11/21/13
Benzyl chloride	ND	0.87	ND	4.5	1.730	11/21/13
1,2-Dichlorobenzene	ND	0.87	ND	5.2	1.730	11/21/13
1,2,4-Trichlorobenzene	ND	0.87	ND	6.4	1.730	11/21/13
Hexachlorobutadiene	ND	0.87	ND	9.2	1.730	11/21/13
Naphthalene	ND	3.5	ND	18	1.730	11/21/13

Surrogate	%REC	Limits	Diln Fac	Analyzed
Bromofluorobenzene	93	70-130	1.730	11/21/13

b= See narrative

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

### Volatile Organics in Air

Lab #:	250914	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Field ID:	SS-01	Diln Fac:	22.92
Lab ID:	250914-002	Batch#:	205287
Matrix:	Air	Sampled:	11/18/13
Units (V):	ppbv	Received:	11/18/13
Units (M):	ug/m3	Analyzed:	11/20/13

Analyte	Result (V)	RL	Result (M)	RL
Freon 12	ND	11	ND	57
Freon 114	ND	11	ND	80
Chloromethane	ND	11	ND	24
Vinyl Chloride	ND	11	ND	29
1,3-Butadiene	ND	11	ND	25
Bromomethane	ND	11	ND	44
Chloroethane	ND	11	ND	30
Trichlorofluoromethane	ND	11	ND	64
Acrolein	ND	46	ND	110
1,1-Dichloroethene	ND	11	ND	45
Freon 113	ND	11	ND	88
Acetone	ND	46	ND	110
Carbon Disulfide	ND	11	ND	36
Methylene Chloride	ND	11	ND	40
trans-1,2-Dichloroethene	ND	11	ND	45
MTBE	ND	11	ND	41
n-Hexane	ND	11	ND	40
1,1-Dichloroethane	ND	11	ND	46
Vinyl Acetate	ND	11	ND	40
cis-1,2-Dichloroethene	ND	11	ND	45
2-Butanone	ND	11	ND	34
Ethyl Acetate	ND	11	ND	41
Tetrahydrofuran	ND	11	ND	34
Chloroform	ND	11	ND	56
1,1,1-Trichloroethane	ND	11	ND	63
Cyclohexane	ND	11	ND	39
Carbon Tetrachloride	ND	11	ND	72
Benzene	ND	11	ND	37
1,2-Dichloroethane	ND	11	ND	46
n-Heptane	ND	11	ND	47
Trichloroethene	ND	11	ND	62
1,2-Dichloropropane	ND	11	ND	53
Bromodichloromethane	ND	11	ND	77
cis-1,3-Dichloropropene	ND	11	ND	52
4-Methyl-2-Pentanone	ND	11	ND	47

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units



### Volatile Organics in Air

Lab #:	250914	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Field ID:	SS-01	Diln Fac:	22.92
Lab ID:	250914-002	Batch#:	205287
Matrix:	Air	Sampled:	11/18/13
Units (V):	ppbv	Received:	11/18/13
Units (M):	ug/m3	Analyzed:	11/20/13

Analyte	Result (V)	RL	Result (M)	RL
Toluene	ND	11	ND	43
trans-1,3-Dichloropropene	ND	11	ND	52
1,1,2-Trichloroethane	ND	11	ND	63
Tetrachloroethene	1,500	11	10,000	78
2-Hexanone	ND	11	ND	47
Dibromochloromethane	ND	11	ND	98
1,2-Dibromoethane	ND	11	ND	88
Chlorobenzene	ND	11	ND	53
Ethylbenzene	ND	11	ND	50
m,p-Xylenes	ND	11	ND	50
o-Xylene	ND	11	ND	50
Styrene	ND	11	ND	49
Bromoform	ND	11	ND	120
1,1,2,2-Tetrachloroethane	ND	11	ND	79
4-Ethyltoluene	ND	11	ND	56
1,3,5-Trimethylbenzene	ND	11	ND	56
1,2,4-Trimethylbenzene	ND	11	ND	56
1,3-Dichlorobenzene	ND	11	ND	69
1,4-Dichlorobenzene	ND	11	ND	69
Benzyl chloride	ND	11	ND	59
1,2-Dichlorobenzene	ND	11	ND	69
1,2,4-Trichlorobenzene	ND	11	ND	85
Hexachlorobutadiene	ND	11	ND	120
Naphthalene	ND	46	ND	240

Surrogate	%REC	Limits
Bromofluorobenzene	101	70-130

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

### Volatile Organics in Air

Lab #:	250914	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Field ID:	SS-03	Units (M):	ug/m3
Lab ID:	250914-003	Batch#:	205287
Matrix:	Air	Sampled:	11/18/13
Units (V):	ppbv	Received:	11/18/13

Analyte	Result (V)	RL	Result (M)	RL	Diln Fac	Analyzed
Freon 12	ND	0.92	ND	4.5	1.830	11/21/13
Freon 114	ND	0.92	ND	6.4	1.830	11/21/13
Chloromethane	ND	0.92	ND	1.9	1.830	11/21/13
Vinyl Chloride	ND	0.92	ND	2.3	1.830	11/21/13
1,3-Butadiene	ND	0.92	ND	2.0	1.830	11/21/13
Bromomethane	ND	0.92	ND	3.6	1.830	11/21/13
Chloroethane	ND	0.92	ND	2.4	1.830	11/21/13
Trichlorofluoromethane	ND	0.92	ND	5.1	1.830	11/21/13
Acrolein	ND	3.7	ND	8.4	1.830	11/21/13
1,1-Dichloroethene	ND	0.92	ND	3.6	1.830	11/21/13
Freon 113	ND	0.92	ND	7.0	1.830	11/21/13
Acetone	5.2 b	3.7	12	8.7	1.830	11/21/13
Carbon Disulfide	ND	5.5	ND	17	10.98	11/20/13
Methylene Chloride	ND	0.92	ND	3.2	1.830	11/21/13
trans-1,2-Dichloroethene	ND	0.92	ND	3.6	1.830	11/21/13
MTBE	ND	0.92	ND	3.3	1.830	11/21/13
n-Hexane	ND	0.92	ND	3.2	1.830	11/21/13
1,1-Dichloroethane	ND	0.92	ND	3.7	1.830	11/21/13
Vinyl Acetate	ND	0.92	ND	3.2	1.830	11/21/13
cis-1,2-Dichloroethene	ND	0.92	ND	3.6	1.830	11/21/13
2-Butanone	ND	0.92	ND	2.7	1.830	11/21/13
Ethyl Acetate	ND	0.92	ND	3.3	1.830	11/21/13
Tetrahydrofuran	ND	0.92	ND	2.7	1.830	11/21/13
Chloroform	ND	0.92	ND	4.5	1.830	11/21/13
1,1,1-Trichloroethane	ND	0.92	ND	5.0	1.830	11/21/13
Cyclohexane	ND	0.92	ND	3.1	1.830	11/21/13
Carbon Tetrachloride	ND	0.92	ND	5.8	1.830	11/21/13
Benzene	ND	0.92	ND	2.9	1.830	11/21/13
1,2-Dichloroethane	ND	0.92	ND	3.7	1.830	11/21/13
n-Heptane	ND	0.92	ND	3.7	1.830	11/21/13
Trichloroethene	ND	0.92	ND	4.9	1.830	11/21/13
1,2-Dichloropropane	ND	0.92	ND	4.2	1.830	11/21/13
Bromodichloromethane	ND	0.92	ND	6.1	1.830	11/21/13
cis-1,3-Dichloropropene	ND	0.92	ND	4.2	1.830	11/21/13
4-Methyl-2-Pentanone	ND	0.92	ND	3.7	1.830	11/21/13

b= See narrative

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

### Volatile Organics in Air

Lab #:	250914	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Field ID:	SS-03	Units (M):	ug/m3
Lab ID:	250914-003	Batch#:	205287
Matrix:	Air	Sampled:	11/18/13
Units (V):	ppbv	Received:	11/18/13

Analyte	Result (V)	RL	Result (M)	RL	Diln Fac	Analyzed
Toluene	ND	0.92	ND	3.4	1.830	11/21/13
trans-1,3-Dichloropropene	ND	0.92	ND	4.2	1.830	11/21/13
1,1,2-Trichloroethane	ND	0.92	ND	5.0	1.830	11/21/13
Tetrachloroethene	62	0.92	420	6.2	1.830	11/21/13
2-Hexanone	ND	0.92	ND	3.7	1.830	11/21/13
Dibromochloromethane	ND	0.92	ND	7.8	1.830	11/21/13
1,2-Dibromoethane	ND	0.92	ND	7.0	1.830	11/21/13
Chlorobenzene	ND	0.92	ND	4.2	1.830	11/21/13
Ethylbenzene	ND	0.92	ND	4.0	1.830	11/21/13
m,p-Xylenes	ND	0.92	ND	4.0	1.830	11/21/13
o-Xylene	ND	0.92	ND	4.0	1.830	11/21/13
Styrene	ND	0.92	ND	3.9	1.830	11/21/13
Bromoform	ND	0.92	ND	9.5	1.830	11/21/13
1,1,2,2-Tetrachloroethane	ND	0.92	ND	6.3	1.830	11/21/13
4-Ethyltoluene	ND	0.92	ND	4.5	1.830	11/21/13
1,3,5-Trimethylbenzene	ND	0.92	ND	4.5	1.830	11/21/13
1,2,4-Trimethylbenzene	ND	0.92	ND	4.5	1.830	11/21/13
1,3-Dichlorobenzene	ND	0.92	ND	5.5	1.830	11/21/13
1,4-Dichlorobenzene	ND	0.92	ND	5.5	1.830	11/21/13
Benzyl chloride	ND	0.92	ND	4.7	1.830	11/21/13
1,2-Dichlorobenzene	ND	0.92	ND	5.5	1.830	11/21/13
1,2,4-Trichlorobenzene	ND	0.92	ND	6.8	1.830	11/21/13
Hexachlorobutadiene	ND	0.92	ND	9.8	1.830	11/21/13
Naphthalene	ND	3.7	ND	19	1.830	11/21/13

Surrogate	%REC	Limits	Diln Fac	Analyzed
Bromofluorobenzene	92	70-130	1.830	11/21/13

b= See narrative

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

### Volatile Organics in Air

Lab #:	250914	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Field ID:	SS-04	Units (M):	ug/m3
Lab ID:	250914-004	Batch#:	205287
Matrix:	Air	Sampled:	11/18/13
Units (V):	ppbv	Received:	11/18/13

Analyte	Result (V)	RL	Result (M)	RL	Diln Fac	Analyzed
Freon 12	ND b	0.89	ND	4.4	1.770	11/21/13
Freon 114	ND b	0.89	ND	6.2	1.770	11/21/13
Chloromethane	ND b	0.89	ND	1.8	1.770	11/21/13
Vinyl Chloride	ND b	0.89	ND	2.3	1.770	11/21/13
1,3-Butadiene	ND b	0.89	ND	2.0	1.770	11/21/13
Bromomethane	ND b	0.89	ND	3.4	1.770	11/21/13
Chloroethane	ND b	0.89	ND	2.3	1.770	11/21/13
Trichlorofluoromethane	ND b	0.89	ND	5.0	1.770	11/21/13
Acrolein	ND b	3.5	ND	8.1	1.770	11/21/13
1,1-Dichloroethene	ND b	0.89	ND	3.5	1.770	11/21/13
Freon 113	ND b	0.89	ND	6.8	1.770	11/21/13
Acetone	8.2 b	3.5	20	8.4	1.770	11/21/13
Carbon Disulfide	ND b	5.3	ND	17	10.62	11/20/13
Methylene Chloride	ND b	0.89	ND	3.1	1.770	11/21/13
trans-1,2-Dichloroethene	ND b	0.89	ND	3.5	1.770	11/21/13
MTBE	ND b	0.89	ND	3.2	1.770	11/21/13
n-Hexane	ND b	0.89	ND	3.1	1.770	11/21/13
1,1-Dichloroethane	ND b	0.89	ND	3.6	1.770	11/21/13
Vinyl Acetate	ND b	0.89	ND	3.1	1.770	11/21/13
cis-1,2-Dichloroethene	ND b	0.89	ND	3.5	1.770	11/21/13
2-Butanone	1.8 b	0.89	5.2	2.6	1.770	11/21/13
Ethyl Acetate	ND b	0.89	ND	3.2	1.770	11/21/13
Tetrahydrofuran	ND b	0.89	ND	2.6	1.770	11/21/13
Chloroform	4.9 b	0.89	24	4.3	1.770	11/21/13
1,1,1-Trichloroethane	ND b	0.89	ND	4.8	1.770	11/21/13
Cyclohexane	ND b	0.89	ND	3.0	1.770	11/21/13
Carbon Tetrachloride	ND b	0.89	ND	5.6	1.770	11/21/13
Benzene	ND b	0.89	ND	2.8	1.770	11/21/13
1,2-Dichloroethane	ND b	0.89	ND	3.6	1.770	11/21/13
n-Heptane	ND b	0.89	ND	3.6	1.770	11/21/13
Trichloroethene	ND b	0.89	ND	4.8	1.770	11/21/13
1,2-Dichloropropane	ND b	0.89	ND	4.1	1.770	11/21/13
Bromodichloromethane	ND b	0.89	ND	5.9	1.770	11/21/13
cis-1,3-Dichloropropene	ND b	0.89	ND	4.0	1.770	11/21/13
4-Methyl-2-Pentanone	ND b	0.89	ND	3.6	1.770	11/21/13

b= See narrative

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

### Volatile Organics in Air

Lab #:	250914	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Field ID:	SS-04	Units (M):	ug/m3
Lab ID:	250914-004	Batch#:	205287
Matrix:	Air	Sampled:	11/18/13
Units (V):	ppbv	Received:	11/18/13

Analyte	Result (V)	RL	Result (M)	RL	Diln Fac	Analyzed
Toluene	ND b	0.89	ND	3.3	1.770	11/21/13
trans-1,3-Dichloropropene	ND b	0.89	ND	4.0	1.770	11/21/13
1,1,2-Trichloroethane	ND b	0.89	ND	4.8	1.770	11/21/13
Tetrachloroethene	72 b	0.89	490	6.0	1.770	11/21/13
2-Hexanone	ND b	0.89	ND	3.6	1.770	11/21/13
Dibromochloromethane	ND b	0.89	ND	7.5	1.770	11/21/13
1,2-Dibromoethane	ND b	0.89	ND	6.8	1.770	11/21/13
Chlorobenzene	ND b	0.89	ND	4.1	1.770	11/21/13
Ethylbenzene	ND b	0.89	ND	3.8	1.770	11/21/13
m,p-Xylenes	ND b	0.89	ND	3.8	1.770	11/21/13
o-Xylene	ND b	0.89	ND	3.8	1.770	11/21/13
Styrene	ND b	0.89	ND	3.8	1.770	11/21/13
Bromoform	ND b	0.89	ND	9.1	1.770	11/21/13
1,1,2,2-Tetrachloroethane	ND b	0.89	ND	6.1	1.770	11/21/13
4-Ethyltoluene	ND b	0.89	ND	4.4	1.770	11/21/13
1,3,5-Trimethylbenzene	ND b	0.89	ND	4.4	1.770	11/21/13
1,2,4-Trimethylbenzene	ND b	0.89	ND	4.4	1.770	11/21/13
1,3-Dichlorobenzene	ND b	0.89	ND	5.3	1.770	11/21/13
1,4-Dichlorobenzene	ND b	0.89	ND	5.3	1.770	11/21/13
Benzyl chloride	ND b	0.89	ND	4.6	1.770	11/21/13
1,2-Dichlorobenzene	ND b	0.89	ND	5.3	1.770	11/21/13
1,2,4-Trichlorobenzene	ND b	0.89	ND	6.6	1.770	11/21/13
Hexachlorobutadiene	ND b	0.89	ND	9.4	1.770	11/21/13
Naphthalene	ND b	3.5	ND	19	1.770	11/21/13

Surrogate	%REC	Limits	Diln Fac	Analyzed
Bromofluorobenzene	101 b	70-130	1.770	11/21/13

b= See narrative

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

# Batch QC Report

Volatile Organics in Air			
Lab #:	250914	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	205287
Units (V):	ppbv	Analyzed:	11/20/13
Diln Fac:	1.000		

Type: BS Lab ID: QC717020

Analyte	Spiked	Result (V)	%REC	Limits
Freon 12	10.00	9.370	94	70-130
Freon 114	10.00	9.506	95	70-130
Chloromethane	10.00	9.140	91	70-130
Vinyl Chloride	10.00	9.408	94	70-130
1,3-Butadiene	10.00	9.216	92	70-130
Bromomethane	10.00	9.411	94	70-130
Chloroethane	10.00	9.318	93	70-130
Trichlorofluoromethane	10.00	9.431	94	70-130
Acrolein	10.00	7.942	79	62-130
1,1-Dichloroethene	10.00	8.994	90	70-130
Freon 113	10.00	8.863	89	70-130
Acetone	10.00	6.723 b	67	67-130
Carbon Disulfide	10.00	7.033	70	70-130
Methylene Chloride	10.00	8.031	80	68-130
trans-1,2-Dichloroethene	10.00	9.798	98	70-130
MTBE	10.00	8.869	89	70-130
n-Hexane	10.00	9.435	94	70-130
1,1-Dichloroethane	10.00	9.932	99	70-130
Vinyl Acetate	10.00	11.21	112	70-130
cis-1,2-Dichloroethene	10.00	9.494	95	70-130
2-Butanone	10.00	9.782	98	70-130
Ethyl Acetate	10.00	9.489	95	70-130
Tetrahydrofuran	10.00	9.110	91	70-130
Chloroform	10.00	9.231	92	70-130
1,1,1-Trichloroethane	10.00	9.691	97	70-130
Cyclohexane	10.00	9.727	97	70-130
Carbon Tetrachloride	10.00	10.02	100	70-130
Benzene	10.00	9.634	96	70-130
1,2-Dichloroethane	10.00	9.879	99	70-130
n-Heptane	10.00	9.982	100	70-130
Trichloroethene	10.00	9.637	96	70-130
1,2-Dichloropropane	10.00	10.18	102	70-130

\*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units

## Batch QC Report

Volatile Organics in Air			
Lab #:	250914	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	205287
Units (V):	ppbv	Analyzed:	11/20/13
Diln Fac:	1.000		

Analyte	Spiked	Result (V)	%REC	Limits
Bromodichloromethane	10.00	9.886	99	70-130
cis-1,3-Dichloropropene	10.00	10.46	105	70-130
4-Methyl-2-Pentanone	10.00	10.48	105	70-130
Toluene	10.00	10.22	102	70-130
trans-1,3-Dichloropropene	10.00	10.45	104	70-130
1,1,2-Trichloroethane	10.00	10.64	106	70-130
Tetrachloroethene	10.00	10.38	104	70-130
2-Hexanone	10.00	12.30	123	70-130
Dibromochloromethane	10.00	11.06	111	70-130
1,2-Dibromoethane	10.00	11.16	112	70-130
Chlorobenzene	10.00	10.95	109	70-130
Ethylbenzene	10.00	9.381	94	70-130
m,p-Xylenes	20.00	19.70	98	70-130
o-Xylene	10.00	9.376	94	70-130
Styrene	10.00	11.23	112	70-130
Bromoform	10.00	10.90	109	70-130
1,1,2,2-Tetrachloroethane	10.00	10.73	107	70-130
4-Ethyltoluene	10.00	10.78	108	70-130
1,3,5-Trimethylbenzene	10.00	9.624	96	70-130
1,2,4-Trimethylbenzene	10.00	9.914	99	70-130
1,3-Dichlorobenzene	10.00	10.26	103	70-130
1,4-Dichlorobenzene	10.00	10.29	103	70-130
Benzyl chloride	10.00	11.59	116	70-130
1,2-Dichlorobenzene	10.00	10.41	104	70-130
1,2,4-Trichlorobenzene	10.00	15.39 b	154 *	62-130
Hexachlorobutadiene	10.00	11.75	117	68-130
Naphthalene	10.00	17.95 b	179 *	54-136

Surrogate	%REC	Limits
Bromofluorobenzene	88	70-130

\*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units



# Batch QC Report

Volatile Organics in Air			
Lab #:	250914	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	205287
Units (V):	ppbv	Analyzed:	11/20/13
Diln Fac:	1.000		

Type: BSD Lab ID: QC717021

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim
Freon 12	10.00	9.888	99	70-130	5	20
Freon 114	10.00	9.937	99	70-130	4	20
Chloromethane	10.00	9.711	97	70-130	6	27
Vinyl Chloride	10.00	10.05	101	70-130	7	23
1,3-Butadiene	10.00	9.447	94	70-130	2	21
Bromomethane	10.00	9.938	99	70-130	5	20
Chloroethane	10.00	9.434	94	70-130	1	20
Trichlorofluoromethane	10.00	9.781	98	70-130	4	20
Acrolein	10.00	8.286	83	62-130	4	31
1,1-Dichloroethene	10.00	9.143	91	70-130	2	20
Freon 113	10.00	9.417	94	70-130	6	23
Acetone	10.00	6.937 b	69	67-130	3	20
Carbon Disulfide	10.00	7.312	73	70-130	4	20
Methylene Chloride	10.00	8.353	84	68-130	4	23
trans-1,2-Dichloroethene	10.00	9.859	99	70-130	1	20
MTBE	10.00	9.111	91	70-130	3	20
n-Hexane	10.00	9.624	96	70-130	2	20
1,1-Dichloroethane	10.00	10.27	103	70-130	3	20
Vinyl Acetate	10.00	11.69	117	70-130	4	21
cis-1,2-Dichloroethene	10.00	9.819	98	70-130	3	20
2-Butanone	10.00	10.01	100	70-130	2	20
Ethyl Acetate	10.00	9.994	100	70-130	5	20
Tetrahydrofuran	10.00	9.372	94	70-130	3	20
Chloroform	10.00	9.692	97	70-130	5	20
1,1,1-Trichloroethane	10.00	9.884	99	70-130	2	20
Cyclohexane	10.00	9.979	100	70-130	3	20
Carbon Tetrachloride	10.00	10.06	101	70-130	0	20
Benzene	10.00	10.16	102	70-130	5	20
1,2-Dichloroethane	10.00	10.23	102	70-130	4	20
n-Heptane	10.00	10.40	104	70-130	4	20
Trichloroethene	10.00	9.874	99	70-130	2	20
1,2-Dichloropropane	10.00	10.64	106	70-130	4	20

\*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units

# Batch QC Report

Volatile Organics in Air			
Lab #:	250914	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	205287
Units (V):	ppbv	Analyzed:	11/20/13
Diln Fac:	1.000		

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim
Bromodichloromethane	10.00	9.947	99	70-130	1	20
cis-1,3-Dichloropropene	10.00	10.49	105	70-130	0	20
4-Methyl-2-Pentanone	10.00	10.68	107	70-130	2	20
Toluene	10.00	9.948	99	70-130	3	23
trans-1,3-Dichloropropene	10.00	10.86	109	70-130	4	20
1,1,2-Trichloroethane	10.00	10.55	105	70-130	1	20
Tetrachloroethene	10.00	9.958	100	70-130	4	20
2-Hexanone	10.00	11.65	117	70-130	5	21
Dibromochloromethane	10.00	10.63	106	70-130	4	20
1,2-Dibromoethane	10.00	10.70	107	70-130	4	20
Chlorobenzene	10.00	10.50	105	70-130	4	21
Ethylbenzene	10.00	9.070	91	70-130	3	20
m,p-Xylenes	20.00	18.91	95	70-130	4	20
o-Xylene	10.00	9.190	92	70-130	2	20
Styrene	10.00	10.90	109	70-130	3	21
Bromoform	10.00	10.64	106	70-130	2	20
1,1,2,2-Tetrachloroethane	10.00	10.48	105	70-130	2	24
4-Ethyltoluene	10.00	10.12	101	70-130	6	22
1,3,5-Trimethylbenzene	10.00	9.278	93	70-130	4	23
1,2,4-Trimethylbenzene	10.00	9.867	99	70-130	0	24
1,3-Dichlorobenzene	10.00	10.12	101	70-130	1	22
1,4-Dichlorobenzene	10.00	10.10	101	70-130	2	22
Benzyl chloride	10.00	11.24	112	70-130	3	21
1,2-Dichlorobenzene	10.00	9.891	99	70-130	5	22
1,2,4-Trichlorobenzene	10.00	12.56 b	126	62-130	20	28
Hexachlorobutadiene	10.00	11.07	111	68-130	6	27
Naphthalene	10.00	14.17 b	142 *	54-136	24	29

Surrogate	%REC	Limits
Bromofluorobenzene	90	70-130

\*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units

# Batch QC Report

Volatile Organics in Air			
Lab #:	250914	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC717022	Diln Fac:	1.000
Matrix:	Air	Batch#:	205287
Units (V):	ppbv	Analyzed:	11/20/13

Analyte	Result (V)	RL	Result (M)	RL
Freon 12	ND	0.50	ND	2.5
Freon 114	ND	0.50	ND	3.5
Chloromethane	ND	0.50	ND	1.0
Vinyl Chloride	ND	0.50	ND	1.3
1,3-Butadiene	ND	0.50	ND	1.1
Bromomethane	ND	0.50	ND	1.9
Chloroethane	ND	0.50	ND	1.3
Trichlorofluoromethane	ND	0.50	ND	2.8
Acrolein	ND	2.0	ND	4.6
1,1-Dichloroethene	ND	0.50	ND	2.0
Freon 113	ND	0.50	ND	3.8
Acetone	ND	2.0	ND	4.8
Carbon Disulfide	ND	0.50	ND	1.6
Methylene Chloride	ND	0.50	ND	1.7
trans-1,2-Dichloroethene	ND	0.50	ND	2.0
MTBE	ND	0.50	ND	1.8
n-Hexane	ND	0.50	ND	1.8
1,1-Dichloroethane	ND	0.50	ND	2.0
Vinyl Acetate	ND	0.50	ND	1.8
cis-1,2-Dichloroethene	ND	0.50	ND	2.0
2-Butanone	ND	0.50	ND	1.5
Ethyl Acetate	ND	0.50	ND	1.8
Tetrahydrofuran	ND	0.50	ND	1.5
Chloroform	ND	0.50	ND	2.4
1,1,1-Trichloroethane	ND	0.50	ND	2.7
Cyclohexane	ND	0.50	ND	1.7
Carbon Tetrachloride	ND	0.50	ND	3.1
Benzene	ND	0.50	ND	1.6
1,2-Dichloroethane	ND	0.50	ND	2.0
n-Heptane	ND	0.50	ND	2.0
Trichloroethene	ND	0.50	ND	2.7
1,2-Dichloropropane	ND	0.50	ND	2.3
Bromodichloromethane	ND	0.50	ND	3.4
cis-1,3-Dichloropropene	ND	0.50	ND	2.3
4-Methyl-2-Pentanone	ND	0.50	ND	2.0

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

## Batch QC Report

Volatile Organics in Air			
Lab #:	250914	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC717022	Diln Fac:	1.000
Matrix:	Air	Batch#:	205287
Units (V):	ppbv	Analyzed:	11/20/13

Analyte	Result (V)	RL	Result (M)	RL
Toluene	ND	0.50	ND	1.9
trans-1,3-Dichloropropene	ND	0.50	ND	2.3
1,1,2-Trichloroethane	ND	0.50	ND	2.7
Tetrachloroethene	ND	0.50	ND	3.4
2-Hexanone	ND	0.50	ND	2.0
Dibromochloromethane	ND	0.50	ND	4.3
1,2-Dibromoethane	ND	0.50	ND	3.8
Chlorobenzene	ND	0.50	ND	2.3
Ethylbenzene	ND	0.50	ND	2.2
m,p-Xylenes	ND	0.50	ND	2.2
o-Xylene	ND	0.50	ND	2.2
Styrene	ND	0.50	ND	2.1
Bromoform	ND	0.50	ND	5.2
1,1,2,2-Tetrachloroethane	ND	0.50	ND	3.4
4-Ethyltoluene	ND	0.50	ND	2.5
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5
1,3-Dichlorobenzene	ND	0.50	ND	3.0
1,4-Dichlorobenzene	ND	0.50	ND	3.0
Benzyl chloride	ND	0.50	ND	2.6
1,2-Dichlorobenzene	ND	0.50	ND	3.0
1,2,4-Trichlorobenzene	ND	0.50	ND	3.7
Hexachlorobutadiene	ND	0.50	ND	5.3
Naphthalene	ND	2.0	ND	10

Surrogate	%REC	Limits
Bromofluorobenzene	94	70-130

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units





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2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

**Laboratory Job Number 250905  
ANALYTICAL REPORT**

Iris Environmental  
1438 Webster Street  
Oakland, CA 94612

Project : 13-945C  
Location : Park Ave. Cleaners  
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
SV-03	250905-001
SV-07	250905-002
SV-08	250905-003
SV-01	250905-004
SV-01-DUP	250905-005
SV-04	250905-006
SV-06	250905-007
SV-05	250905-008

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: \_\_\_\_\_

Tracy Babjar  
Project Manager  
tracy.babjar@ctberk.com  
(510) 204-2226

Date: 11/20/2013

## CASE NARRATIVE

Laboratory number: 250905  
Client: Iris Environmental  
Project: 13-945C  
Location: Park Ave. Cleaners  
Request Date: 11/18/13  
Samples Received: 11/18/13

This data package contains sample and QC results for eight air samples, requested for the above referenced project on 11/18/13. The samples were received cold and intact.

### Volatile Organics in Air by MS (EPA TO-15):

High response was observed for n-heptane in the CCV analyzed 11/20/13 10:05; affected data was qualified with "b". High recoveries were observed for a number of analytes in the BSD for batch 205231; the associated RPDs were within limits, and these analytes were not detected at or above the RL in the associated samples. High RPD was observed for naphthalene in the BS/BSD for batch 205231; this analyte was not detected at or above the RL in the associated samples. High recoveries were observed for n-heptane in the BS/BSD for batch 205279; the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated samples. High surrogate recoveries were observed for bromofluorobenzene in many samples. No other analytical problems were encountered.



**IRIS ENVIRONMENTAL**

1438 Webster Street, Suite 302  
Oakland, California 94612  
(510) 834-4747 tel  
(510) 834-4199 fax

**CHAIN-OF-CUSTODY**

250905

Date: 11 / 18 / 13

Page: 1 of 1

Nº 003616

**Analyses Required**

Sampler Name(s):

Tiffany Kitzke

Signature(s):

*[Signature]*

Sample ID

Date

Time

Matrix

Pres.

TO-15

48 Hour Rust

Number of Containers

1	SV-03	11/18/13	0957	SC	-
2	SV-07		1048		
3	SV-08		1110		
4	SV-01		1225		
5	SV-01-DUP		1235		
6	SV-04		1308		
7	SV-06		1402		
8	SV-05		1346		

**PROJECT INFORMATION**

Project Name: Park Avenue cleaners  
Project Number: 13-445C  
Contact Person: Craig Pelleber, Tiffany Kitzke  
E-mail: craig@irisenv.com  
Contact Telephone:

Report: Routine (Level 2) Level 3 Level 4 EDD

TAT: 10-day 5-day 72-hr 48-hr 24-hr Other:

**Special Instructions/Comments:**

48 hour Rust

**RELINQUISHED BY:**

Printed Name

Signature

Company

Time/Date

**RELINQUISHED BY:**

Printed Name

Signature

Company

Time/Date

**RECEIVED BY:**

Printed Name

Signature

Company

Time/Date

**RECEIVED BY:**

Printed Name

Signature

Company

Time/Date

# COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 250905 Date Received 11/18/13 Number of coolers 0  
 Client IRIS Project Park Ave  
 Date Opened 11/18/13 By (print) PA (sign) [Signature]  
 Date Logged in ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc) \_\_\_\_\_ YES (NO)  
 Shipping info \_\_\_\_\_

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO  
 How many \_\_\_\_\_ Name \_\_\_\_\_ Date \_\_\_\_\_

2B. Were custody seals intact upon arrival? \_\_\_\_\_ YES NO (N/A)

3. Were custody papers dry and intact when received? \_\_\_\_\_ YES NO (YES)

4. Were custody papers filled out properly (ink, signed, etc)? \_\_\_\_\_ YES NO (YES)

5. Is the project identifiable from custody papers? (If so fill out top of form) \_\_\_\_\_ YES NO (YES)

6. Indicate the packing in cooler: (if other, describe) \_\_\_\_\_

☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☐ None  
☐ Cloth material ☒ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: \* Notify PM if temperature exceeds 6°C

Type of ice used: ☐ Wet ☐ Blue/Gel ☒ None Temp(°C) \_\_\_\_\_

☐ Samples Received on ice & cold without a temperature blank

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? \_\_\_\_\_ YES (NO)

If YES, what time were they transferred to freezer? \_\_\_\_\_

9. Did all bottles arrive unbroken/unopened? \_\_\_\_\_ YES NO (YES)

10. Are there any missing / extra samples? \_\_\_\_\_ YES NO (YES)

11. Are samples in the appropriate containers for indicated tests? \_\_\_\_\_ YES NO (YES)

12. Are sample labels present, in good condition and complete? \_\_\_\_\_ YES NO (YES)

13. Do the sample labels agree with custody papers? \_\_\_\_\_ YES NO (YES)

14. Was sufficient amount of sample sent for tests requested? \_\_\_\_\_ YES NO (YES)

15. Are the samples appropriately preserved? \_\_\_\_\_ YES NO (N/A)

16. Did you check preservatives for all bottles for each sample? \_\_\_\_\_ YES NO (N/A)

17. Did you document your preservative check? \_\_\_\_\_ YES NO (N/A)

18. Did you change the hold time in LIMS for unpreserved VOAs? \_\_\_\_\_ YES NO (N/A)

19. Did you change the hold time in LIMS for preserved terracores? \_\_\_\_\_ YES NO (N/A)

20. Are bubbles > 6mm absent in VOA samples? \_\_\_\_\_ YES NO (N/A)

21. Was the client contacted concerning this sample delivery? \_\_\_\_\_ YES NO (NO)

If YES, Who was called? \_\_\_\_\_ By \_\_\_\_\_ Date: \_\_\_\_\_

## COMMENTS

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### Volatile Organics in Air

Lab #:	250905	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Field ID:	SV-03	Diln Fac:	1.740
Lab ID:	250905-001	Batch#:	205231
Matrix:	Air	Sampled:	11/18/13
Units (V):	ppbv	Received:	11/18/13
Units (M):	ug/m3	Analyzed:	11/19/13

Analyte	Result (V)	RL	Result (M)	RL
Freon 12	ND	0.87	ND	4.3
Freon 114	ND	0.87	ND	6.1
Chloromethane	ND	0.87	ND	1.8
Vinyl Chloride	ND	0.87	ND	2.2
1,3-Butadiene	ND	0.87	ND	1.9
Bromomethane	ND	0.87	ND	3.4
Chloroethane	ND	0.87	ND	2.3
Trichlorofluoromethane	ND	0.87	ND	4.9
Acrolein	ND	3.5	ND	8.0
1,1-Dichloroethene	ND	0.87	ND	3.4
Freon 113	ND	0.87	ND	6.7
Acetone	ND	3.5	ND	8.3
Carbon Disulfide	0.87	0.87	2.7	2.7
Methylene Chloride	ND	0.87	ND	3.0
trans-1,2-Dichloroethene	ND	0.87	ND	3.4
MTBE	ND	0.87	ND	3.1
n-Hexane	ND	0.87	ND	3.1
1,1-Dichloroethane	ND	0.87	ND	3.5
Vinyl Acetate	ND	0.87	ND	3.1
cis-1,2-Dichloroethene	ND	0.87	ND	3.4
2-Butanone	ND	0.87	ND	2.6
Ethyl Acetate	ND	0.87	ND	3.1
Tetrahydrofuran	ND	0.87	ND	2.6
Chloroform	ND	0.87	ND	4.2
1,1,1-Trichloroethane	ND	0.87	ND	4.7
Cyclohexane	ND	0.87	ND	3.0
Carbon Tetrachloride	ND	0.87	ND	5.5
Benzene	ND	0.87	ND	2.8
1,2-Dichloroethane	ND	0.87	ND	3.5
n-Heptane	ND	0.87	ND	3.6
Trichloroethene	ND	0.87	ND	4.7
1,2-Dichloropropane	ND	0.87	ND	4.0
Bromodichloromethane	ND	0.87	ND	5.8
cis-1,3-Dichloropropene	ND	0.87	ND	3.9

\*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

### Volatile Organics in Air

Lab #:	250905	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Field ID:	SV-03	Diln Fac:	1.740
Lab ID:	250905-001	Batch#:	205231
Matrix:	Air	Sampled:	11/18/13
Units (V):	ppbv	Received:	11/18/13
Units (M):	ug/m3	Analyzed:	11/19/13

Analyte	Result (V)	RL	Result (M)	RL
4-Methyl-2-Pentanone	ND	0.87	ND	3.6
Toluene	ND	0.87	ND	3.3
trans-1,3-Dichloropropene	ND	0.87	ND	3.9
1,1,2-Trichloroethane	ND	0.87	ND	4.7
Tetrachloroethene	8.0	0.87	54	5.9
2-Hexanone	ND	0.87	ND	3.6
Dibromochloromethane	ND	0.87	ND	7.4
1,2-Dibromoethane	ND	0.87	ND	6.7
Chlorobenzene	ND	0.87	ND	4.0
Ethylbenzene	ND	0.87	ND	3.8
m,p-Xylenes	ND	0.87	ND	3.8
o-Xylene	ND	0.87	ND	3.8
Styrene	ND	0.87	ND	3.7
Bromoform	ND	0.87	ND	9.0
1,1,2,2-Tetrachloroethane	ND	0.87	ND	6.0
4-Ethyltoluene	ND	0.87	ND	4.3
1,3,5-Trimethylbenzene	ND	0.87	ND	4.3
1,2,4-Trimethylbenzene	ND	0.87	ND	4.3
1,3-Dichlorobenzene	ND	0.87	ND	5.2
1,4-Dichlorobenzene	ND	0.87	ND	5.2
Benzyl chloride	ND	0.87	ND	4.5
1,2-Dichlorobenzene	ND	0.87	ND	5.2
1,2,4-Trichlorobenzene	ND	0.87	ND	6.5
Hexachlorobutadiene	ND	0.87	ND	9.3
Naphthalene	ND	3.5	ND	18

Surrogate	%REC	Limits
Bromofluorobenzene	135 *	70-130

\*= Value outside of QC limits; see narrative

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### Volatile Organics in Air

Lab #:	250905	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Field ID:	SV-07	Diln Fac:	3.460
Lab ID:	250905-002	Batch#:	205231
Matrix:	Air	Sampled:	11/18/13
Units (V):	ppbv	Received:	11/18/13
Units (M):	ug/m3	Analyzed:	11/20/13

Analyte	Result (V)	RL	Result (M)	RL
Freon 12	ND	1.7	ND	8.6
Freon 114	ND	1.7	ND	12
Chloromethane	ND	1.7	ND	3.6
Vinyl Chloride	ND	1.7	ND	4.4
1,3-Butadiene	ND	1.7	ND	3.8
Bromomethane	ND	1.7	ND	6.7
Chloroethane	ND	1.7	ND	4.6
Trichlorofluoromethane	ND	1.7	ND	9.7
Acrolein	ND	6.9	ND	16
1,1-Dichloroethene	ND	1.7	ND	6.9
Freon 113	ND	1.7	ND	13
Acetone	ND	6.9	ND	16
Carbon Disulfide	3.3	1.7	10	5.4
Methylene Chloride	ND	1.7	ND	6.0
trans-1,2-Dichloroethene	ND	1.7	ND	6.9
MTBE	ND	1.7	ND	6.2
n-Hexane	ND	1.7	ND	6.1
1,1-Dichloroethane	ND	1.7	ND	7.0
Vinyl Acetate	ND	1.7	ND	6.1
cis-1,2-Dichloroethene	ND	1.7	ND	6.9
2-Butanone	ND	1.7	ND	5.1
Ethyl Acetate	ND	1.7	ND	6.2
Tetrahydrofuran	ND	1.7	ND	5.1
Chloroform	ND	1.7	ND	8.4
1,1,1-Trichloroethane	ND	1.7	ND	9.4
Cyclohexane	ND	1.7	ND	6.0
Carbon Tetrachloride	ND	1.7	ND	11
Benzene	ND	1.7	ND	5.5
1,2-Dichloroethane	ND	1.7	ND	7.0
n-Heptane	ND	1.7	ND	7.1
Trichloroethene	ND	1.7	ND	9.3
1,2-Dichloropropane	ND	1.7	ND	8.0
Bromodichloromethane	ND	1.7	ND	12
cis-1,3-Dichloropropene	ND	1.7	ND	7.9

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### Volatile Organics in Air

Lab #:	250905	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Field ID:	SV-07	Diln Fac:	3.460
Lab ID:	250905-002	Batch#:	205231
Matrix:	Air	Sampled:	11/18/13
Units (V):	ppbv	Received:	11/18/13
Units (M):	ug/m3	Analyzed:	11/20/13

Analyte	Result (V)	RL	Result (M)	RL
4-Methyl-2-Pentanone	ND	1.7	ND	7.1
Toluene	ND	1.7	ND	6.5
trans-1,3-Dichloropropene	ND	1.7	ND	7.9
1,1,2-Trichloroethane	ND	1.7	ND	9.4
Tetrachloroethene	170	1.7	1,200	12
2-Hexanone	ND	1.7	ND	7.1
Dibromochloromethane	ND	1.7	ND	15
1,2-Dibromoethane	ND	1.7	ND	13
Chlorobenzene	ND	1.7	ND	8.0
Ethylbenzene	ND	1.7	ND	7.5
m,p-Xylenes	ND	1.7	ND	7.5
o-Xylene	ND	1.7	ND	7.5
Styrene	ND	1.7	ND	7.4
Bromoform	ND	1.7	ND	18
1,1,2,2-Tetrachloroethane	ND	1.7	ND	12
4-Ethyltoluene	ND	1.7	ND	8.5
1,3,5-Trimethylbenzene	ND	1.7	ND	8.5
1,2,4-Trimethylbenzene	ND	1.7	ND	8.5
1,3-Dichlorobenzene	ND	1.7	ND	10
1,4-Dichlorobenzene	ND	1.7	ND	10
Benzyl chloride	ND	1.7	ND	9.0
1,2-Dichlorobenzene	ND	1.7	ND	10
1,2,4-Trichlorobenzene	ND	1.7	ND	13
Hexachlorobutadiene	ND	1.7	ND	18
Naphthalene	ND	6.9	ND	36

Surrogate	%REC	Limits
Bromofluorobenzene	134 *	70-130

\*= Value outside of QC limits; see narrative

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Result V= Result in volume units

### Volatile Organics in Air

Lab #:	250905	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Field ID:	SV-08	Diln Fac:	37.80
Lab ID:	250905-003	Batch#:	205231
Matrix:	Air	Sampled:	11/18/13
Units (V):	ppbv	Received:	11/18/13
Units (M):	ug/m3	Analyzed:	11/20/13

Analyte	Result (V)	RL	Result (M)	RL
Freon 12	ND	19	ND	93
Freon 114	ND	19	ND	130
Chloromethane	ND	19	ND	39
Vinyl Chloride	ND	19	ND	48
1,3-Butadiene	ND	19	ND	42
Bromomethane	ND	19	ND	73
Chloroethane	ND	19	ND	50
Trichlorofluoromethane	ND	19	ND	110
Acrolein	ND	76	ND	170
1,1-Dichloroethene	ND	19	ND	75
Freon 113	ND	19	ND	140
Acetone	ND	76	ND	180
Carbon Disulfide	ND	19	ND	59
Methylene Chloride	ND	19	ND	66
trans-1,2-Dichloroethene	ND	19	ND	75
MTBE	ND	19	ND	68
n-Hexane	ND	19	ND	67
1,1-Dichloroethane	ND	19	ND	76
Vinyl Acetate	ND	19	ND	67
cis-1,2-Dichloroethene	ND	19	ND	75
2-Butanone	ND	19	ND	56
Ethyl Acetate	ND	19	ND	68
Tetrahydrofuran	ND	19	ND	56
Chloroform	ND	19	ND	92
1,1,1-Trichloroethane	ND	19	ND	100
Cyclohexane	ND	19	ND	65
Carbon Tetrachloride	ND	19	ND	120
Benzene	ND	19	ND	60
1,2-Dichloroethane	ND	19	ND	76
n-Heptane	ND	19	ND	77
Trichloroethene	ND	19	ND	100
1,2-Dichloropropane	ND	19	ND	87
Bromodichloromethane	ND	19	ND	130
cis-1,3-Dichloropropene	ND	19	ND	86

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Result M= Result in mass units

Result V= Result in volume units



### Volatile Organics in Air

Lab #:	250905	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Field ID:	SV-08	Diln Fac:	37.80
Lab ID:	250905-003	Batch#:	205231
Matrix:	Air	Sampled:	11/18/13
Units (V):	ppbv	Received:	11/18/13
Units (M):	ug/m3	Analyzed:	11/20/13

Analyte	Result (V)	RL	Result (M)	RL
4-Methyl-2-Pentanone	ND	19	ND	77
Toluene	ND	19	ND	71
trans-1,3-Dichloropropene	ND	19	ND	86
1,1,2-Trichloroethane	ND	19	ND	100
Tetrachloroethene	1,500	19	10,000	130
2-Hexanone	ND	19	ND	77
Dibromochloromethane	ND	19	ND	160
1,2-Dibromoethane	ND	19	ND	150
Chlorobenzene	ND	19	ND	87
Ethylbenzene	ND	19	ND	82
m,p-Xylenes	ND	19	ND	82
o-Xylene	ND	19	ND	82
Styrene	ND	19	ND	81
Bromoform	ND	19	ND	200
1,1,2,2-Tetrachloroethane	ND	19	ND	130
4-Ethyltoluene	ND	19	ND	93
1,3,5-Trimethylbenzene	ND	19	ND	93
1,2,4-Trimethylbenzene	ND	19	ND	93
1,3-Dichlorobenzene	ND	19	ND	110
1,4-Dichlorobenzene	ND	19	ND	110
Benzyl chloride	ND	19	ND	98
1,2-Dichlorobenzene	ND	19	ND	110
1,2,4-Trichlorobenzene	ND	19	ND	140
Hexachlorobutadiene	ND	19	ND	200
Naphthalene	ND	76	ND	400

Surrogate	%REC	Limits
Bromofluorobenzene	135 *	70-130

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Result V= Result in volume units

### Volatile Organics in Air

Lab #:	250905	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Field ID:	SV-01	Diln Fac:	1.780
Lab ID:	250905-004	Batch#:	205231
Matrix:	Air	Sampled:	11/18/13
Units (V):	ppbv	Received:	11/18/13
Units (M):	ug/m3	Analyzed:	11/20/13

Analyte	Result (V)	RL	Result (M)	RL
Freon 12	ND	0.89	ND	4.4
Freon 114	ND	0.89	ND	6.2
Chloromethane	ND	0.89	ND	1.8
Vinyl Chloride	ND	0.89	ND	2.3
1,3-Butadiene	ND	0.89	ND	2.0
Bromomethane	ND	0.89	ND	3.5
Chloroethane	ND	0.89	ND	2.3
Trichlorofluoromethane	ND	0.89	ND	5.0
Acrolein	ND	3.6	ND	8.2
1,1-Dichloroethene	ND	0.89	ND	3.5
Freon 113	ND	0.89	ND	6.8
Acetone	ND	3.6	ND	8.5
Carbon Disulfide	ND	0.89	ND	2.8
Methylene Chloride	ND	0.89	ND	3.1
trans-1,2-Dichloroethene	ND	0.89	ND	3.5
MTBE	ND	0.89	ND	3.2
n-Hexane	ND	0.89	ND	3.1
1,1-Dichloroethane	ND	0.89	ND	3.6
Vinyl Acetate	ND	0.89	ND	3.1
cis-1,2-Dichloroethene	ND	0.89	ND	3.5
2-Butanone	ND	0.89	ND	2.6
Ethyl Acetate	ND	0.89	ND	3.2
Tetrahydrofuran	ND	0.89	ND	2.6
Chloroform	ND	0.89	ND	4.3
1,1,1-Trichloroethane	ND	0.89	ND	4.9
Cyclohexane	ND	0.89	ND	3.1
Carbon Tetrachloride	ND	0.89	ND	5.6
Benzene	ND	0.89	ND	2.8
1,2-Dichloroethane	ND	0.89	ND	3.6
n-Heptane	ND	0.89	ND	3.6
Trichloroethene	ND	0.89	ND	4.8
1,2-Dichloropropane	ND	0.89	ND	4.1
Bromodichloromethane	ND	0.89	ND	6.0
cis-1,3-Dichloropropene	ND	0.89	ND	4.0

\*= Value outside of QC limits; see narrative

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Result M= Result in mass units

Result V= Result in volume units

### Volatile Organics in Air

Lab #:	250905	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Field ID:	SV-01	Diln Fac:	1.780
Lab ID:	250905-004	Batch#:	205231
Matrix:	Air	Sampled:	11/18/13
Units (V):	ppbv	Received:	11/18/13
Units (M):	ug/m3	Analyzed:	11/20/13

Analyte	Result (V)	RL	Result (M)	RL
4-Methyl-2-Pentanone	ND	0.89	ND	3.6
Toluene	ND	0.89	ND	3.4
trans-1,3-Dichloropropene	ND	0.89	ND	4.0
1,1,2-Trichloroethane	ND	0.89	ND	4.9
Tetrachloroethene	36	0.89	240	6.0
2-Hexanone	ND	0.89	ND	3.6
Dibromochloromethane	ND	0.89	ND	7.6
1,2-Dibromoethane	ND	0.89	ND	6.8
Chlorobenzene	ND	0.89	ND	4.1
Ethylbenzene	ND	0.89	ND	3.9
m,p-Xylenes	ND	0.89	ND	3.9
o-Xylene	ND	0.89	ND	3.9
Styrene	ND	0.89	ND	3.8
Bromoform	ND	0.89	ND	9.2
1,1,2,2-Tetrachloroethane	ND	0.89	ND	6.1
4-Ethyltoluene	ND	0.89	ND	4.4
1,3,5-Trimethylbenzene	ND	0.89	ND	4.4
1,2,4-Trimethylbenzene	ND	0.89	ND	4.4
1,3-Dichlorobenzene	ND	0.89	ND	5.4
1,4-Dichlorobenzene	ND	0.89	ND	5.4
Benzyl chloride	ND	0.89	ND	4.6
1,2-Dichlorobenzene	ND	0.89	ND	5.4
1,2,4-Trichlorobenzene	ND	0.89	ND	6.6
Hexachlorobutadiene	ND	0.89	ND	9.5
Naphthalene	ND	3.6	ND	19

Surrogate	%REC	Limits
Bromofluorobenzene	133 *	70-130

\*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

### Volatile Organics in Air

Lab #:	250905	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Field ID:	SV-01-DUP	Diln Fac:	1.830
Lab ID:	250905-005	Batch#:	205279
Matrix:	Air	Sampled:	11/18/13
Units (V):	ppbv	Received:	11/18/13
Units (M):	ug/m3	Analyzed:	11/20/13

Analyte	Result (V)	RL	Result (M)	RL
Freon 12	ND	0.92	ND	4.5
Freon 114	ND	0.92	ND	6.4
Chloromethane	ND	0.92	ND	1.9
Vinyl Chloride	ND	0.92	ND	2.3
1,3-Butadiene	ND	0.92	ND	2.0
Bromomethane	ND	0.92	ND	3.6
Chloroethane	ND	0.92	ND	2.4
Trichlorofluoromethane	ND	0.92	ND	5.1
Acrolein	ND	3.7	ND	8.4
1,1-Dichloroethene	ND	0.92	ND	3.6
Freon 113	ND	0.92	ND	7.0
Acetone	ND	3.7	ND	8.7
Carbon Disulfide	ND	0.92	ND	2.8
Methylene Chloride	ND	0.92	ND	3.2
trans-1,2-Dichloroethene	ND	0.92	ND	3.6
MTBE	ND	0.92	ND	3.3
n-Hexane	ND	0.92	ND	3.2
1,1-Dichloroethane	ND	0.92	ND	3.7
Vinyl Acetate	ND	0.92	ND	3.2
cis-1,2-Dichloroethene	ND	0.92	ND	3.6
2-Butanone	ND	0.92	ND	2.7
Ethyl Acetate	ND	0.92	ND	3.3
Tetrahydrofuran	ND	0.92	ND	2.7
Chloroform	ND	0.92	ND	4.5
1,1,1-Trichloroethane	ND	0.92	ND	5.0
Cyclohexane	ND	0.92	ND	3.1
Carbon Tetrachloride	ND	0.92	ND	5.8
Benzene	ND	0.92	ND	2.9
1,2-Dichloroethane	ND	0.92	ND	3.7
n-Heptane	ND	0.92	ND	3.7
Trichloroethene	ND	0.92	ND	4.9
1,2-Dichloropropane	ND	0.92	ND	4.2
Bromodichloromethane	ND	0.92	ND	6.1
cis-1,3-Dichloropropene	ND	0.92	ND	4.2

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Result V= Result in volume units

### Volatile Organics in Air

Lab #:	250905	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Field ID:	SV-01-DUP	Diln Fac:	1.830
Lab ID:	250905-005	Batch#:	205279
Matrix:	Air	Sampled:	11/18/13
Units (V):	ppbv	Received:	11/18/13
Units (M):	ug/m3	Analyzed:	11/20/13

Analyte	Result (V)	RL	Result (M)	RL
4-Methyl-2-Pentanone	ND	0.92	ND	3.7
Toluene	ND	0.92	ND	3.4
trans-1,3-Dichloropropene	ND	0.92	ND	4.2
1,1,2-Trichloroethane	ND	0.92	ND	5.0
Tetrachloroethene	37	0.92	250	6.2
2-Hexanone	ND	0.92	ND	3.7
Dibromochloromethane	ND	0.92	ND	7.8
1,2-Dibromoethane	ND	0.92	ND	7.0
Chlorobenzene	ND	0.92	ND	4.2
Ethylbenzene	ND	0.92	ND	4.0
m,p-Xylenes	ND	0.92	ND	4.0
o-Xylene	ND	0.92	ND	4.0
Styrene	ND	0.92	ND	3.9
Bromoform	ND	0.92	ND	9.5
1,1,2,2-Tetrachloroethane	ND	0.92	ND	6.3
4-Ethyltoluene	ND	0.92	ND	4.5
1,3,5-Trimethylbenzene	ND	0.92	ND	4.5
1,2,4-Trimethylbenzene	ND	0.92	ND	4.5
1,3-Dichlorobenzene	ND	0.92	ND	5.5
1,4-Dichlorobenzene	ND	0.92	ND	5.5
Benzyl chloride	ND	0.92	ND	4.7
1,2-Dichlorobenzene	ND	0.92	ND	5.5
1,2,4-Trichlorobenzene	ND	0.92	ND	6.8
Hexachlorobutadiene	ND	0.92	ND	9.8
Naphthalene	ND	3.7	ND	19

Surrogate	%REC	Limits
Bromofluorobenzene	134 *	70-130

\*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

### Volatile Organics in Air

Lab #:	250905	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Field ID:	SV-04	Diln Fac:	10.32
Lab ID:	250905-006	Batch#:	205231
Matrix:	Air	Sampled:	11/18/13
Units (V):	ppbv	Received:	11/18/13
Units (M):	ug/m3	Analyzed:	11/20/13

Analyte	Result (V)	RL	Result (M)	RL
Freon 12	ND	5.2	ND	26
Freon 114	ND	5.2	ND	36
Chloromethane	ND	5.2	ND	11
Vinyl Chloride	ND	5.2	ND	13
1,3-Butadiene	ND	5.2	ND	11
Bromomethane	ND	5.2	ND	20
Chloroethane	ND	5.2	ND	14
Trichlorofluoromethane	ND	5.2	ND	29
Acrolein	ND	21	ND	47
1,1-Dichloroethene	ND	5.2	ND	20
Freon 113	ND	5.2	ND	40
Acetone	ND	21	ND	49
Carbon Disulfide	ND	5.2	ND	16
Methylene Chloride	ND	5.2	ND	18
trans-1,2-Dichloroethene	ND	5.2	ND	20
MTBE	ND	5.2	ND	19
n-Hexane	ND	5.2	ND	18
1,1-Dichloroethane	ND	5.2	ND	21
Vinyl Acetate	ND	5.2	ND	18
cis-1,2-Dichloroethene	ND	5.2	ND	20
2-Butanone	ND	5.2	ND	15
Ethyl Acetate	ND	5.2	ND	19
Tetrahydrofuran	ND	5.2	ND	15
Chloroform	5.5	5.2	27	25
1,1,1-Trichloroethane	ND	5.2	ND	28
Cyclohexane	ND	5.2	ND	18
Carbon Tetrachloride	ND	5.2	ND	32
Benzene	ND	5.2	ND	16
1,2-Dichloroethane	ND	5.2	ND	21
n-Heptane	ND	5.2	ND	21
Trichloroethene	ND	5.2	ND	28
1,2-Dichloropropane	ND	5.2	ND	24
Bromodichloromethane	ND	5.2	ND	35
cis-1,3-Dichloropropene	ND	5.2	ND	23

\*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

### Volatile Organics in Air

Lab #:	250905	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Field ID:	SV-04	Diln Fac:	10.32
Lab ID:	250905-006	Batch#:	205231
Matrix:	Air	Sampled:	11/18/13
Units (V):	ppbv	Received:	11/18/13
Units (M):	ug/m3	Analyzed:	11/20/13

Analyte	Result (V)	RL	Result (M)	RL
4-Methyl-2-Pentanone	ND	5.2	ND	21
Toluene	ND	5.2	ND	19
trans-1,3-Dichloropropene	ND	5.2	ND	23
1,1,2-Trichloroethane	ND	5.2	ND	28
Tetrachloroethene	430	5.2	2,900	35
2-Hexanone	ND	5.2	ND	21
Dibromochloromethane	ND	5.2	ND	44
1,2-Dibromoethane	ND	5.2	ND	40
Chlorobenzene	ND	5.2	ND	24
Ethylbenzene	ND	5.2	ND	22
m,p-Xylenes	ND	5.2	ND	22
o-Xylene	ND	5.2	ND	22
Styrene	ND	5.2	ND	22
Bromoform	ND	5.2	ND	53
1,1,2,2-Tetrachloroethane	ND	5.2	ND	35
4-Ethyltoluene	ND	5.2	ND	25
1,3,5-Trimethylbenzene	ND	5.2	ND	25
1,2,4-Trimethylbenzene	ND	5.2	ND	25
1,3-Dichlorobenzene	ND	5.2	ND	31
1,4-Dichlorobenzene	ND	5.2	ND	31
Benzyl chloride	ND	5.2	ND	27
1,2-Dichlorobenzene	ND	5.2	ND	31
1,2,4-Trichlorobenzene	ND	5.2	ND	38
Hexachlorobutadiene	ND	5.2	ND	55
Naphthalene	ND	21	ND	110

Surrogate	%REC	Limits
Bromofluorobenzene	131 *	70-130

\*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units



### Volatile Organics in Air

Lab #:	250905	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Field ID:	SV-06	Diln Fac:	105.0
Lab ID:	250905-007	Batch#:	205279
Matrix:	Air	Sampled:	11/18/13
Units (V):	ppbv	Received:	11/18/13
Units (M):	ug/m3	Analyzed:	11/20/13

Analyte	Result (V)	RL	Result (M)	RL
Freon 12	ND	53	ND	260
Freon 114	ND	53	ND	370
Chloromethane	ND	53	ND	110
Vinyl Chloride	ND	53	ND	130
1,3-Butadiene	ND	53	ND	120
Bromomethane	ND	53	ND	200
Chloroethane	ND	53	ND	140
Trichlorofluoromethane	ND	53	ND	290
Acrolein	ND	210	ND	480
1,1-Dichloroethene	ND	53	ND	210
Freon 113	ND	53	ND	400
Acetone	ND	210	ND	500
Carbon Disulfide	ND	53	ND	160
Methylene Chloride	ND	53	ND	180
trans-1,2-Dichloroethene	ND	53	ND	210
MTBE	ND	53	ND	190
n-Hexane	ND	53	ND	190
1,1-Dichloroethane	ND	53	ND	210
Vinyl Acetate	ND	53	ND	180
cis-1,2-Dichloroethene	ND	53	ND	210
2-Butanone	ND	53	ND	150
Ethyl Acetate	ND	53	ND	190
Tetrahydrofuran	ND	53	ND	150
Chloroform	ND	53	ND	260
1,1,1-Trichloroethane	ND	53	ND	290
Cyclohexane	ND	53	ND	180
Carbon Tetrachloride	ND	53	ND	330
Benzene	ND	53	ND	170
1,2-Dichloroethane	ND	53	ND	210
n-Heptane	ND	53	ND	220
Trichloroethene	560	53	3,000	280
1,2-Dichloropropane	ND	53	ND	240
Bromodichloromethane	ND	53	ND	350
cis-1,3-Dichloropropene	ND	53	ND	240

\*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

### Volatile Organics in Air

Lab #:	250905	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Field ID:	SV-06	Diln Fac:	105.0
Lab ID:	250905-007	Batch#:	205279
Matrix:	Air	Sampled:	11/18/13
Units (V):	ppbv	Received:	11/18/13
Units (M):	ug/m3	Analyzed:	11/20/13

Analyte	Result (V)	RL	Result (M)	RL
4-Methyl-2-Pentanone	ND	53	ND	220
Toluene	ND	53	ND	200
trans-1,3-Dichloropropene	ND	53	ND	240
1,1,2-Trichloroethane	ND	53	ND	290
Tetrachloroethene	5,400	53	37,000	360
2-Hexanone	ND	53	ND	220
Dibromochloromethane	ND	53	ND	450
1,2-Dibromoethane	ND	53	ND	400
Chlorobenzene	ND	53	ND	240
Ethylbenzene	ND	53	ND	230
m,p-Xylenes	ND	53	ND	230
o-Xylene	ND	53	ND	230
Styrene	ND	53	ND	220
Bromoform	ND	53	ND	540
1,1,2,2-Tetrachloroethane	ND	53	ND	360
4-Ethyltoluene	ND	53	ND	260
1,3,5-Trimethylbenzene	ND	53	ND	260
1,2,4-Trimethylbenzene	ND	53	ND	260
1,3-Dichlorobenzene	ND	53	ND	320
1,4-Dichlorobenzene	ND	53	ND	320
Benzyl chloride	ND	53	ND	270
1,2-Dichlorobenzene	ND	53	ND	320
1,2,4-Trichlorobenzene	ND	53	ND	390
Hexachlorobutadiene	ND	53	ND	560
Naphthalene	ND	210	ND	1,100

Surrogate	%REC	Limits
Bromofluorobenzene	136 *	70-130

\*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

### Volatile Organics in Air

Lab #:	250905	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Field ID:	SV-05	Diln Fac:	37.60
Lab ID:	250905-008	Batch#:	205231
Matrix:	Air	Sampled:	11/18/13
Units (V):	ppbv	Received:	11/18/13
Units (M):	ug/m3	Analyzed:	11/20/13

Analyte	Result (V)	RL	Result (M)	RL
Freon 12	ND	19	ND	93
Freon 114	ND	19	ND	130
Chloromethane	ND	19	ND	39
Vinyl Chloride	ND	19	ND	48
1,3-Butadiene	ND	19	ND	42
Bromomethane	ND	19	ND	73
Chloroethane	ND	19	ND	50
Trichlorofluoromethane	ND	19	ND	110
Acrolein	ND	75	ND	170
1,1-Dichloroethene	ND	19	ND	75
Freon 113	ND	19	ND	140
Acetone	ND	75	ND	180
Carbon Disulfide	ND	19	ND	59
Methylene Chloride	ND	19	ND	65
trans-1,2-Dichloroethene	ND	19	ND	75
MTBE	ND	19	ND	68
n-Hexane	ND	19	ND	66
1,1-Dichloroethane	ND	19	ND	76
Vinyl Acetate	ND	19	ND	66
cis-1,2-Dichloroethene	ND	19	ND	75
2-Butanone	ND	19	ND	55
Ethyl Acetate	ND	19	ND	68
Tetrahydrofuran	ND	19	ND	55
Chloroform	ND	19	ND	92
1,1,1-Trichloroethane	ND	19	ND	100
Cyclohexane	ND	19	ND	65
Carbon Tetrachloride	ND	19	ND	120
Benzene	ND	19	ND	60
1,2-Dichloroethane	ND	19	ND	76
n-Heptane	ND	19	ND	77
Trichloroethene	ND	19	ND	100
1,2-Dichloropropane	ND	19	ND	87
Bromodichloromethane	ND	19	ND	130
cis-1,3-Dichloropropene	ND	19	ND	85

\*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

### Volatile Organics in Air

Lab #:	250905	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Field ID:	SV-05	Diln Fac:	37.60
Lab ID:	250905-008	Batch#:	205231
Matrix:	Air	Sampled:	11/18/13
Units (V):	ppbv	Received:	11/18/13
Units (M):	ug/m3	Analyzed:	11/20/13

Analyte	Result (V)	RL	Result (M)	RL
4-Methyl-2-Pentanone	ND	19	ND	77
Toluene	ND	19	ND	71
trans-1,3-Dichloropropene	ND	19	ND	85
1,1,2-Trichloroethane	ND	19	ND	100
Tetrachloroethene	1,600	19	11,000	130
2-Hexanone	ND	19	ND	77
Dibromochloromethane	ND	19	ND	160
1,2-Dibromoethane	ND	19	ND	140
Chlorobenzene	ND	19	ND	87
Ethylbenzene	ND	19	ND	82
m,p-Xylenes	ND	19	ND	82
o-Xylene	ND	19	ND	82
Styrene	ND	19	ND	80
Bromoform	ND	19	ND	190
1,1,2,2-Tetrachloroethane	ND	19	ND	130
4-Ethyltoluene	ND	19	ND	92
1,3,5-Trimethylbenzene	ND	19	ND	92
1,2,4-Trimethylbenzene	ND	19	ND	92
1,3-Dichlorobenzene	ND	19	ND	110
1,4-Dichlorobenzene	ND	19	ND	110
Benzyl chloride	ND	19	ND	97
1,2-Dichlorobenzene	ND	19	ND	110
1,2,4-Trichlorobenzene	ND	19	ND	140
Hexachlorobutadiene	ND	19	ND	200
Naphthalene	ND	75	ND	390

Surrogate	%REC	Limits
Bromofluorobenzene	147 *	70-130

\*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

# Batch QC Report

Volatile Organics in Air			
Lab #:	250905	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	205231
Units (V):	ppbv	Analyzed:	11/19/13
Diln Fac:	1.000		

Type: BS Lab ID: QC716814

Analyte	Spiked	Result (V)	%REC	Limits
Freon 12	10.00	10.02	100	70-130
Freon 114	10.00	10.25	102	70-130
Chloromethane	10.00	10.72	107	70-130
Vinyl Chloride	10.00	10.52	105	70-130
1,3-Butadiene	10.00	10.07	101	70-130
Bromomethane	10.00	10.47	105	70-130
Chloroethane	10.00	11.36	114	70-130
Trichlorofluoromethane	10.00	10.24	102	70-130
Acrolein	10.00	10.51	105	62-130
1,1-Dichloroethene	10.00	9.697	97	70-130
Freon 113	10.00	9.893	99	70-130
Acetone	10.00	9.774	98	67-130
Carbon Disulfide	10.00	9.111	91	70-130
Methylene Chloride	10.00	9.201	92	68-130
trans-1,2-Dichloroethene	10.00	10.43	104	70-130
MTBE	10.00	10.77	108	70-130
n-Hexane	10.00	10.67	107	70-130
1,1-Dichloroethane	10.00	10.56	106	70-130
Vinyl Acetate	10.00	12.26	123	70-130
cis-1,2-Dichloroethene	10.00	10.24	102	70-130
2-Butanone	10.00	10.83	108	70-130
Ethyl Acetate	10.00	10.50	105	70-130
Tetrahydrofuran	10.00	10.53	105	70-130
Chloroform	10.00	9.957	100	70-130
1,1,1-Trichloroethane	10.00	10.58	106	70-130
Cyclohexane	10.00	11.02	110	70-130
Carbon Tetrachloride	10.00	10.78	108	70-130
Benzene	10.00	10.68	107	70-130
1,2-Dichloroethane	10.00	10.85	109	70-130
n-Heptane	10.00	12.88	129	70-130
Trichloroethene	10.00	10.54	105	70-130
1,2-Dichloropropane	10.00	11.01	110	70-130
Bromodichloromethane	10.00	10.52	105	70-130

\*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Result V= Result in volume units

## Batch QC Report

Volatile Organics in Air			
Lab #:	250905	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	205231
Units (V):	ppbv	Analyzed:	11/19/13
Diln Fac:	1.000		

Analyte	Spiked	Result (V)	%REC	Limits
cis-1,3-Dichloropropene	10.00	10.95	110	70-130
4-Methyl-2-Pentanone	10.00	12.62	126	70-130
Toluene	10.00	11.27	113	70-130
trans-1,3-Dichloropropene	10.00	11.19	112	70-130
1,1,2-Trichloroethane	10.00	10.00	100	70-130
Tetrachloroethene	10.00	10.45	104	70-130
2-Hexanone	10.00	12.75	127	70-130
Dibromochloromethane	10.00	9.787	98	70-130
1,2-Dibromoethane	10.00	10.13	101	70-130
Chlorobenzene	10.00	10.80	108	70-130
Ethylbenzene	10.00	11.32	113	70-130
m,p-Xylenes	20.00	24.75	124	70-130
o-Xylene	10.00	12.76	128	70-130
Styrene	10.00	12.07	121	70-130
Bromoform	10.00	10.63	106	70-130
1,1,2,2-Tetrachloroethane	10.00	10.30	103	70-130
4-Ethyltoluene	10.00	12.47	125	70-130
1,3,5-Trimethylbenzene	10.00	10.91	109	70-130
1,2,4-Trimethylbenzene	10.00	11.16	112	70-130
1,3-Dichlorobenzene	10.00	10.96	110	70-130
1,4-Dichlorobenzene	10.00	10.25	103	70-130
Benzyl chloride	10.00	11.16	112	70-130
1,2-Dichlorobenzene	10.00	10.30	103	70-130
1,2,4-Trichlorobenzene	10.00	8.966	90	62-130
Hexachlorobutadiene	10.00	9.227	92	68-130
Naphthalene	10.00	11.02	110	54-136

Surrogate	%REC	Limits
Bromofluorobenzene	112	70-130

\*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Result V= Result in volume units

## Batch QC Report

Volatile Organics in Air			
Lab #:	250905	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	205231
Units (V):	ppbv	Analyzed:	11/19/13
Diln Fac:	1.000		

Type: BSD Lab ID: QC716815

Analyte	Spiked	Result (V)	%REC	Limits RPD	Lim
Freon 12	10.00	10.12	101	70-130 1	20
Freon 114	10.00	10.27	103	70-130 0	20
Chloromethane	10.00	10.22	102	70-130 5	27
Vinyl Chloride	10.00	10.54	105	70-130 0	23
1,3-Butadiene	10.00	10.30	103	70-130 2	21
Bromomethane	10.00	10.46	105	70-130 0	20
Chloroethane	10.00	11.16	112	70-130 2	20
Trichlorofluoromethane	10.00	10.42	104	70-130 2	20
Acrolein	10.00	10.71	107	62-130 2	31
1,1-Dichloroethene	10.00	9.699	97	70-130 0	20
Freon 113	10.00	9.962	100	70-130 1	23
Acetone	10.00	9.675	97	67-130 1	20
Carbon Disulfide	10.00	9.195	92	70-130 1	20
Methylene Chloride	10.00	9.593	96	68-130 4	23
trans-1,2-Dichloroethene	10.00	10.67	107	70-130 2	20
MTBE	10.00	11.01	110	70-130 2	20
n-Hexane	10.00	11.06	111	70-130 4	20
1,1-Dichloroethane	10.00	10.57	106	70-130 0	20
Vinyl Acetate	10.00	12.48	125	70-130 2	21
cis-1,2-Dichloroethene	10.00	10.27	103	70-130 0	20
2-Butanone	10.00	10.97	110	70-130 1	20
Ethyl Acetate	10.00	10.86	109	70-130 3	20
Tetrahydrofuran	10.00	10.07	101	70-130 4	20
Chloroform	10.00	10.06	101	70-130 1	20
1,1,1-Trichloroethane	10.00	10.01	100	70-130 5	20
Cyclohexane	10.00	10.39	104	70-130 6	20
Carbon Tetrachloride	10.00	10.23	102	70-130 5	20
Benzene	10.00	10.26	103	70-130 4	20
1,2-Dichloroethane	10.00	10.50	105	70-130 3	20
n-Heptane	10.00	13.35	134 *	70-130 4	20
Trichloroethene	10.00	10.05	100	70-130 5	20
1,2-Dichloropropane	10.00	10.44	104	70-130 5	20
Bromodichloromethane	10.00	9.989	100	70-130 5	20

\*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Result V= Result in volume units



# Batch QC Report

Volatile Organics in Air			
Lab #:	250905	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	205231
Units (V):	ppbv	Analyzed:	11/19/13
Diln Fac:	1.000		

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim
cis-1,3-Dichloropropene	10.00	10.68	107	70-130	3	20
4-Methyl-2-Pentanone	10.00	12.51	125	70-130	1	20
Toluene	10.00	10.71	107	70-130	5	23
trans-1,3-Dichloropropene	10.00	11.08	111	70-130	1	20
1,1,2-Trichloroethane	10.00	8.842	88	70-130	12	20
Tetrachloroethene	10.00	9.487	95	70-130	10	20
2-Hexanone	10.00	11.89	119	70-130	7	21
Dibromochloromethane	10.00	8.676	87	70-130	12	20
1,2-Dibromoethane	10.00	9.097	91	70-130	11	20
Chlorobenzene	10.00	10.66	107	70-130	1	21
Ethylbenzene	10.00	11.40	114	70-130	1	20
m,p-Xylenes	20.00	26.29	131 *	70-130	6	20
o-Xylene	10.00	13.29	133 *	70-130	4	20
Styrene	10.00	13.22	132 *	70-130	9	21
Bromoform	10.00	9.385	94	70-130	12	20
1,1,2,2-Tetrachloroethane	10.00	9.425	94	70-130	9	24
4-Ethyltoluene	10.00	12.59	126	70-130	1	22
1,3,5-Trimethylbenzene	10.00	10.54	105	70-130	3	23
1,2,4-Trimethylbenzene	10.00	10.52	105	70-130	6	24
1,3-Dichlorobenzene	10.00	11.43	114	70-130	4	22
1,4-Dichlorobenzene	10.00	10.60	106	70-130	3	22
Benzyl chloride	10.00	11.54	115	70-130	3	21
1,2-Dichlorobenzene	10.00	10.81	108	70-130	5	22
1,2,4-Trichlorobenzene	10.00	7.510	75	62-130	18	28
Hexachlorobutadiene	10.00	9.692	97	68-130	5	27
Naphthalene	10.00	7.714	77	54-136	35 *	29

Surrogate	%REC	Limits
Bromofluorobenzene	123	70-130

\*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Result V= Result in volume units

# Batch QC Report

Volatile Organics in Air			
Lab #:	250905	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC716816	Diln Fac:	1.000
Matrix:	Air	Batch#:	205231
Units (V):	ppbv	Analyzed:	11/19/13

Analyte	Result (V)	RL	Result (M)	RL
Freon 12	ND	0.50	ND	2.5
Freon 114	ND	0.50	ND	3.5
Chloromethane	ND	0.50	ND	1.0
Vinyl Chloride	ND	0.50	ND	1.3
1,3-Butadiene	ND	0.50	ND	1.1
Bromomethane	ND	0.50	ND	1.9
Chloroethane	ND	0.50	ND	1.3
Trichlorofluoromethane	ND	0.50	ND	2.8
Acrolein	ND	2.0	ND	4.6
1,1-Dichloroethene	ND	0.50	ND	2.0
Freon 113	ND	0.50	ND	3.8
Acetone	ND	2.0	ND	4.8
Carbon Disulfide	ND	0.50	ND	1.6
Methylene Chloride	ND	0.50	ND	1.7
trans-1,2-Dichloroethene	ND	0.50	ND	2.0
MTBE	ND	0.50	ND	1.8
n-Hexane	ND	0.50	ND	1.8
1,1-Dichloroethane	ND	0.50	ND	2.0
Vinyl Acetate	ND	0.50	ND	1.8
cis-1,2-Dichloroethene	ND	0.50	ND	2.0
2-Butanone	ND	0.50	ND	1.5
Ethyl Acetate	ND	0.50	ND	1.8
Tetrahydrofuran	ND	0.50	ND	1.5
Chloroform	ND	0.50	ND	2.4
1,1,1-Trichloroethane	ND	0.50	ND	2.7
Cyclohexane	ND	0.50	ND	1.7
Carbon Tetrachloride	ND	0.50	ND	3.1
Benzene	ND	0.50	ND	1.6
1,2-Dichloroethane	ND	0.50	ND	2.0
n-Heptane	ND	0.50	ND	2.0
Trichloroethene	ND	0.50	ND	2.7
1,2-Dichloropropane	ND	0.50	ND	2.3
Bromodichloromethane	ND	0.50	ND	3.4
cis-1,3-Dichloropropene	ND	0.50	ND	2.3
4-Methyl-2-Pentanone	ND	0.50	ND	2.0

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

# Batch QC Report

Volatile Organics in Air			
Lab #:	250905	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC716816	Diln Fac:	1.000
Matrix:	Air	Batch#:	205231
Units (V):	ppbv	Analyzed:	11/19/13

Analyte	Result (V)	RL	Result (M)	RL
Toluene	ND	0.50	ND	1.9
trans-1,3-Dichloropropene	ND	0.50	ND	2.3
1,1,2-Trichloroethane	ND	0.50	ND	2.7
Tetrachloroethene	ND	0.50	ND	3.4
2-Hexanone	ND	0.50	ND	2.0
Dibromochloromethane	ND	0.50	ND	4.3
1,2-Dibromoethane	ND	0.50	ND	3.8
Chlorobenzene	ND	0.50	ND	2.3
Ethylbenzene	ND	0.50	ND	2.2
m,p-Xylenes	ND	0.50	ND	2.2
o-Xylene	ND	0.50	ND	2.2
Styrene	ND	0.50	ND	2.1
Bromoform	ND	0.50	ND	5.2
1,1,2,2-Tetrachloroethane	ND	0.50	ND	3.4
4-Ethyltoluene	ND	0.50	ND	2.5
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5
1,3-Dichlorobenzene	ND	0.50	ND	3.0
1,4-Dichlorobenzene	ND	0.50	ND	3.0
Benzyl chloride	ND	0.50	ND	2.6
1,2-Dichlorobenzene	ND	0.50	ND	3.0
1,2,4-Trichlorobenzene	ND	0.50	ND	3.7
Hexachlorobutadiene	ND	0.50	ND	5.3
Naphthalene	ND	2.0	ND	10

Surrogate	%REC	Limits
Bromofluorobenzene	127	70-130

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

# Batch QC Report

Volatile Organics in Air			
Lab #:	250905	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	205279
Units (V):	ppbv	Analyzed:	11/20/13
Diln Fac:	1.000		

Type: BS Lab ID: QC716986

Analyte	Spiked	Result (V)	%REC	Limits
Freon 12	10.00	10.55	106	70-130
Freon 114	10.00	10.76	108	70-130
Chloromethane	10.00	10.80	108	70-130
Vinyl Chloride	10.00	10.80	108	70-130
1,3-Butadiene	10.00	10.29	103	70-130
Bromomethane	10.00	10.83	108	70-130
Chloroethane	10.00	11.34	113	70-130
Trichlorofluoromethane	10.00	10.87	109	70-130
Acrolein	10.00	10.28	103	62-130
1,1-Dichloroethene	10.00	10.25	103	70-130
Freon 113	10.00	10.44	104	70-130
Acetone	10.00	9.935	99	67-130
Carbon Disulfide	10.00	9.529	95	70-130
Methylene Chloride	10.00	9.404	94	68-130
trans-1,2-Dichloroethene	10.00	10.98	110	70-130
MTBE	10.00	11.33	113	70-130
n-Hexane	10.00	10.95	110	70-130
1,1-Dichloroethane	10.00	11.03	110	70-130
Vinyl Acetate	10.00	12.25	123	70-130
cis-1,2-Dichloroethene	10.00	10.63	106	70-130
2-Butanone	10.00	10.98	110	70-130
Ethyl Acetate	10.00	10.74	107	70-130
Tetrahydrofuran	10.00	10.87	109	70-130
Chloroform	10.00	10.50	105	70-130
1,1,1-Trichloroethane	10.00	11.09	111	70-130
Cyclohexane	10.00	11.16	112	70-130
Carbon Tetrachloride	10.00	11.38	114	70-130
Benzene	10.00	11.10	111	70-130
1,2-Dichloroethane	10.00	11.52	115	70-130
n-Heptane	10.00	14.33 b	143 *	70-130
Trichloroethene	10.00	10.96	110	70-130
1,2-Dichloropropane	10.00	11.47	115	70-130

\*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units

# Batch QC Report

Volatile Organics in Air			
Lab #:	250905	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	205279
Units (V):	ppbv	Analyzed:	11/20/13
Diln Fac:	1.000		

Analyte	Spiked	Result (V)	%REC	Limits
Bromodichloromethane	10.00	11.04	110	70-130
cis-1,3-Dichloropropene	10.00	11.44	114	70-130
4-Methyl-2-Pentanone	10.00	12.88	129	70-130
Toluene	10.00	10.64	106	70-130
trans-1,3-Dichloropropene	10.00	11.80	118	70-130
1,1,2-Trichloroethane	10.00	9.067	91	70-130
Tetrachloroethene	10.00	9.441	94	70-130
2-Hexanone	10.00	11.71	117	70-130
Dibromochloromethane	10.00	8.673	87	70-130
1,2-Dibromoethane	10.00	9.119	91	70-130
Chlorobenzene	10.00	10.57	106	70-130
Ethylbenzene	10.00	11.72	117	70-130
m,p-Xylenes	20.00	23.77	119	70-130
o-Xylene	10.00	12.19	122	70-130
Styrene	10.00	11.73	117	70-130
Bromoform	10.00	9.467	95	70-130
1,1,2,2-Tetrachloroethane	10.00	9.424	94	70-130
4-Ethyltoluene	10.00	10.93	109	70-130
1,3,5-Trimethylbenzene	10.00	10.02	100	70-130
1,2,4-Trimethylbenzene	10.00	10.16	102	70-130
1,3-Dichlorobenzene	10.00	10.01	100	70-130
1,4-Dichlorobenzene	10.00	9.248	92	70-130
Benzyl chloride	10.00	10.82	108	70-130
1,2-Dichlorobenzene	10.00	9.593	96	70-130
1,2,4-Trichlorobenzene	10.00	7.156	72	62-130
Hexachlorobutadiene	10.00	8.541	85	68-130
Naphthalene	10.00	7.427	74	54-136

Surrogate	%REC	Limits
Bromofluorobenzene	118	70-130

\*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units

# Batch QC Report

Volatile Organics in Air			
Lab #:	250905	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	205279
Units (V):	ppbv	Analyzed:	11/20/13
Diln Fac:	1.000		

Type: BSD Lab ID: QC716987

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim
Freon 12	10.00	10.37	104	70-130	2	20
Freon 114	10.00	10.51	105	70-130	2	20
Chloromethane	10.00	9.587	96	70-130	12	27
Vinyl Chloride	10.00	10.60	106	70-130	2	23
1,3-Butadiene	10.00	9.966	100	70-130	3	21
Bromomethane	10.00	10.61	106	70-130	2	20
Chloroethane	10.00	11.08	111	70-130	2	20
Trichlorofluoromethane	10.00	10.64	106	70-130	2	20
Acrolein	10.00	9.881	99	62-130	4	31
1,1-Dichloroethene	10.00	10.02	100	70-130	2	20
Freon 113	10.00	10.20	102	70-130	2	23
Acetone	10.00	9.682	97	67-130	3	20
Carbon Disulfide	10.00	9.340	93	70-130	2	20
Methylene Chloride	10.00	9.179	92	68-130	2	23
trans-1,2-Dichloroethene	10.00	10.71	107	70-130	2	20
MTBE	10.00	11.26	113	70-130	1	20
n-Hexane	10.00	11.04	110	70-130	1	20
1,1-Dichloroethane	10.00	10.83	108	70-130	2	20
Vinyl Acetate	10.00	12.26	123	70-130	0	21
cis-1,2-Dichloroethene	10.00	10.43	104	70-130	2	20
2-Butanone	10.00	10.87	109	70-130	1	20
Ethyl Acetate	10.00	10.72	107	70-130	0	20
Tetrahydrofuran	10.00	10.09	101	70-130	7	20
Chloroform	10.00	10.37	104	70-130	1	20
1,1,1-Trichloroethane	10.00	10.25	102	70-130	8	20
Cyclohexane	10.00	10.52	105	70-130	6	20
Carbon Tetrachloride	10.00	10.61	106	70-130	7	20
Benzene	10.00	10.60	106	70-130	5	20
1,2-Dichloroethane	10.00	10.53	105	70-130	9	20
n-Heptane	10.00	13.88 b	139 *	70-130	3	20
Trichloroethene	10.00	10.33	103	70-130	6	20
1,2-Dichloropropane	10.00	10.76	108	70-130	6	20

\*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units

# Batch QC Report

Volatile Organics in Air			
Lab #:	250905	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Matrix:	Air	Batch#:	205279
Units (V):	ppbv	Analyzed:	11/20/13
Diln Fac:	1.000		

Analyte	Spiked	Result (V)	%REC	Limits	RPD	Lim
Bromodichloromethane	10.00	10.38	104	70-130	6	20
cis-1,3-Dichloropropene	10.00	11.09	111	70-130	3	20
4-Methyl-2-Pentanone	10.00	12.47	125	70-130	3	20
Toluene	10.00	10.55	105	70-130	1	23
trans-1,3-Dichloropropene	10.00	11.55	115	70-130	2	20
1,1,2-Trichloroethane	10.00	8.698	87	70-130	4	20
Tetrachloroethene	10.00	9.301	93	70-130	1	20
2-Hexanone	10.00	11.51	115	70-130	2	21
Dibromochloromethane	10.00	8.366	84	70-130	4	20
1,2-Dibromoethane	10.00	8.827	88	70-130	3	20
Chlorobenzene	10.00	10.60	106	70-130	0	21
Ethylbenzene	10.00	11.36	114	70-130	3	20
m,p-Xylenes	20.00	21.56	108	70-130	10	20
o-Xylene	10.00	11.12	111	70-130	9	20
Styrene	10.00	10.49	105	70-130	11	21
Bromoform	10.00	9.064	91	70-130	4	20
1,1,2,2-Tetrachloroethane	10.00	9.210	92	70-130	2	24
4-Ethyltoluene	10.00	9.870	99	70-130	10	22
1,3,5-Trimethylbenzene	10.00	9.251	93	70-130	8	23
1,2,4-Trimethylbenzene	10.00	9.299	93	70-130	9	24
1,3-Dichlorobenzene	10.00	8.919	89	70-130	12	22
1,4-Dichlorobenzene	10.00	8.186	82	70-130	12	22
Benzyl chloride	10.00	10.19	102	70-130	6	21
1,2-Dichlorobenzene	10.00	8.705	87	70-130	10	22
1,2,4-Trichlorobenzene	10.00	6.987	70	62-130	2	28
Hexachlorobutadiene	10.00	7.547	75	68-130	12	27
Naphthalene	10.00	7.093	71	54-136	5	29

Surrogate	%REC	Limits
Bromofluorobenzene	107	70-130

\*= Value outside of QC limits; see narrative

b= See narrative

RPD= Relative Percent Difference

Result V= Result in volume units



# Batch QC Report

Volatile Organics in Air			
Lab #:	250905	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC716988	Diln Fac:	1.000
Matrix:	Air	Batch#:	205279
Units (V):	ppbv	Analyzed:	11/20/13

Analyte	Result (V)	RL	Result (M)	RL
Freon 12	ND	0.50	ND	2.5
Freon 114	ND	0.50	ND	3.5
Chloromethane	ND	0.50	ND	1.0
Vinyl Chloride	ND	0.50	ND	1.3
1,3-Butadiene	ND	0.50	ND	1.1
Bromomethane	ND	0.50	ND	1.9
Chloroethane	ND	0.50	ND	1.3
Trichlorofluoromethane	ND	0.50	ND	2.8
Acrolein	ND	2.0	ND	4.6
1,1-Dichloroethene	ND	0.50	ND	2.0
Freon 113	ND	0.50	ND	3.8
Acetone	ND	2.0	ND	4.8
Carbon Disulfide	ND	0.50	ND	1.6
Methylene Chloride	ND	0.50	ND	1.7
trans-1,2-Dichloroethene	ND	0.50	ND	2.0
MTBE	ND	0.50	ND	1.8
n-Hexane	ND	0.50	ND	1.8
1,1-Dichloroethane	ND	0.50	ND	2.0
Vinyl Acetate	ND	0.50	ND	1.8
cis-1,2-Dichloroethene	ND	0.50	ND	2.0
2-Butanone	ND	0.50	ND	1.5
Ethyl Acetate	ND	0.50	ND	1.8
Tetrahydrofuran	ND	0.50	ND	1.5
Chloroform	ND	0.50	ND	2.4
1,1,1-Trichloroethane	ND	0.50	ND	2.7
Cyclohexane	ND	0.50	ND	1.7
Carbon Tetrachloride	ND	0.50	ND	3.1
Benzene	ND	0.50	ND	1.6
1,2-Dichloroethane	ND	0.50	ND	2.0
n-Heptane	ND	0.50	ND	2.0
Trichloroethene	ND	0.50	ND	2.7
1,2-Dichloropropane	ND	0.50	ND	2.3
Bromodichloromethane	ND	0.50	ND	3.4
cis-1,3-Dichloropropene	ND	0.50	ND	2.3

\*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

## Batch QC Report

Volatile Organics in Air			
Lab #:	250905	Location:	Park Ave. Cleaners
Client:	Iris Environmental	Prep:	METHOD
Project#:	13-945C	Analysis:	EPA TO-15
Type:	BLANK	Units (M):	ug/m3
Lab ID:	QC716988	Diln Fac:	1.000
Matrix:	Air	Batch#:	205279
Units (V):	ppbv	Analyzed:	11/20/13

Analyte	Result (V)	RL	Result (M)	RL
4-Methyl-2-Pentanone	ND	0.50	ND	2.0
Toluene	ND	0.50	ND	1.9
trans-1,3-Dichloropropene	ND	0.50	ND	2.3
1,1,2-Trichloroethane	ND	0.50	ND	2.7
Tetrachloroethene	ND	0.50	ND	3.4
2-Hexanone	ND	0.50	ND	2.0
Dibromochloromethane	ND	0.50	ND	4.3
1,2-Dibromoethane	ND	0.50	ND	3.8
Chlorobenzene	ND	0.50	ND	2.3
Ethylbenzene	ND	0.50	ND	2.2
m,p-Xylenes	ND	0.50	ND	2.2
o-Xylene	ND	0.50	ND	2.2
Styrene	ND	0.50	ND	2.1
Bromoform	ND	0.50	ND	5.2
1,1,2,2-Tetrachloroethane	ND	0.50	ND	3.4
4-Ethyltoluene	ND	0.50	ND	2.5
1,3,5-Trimethylbenzene	ND	0.50	ND	2.5
1,2,4-Trimethylbenzene	ND	0.50	ND	2.5
1,3-Dichlorobenzene	ND	0.50	ND	3.0
1,4-Dichlorobenzene	ND	0.50	ND	3.0
Benzyl chloride	ND	0.50	ND	2.6
1,2-Dichlorobenzene	ND	0.50	ND	3.0
1,2,4-Trichlorobenzene	ND	0.50	ND	3.7
Hexachlorobutadiene	ND	0.50	ND	5.3
Naphthalene	ND	2.0	ND	10

Surrogate	%REC	Limits
Bromofluorobenzene	131 *	70-130

\*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

Result M= Result in mass units

Result V= Result in volume units

**Appendix C**  
**Waste Manifests and Bill of Lading Tickets**

### Detail Contract Activity Report

October 01, 2013 to December 02, 2013

All Facilities

Specific Contract: 38501317457

38501317457

Ticket Date	Facility & Ticket Number	Customer	Truck	Material	Contract Rate	Billing Quantity	Ordered Quantity	Minimum Quantity	Maximum Quantity	Material Total	Tax Total	Total
10/17/2013	I 01	929796 021591 - INNOVATIVE CONSTRUCTION SOLI	1	SW-CONT SOIL-ALT DAILY	23.25 F	13.50 TN	0.00	\$0.00	\$0.00			
10/18/2013	I 01	929885 021591 - INNOVATIVE CONSTRUCTION SOLI	INT725	SW-CONT SOIL-ALT DAILY	23.25 F	16.76 TN	0.00	\$0.00	\$0.00			
10/18/2013	I 01	929939 021591 - INNOVATIVE CONSTRUCTION SOLI	INT725	SW-CONT SOIL-ALT DAILY	23.25 F	18.96 TN	0.00	\$0.00	\$0.00			
10/18/2013	I 01	929981 021591 - INNOVATIVE CONSTRUCTION SOLI	INT725	SW-CONT SOIL-ALT DAILY	23.25 F	18.44 TN	0.00	\$0.00	\$0.00			
10/18/2013	I 01	930010 021591 - INNOVATIVE CONSTRUCTION SOLI	INT725	SW-CONT SOIL-ALT DAILY	23.25 F	18.47 TN	0.00	\$0.00	\$0.00			
10/18/2013	I 01	930033 021591 - INNOVATIVE CONSTRUCTION SOLI	INT725	SW-CONT SOIL-ALT DAILY	23.25 F	16.97 TN	0.00	\$0.00	\$0.00			
10/25/2013	I 01	931182 021591 - INNOVATIVE CONSTRUCTION SOLI	INT725	SW-CONT SOIL-ALT DAILY	23.25 F	18.44 TN	0.00	\$0.00	\$0.00			
10/25/2013	I 01	931217 021591 - INNOVATIVE CONSTRUCTION SOLI	INT725	SW-CONT SOIL-ALT DAILY	23.25 F	17.54 TN	0.00	\$0.00	\$0.00			
10/25/2013	I 01	931253 021591 - INNOVATIVE CONSTRUCTION SOLI	INT725	SW-CONT SOIL-ALT DAILY	23.25 F	18.23 TN	0.00	\$0.00	\$0.00			
11/01/2013	I 01	932328 021591 - INNOVATIVE CONSTRUCTION SOLI	INT725	SW-CONT SOIL-ALT DAILY	23.25 F	17.85 TN	0.00	\$0.00	\$0.00			
11/01/2013	I 01	932373 021591 - INNOVATIVE CONSTRUCTION SOLI	INT725	SW-CONT SOIL-ALT DAILY	23.25 F	17.12 TN	0.00	\$0.00	\$0.00			
11/01/2013	I 01	932414 021591 - INNOVATIVE CONSTRUCTION SOLI	INT725	SW-CONT SOIL-ALT DAILY	23.25 F	17.33 TN	0.00	\$0.00	\$0.00			
11/01/2013	I 01	932455 021591 - INNOVATIVE CONSTRUCTION SOLI	INT725	SW-CONT SOIL-ALT DAILY	23.25 F	17.81 TN	0.00	\$0.00	\$0.00			
11/01/2013	I 01	932490 021591 - INNOVATIVE CONSTRUCTION SOLI	INT725	SW-CONT SOIL-ALT DAILY	23.25 F	16.27 TN	0.00	\$0.00	\$0.00			
11/05/2013	I 01	932881 021591 - INNOVATIVE CONSTRUCTION SOLI	INT725	SW-CONT SOIL-ALT DAILY	23.25 F	16.43 TN	0.00	\$0.00	\$0.00			
11/05/2013	I 01	932934 021591 - INNOVATIVE CONSTRUCTION SOLI	INT725	SW-CONT SOIL-ALT DAILY	23.25 F	17.13 TN	0.00	\$0.00	\$0.00			
11/05/2013	I 01	932987 021591 - INNOVATIVE CONSTRUCTION SOLI	INT725	SW-CONT SOIL-ALT DAILY	23.25 F	15.86 TN	0.00	\$0.00	\$0.00			
11/05/2013	I 01	933011 021591 - INNOVATIVE CONSTRUCTION SOLI	INT725	SW-CONT SOIL-ALT DAILY	23.25 F	14.84 TN	0.00	\$0.00	\$0.00			
11/09/2013	I 01	933686 021591 - INNOVATIVE CONSTRUCTION SOLI	INT725	SW-CONT SOIL-ALT DAILY	23.25 F	17.13 TN	0.00	\$0.00	\$0.00			
11/09/2013	I 01	933708 021591 - INNOVATIVE CONSTRUCTION SOLI	INT725	SW-CONT SOIL-ALT DAILY	23.25 F	17.63 TN	0.00	\$0.00	\$0.00			
11/09/2013	I 01	933723 021591 - INNOVATIVE CONSTRUCTION SOLI	INT725	SW-CONT SOIL-ALT DAILY	23.25 F	17.59 TN	0.00	\$0.00	\$0.00			
11/09/2013	I 01	933739 021591 - INNOVATIVE CONSTRUCTION SOLI	INT725	SW-CONT SOIL-ALT DAILY	23.25 F	15.32 TN	0.00	\$0.00	\$0.00			
11/09/2013	I 01	933755 021591 - INNOVATIVE CONSTRUCTION SOLI	INT725	SW-CONT SOIL-ALT DAILY	23.25 F	17.17 TN	0.00	\$0.00	\$0.00			
11/16/2013	I 01	934773 021591 - INNOVATIVE CONSTRUCTION SOLI	1	SW-CONT SOIL-ALT DAILY	23.25 F	17.35 TN	0.00	\$0.00	\$0.00			

Tickets Reported:

24

Items Reported:

24

Contract Totals:

Material Summary	Weight	Volume	Count	Billing Quantity	Material Total	Tax Total	Total
	Inbound	Outbound	Inbound	Outbound	Inbound	Outbound	
VI - SW-CONT SOIL-ALT D	410.14	0.00 TN	0.00	0.00 YD	0.00	0.00	410.14 TN



## NON-HAZARDOUS SPECIAL WASTE &amp; ASBESTOS MANIFEST

1319885

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is NOT asbestos waste, complete Sections I, II and III

By # PT 3120  
UR 45967

## I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number N/A		b. Manifest Document Number		c. Page 1 of	
d. Generator's Name and Location: Ready Family Partnership, LP 7102 & 7104 Dublin Rd Dublin, CA 94568 415-388-4460		e. Generator's Mailing Address: Ready Family Partnership, LP 655 Redwood Hwy, Suite 177 Mill Valley, CA 94041 415-388-4460			
f. Phone:		g. Phone:			
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:		i. Owner's Phone No.:			
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
38501317457	4/30/2014	Soil	001 CM	11	Y
151 B					
247 C					
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
p. Generator Authorized Agent Name (Print) Kim Genthner		q. Signature Kim Genthner		r. Date	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: INTRINSIC Trans Inc 3250 Dutton Ave Santa Rosa CA CAR 000165271			
b. Phone: 707 578 0960	c. Driver Name (Print) Brad DeMarco	d. Signature Brad DeMarco	e. Date 10-17-13

## III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Vasco Rd. Landfill 4001 N. Vasco Rd. Livermore, CA 94551 925-447-0491		c. US EPA Number	d. Discrepancy Indication Space: 2-1986
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) Carlos Moran		f. Signature Carlos Moran	g. Date 10-17-13

## IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
i. Date			
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			

SITE	Vasco Road Landfill 4001 N Vasco Road Livermore, CA 925-447-0491
CUSTOMER	021591 INNOVATIVE CONSTRUCTION SOLUTIONS 4011 W CHANDLER AVE SANTA ANA, CA 92704 38501317457

SITE	TICKET #	CELL
WEIGHMASTER	929796	
DATE/TIME IN	DATE/TIME OUT	
VEHICLE 7-2013 11:54 am	CONTAINER 2013 12:31 pm	
REFERENCE		
INTRINSIC TRANSPORTATION 725 INVOICE		
BILL OF LADING		
LIC#UP45947		

		GROSS WEIGHT	68,920	NET TONS	13.50			
		TARE WEIGHT	41,920	NET WEIGHT	27,000	INBOUND		
QTY.	UNIT	DESCRIPTION			RATE	EXTENSION	TAX	TOTAL
0.00	YD	TRACKING QTY						
13.50	TN	SW-CONT SOIL-ALT DAILY COVE DUBLIN						

WEIGHMASTER CERTIFICATE - This is to certify that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food & Agriculture.

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

SIGNATURE

NET AMOUNT
TENDERED
CHANGE
CHECK#

NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST UP45947

1319876

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is NOT asbestos waste, complete Sections I, II and IIIBin # PT 3136  
1210pm

## I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number N/A		b. Manifest Document Number		c. Page 1 of 1	
d. Generator's Name and Location: Ready Family Partnership, LP 7102 & 7104 Dublin Rd Dublin, CA 94568 415-388-4460		e. Generator's Mailing Address: Ready Family Partnership, LP 855 Redwood Hwy, Suite 177 Mill Valley, CA 94941 415-388-4460			
f. Phone:		g. Phone:			
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:			i. Owner's Phone No.:		
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
38501317457	4/30/2014	Soil	001 CM	11	Tons
B.					
C.					

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print) KIM GONTHIER		q. Signature K Gonthier	r. Date 10-18-13
--	--	----------------------------	---------------------

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: INTRINSIC TRANSPORTATION 3250 DUTTON AVE SANTA ROSA, CA		
b. Phone: 707-578-0960		
c. Driver Name (Print) Brent DeMarco	d. Signature Brent DeMarco	e. Date 10-18-13

## III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Vasco Rd. Landfill 4001 N. Vasco Rd. Livermore, CA 94551		c. US EPA Number 025847-0491	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) KIM GONTHIER	f. Signature K Gonthier	g. Date 10-18-13	

## IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		i. Date	
h. Signature			

\*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both



Vasco Road Landfill  
 4001 N Vasco Road  
 Livermore, CA 925-447-0491

CUSTOMER  
 021591  
 INNOVATIVE CONSTRUCTION SOLUTIONS  
 4011 W CHANDLER AVE  
 SANTA ANA, CA 92704  
 38501317457

01	930010
WEIGHMASTER	
IN - C. MORA	OUT - M. Pedroza
DATE/TIME IN	DATE/TIME OUT
10-18-2013 12:42 pm	10-18-2013 1:18 pm
VEHICLE	CONTAINER
INT725	
REFERENCE	
BILL OF LADING	
INVOICE	

GROSS WEIGHT 78,360 NET TONS 18.47  
 TARE WEIGHT 41,420 NET WEIGHT 36,940 INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	TRACKING QTY				
18.47	TN	SW-CONT SOIL-ALT DAILY COVE DUBLIN				

WEIGHMASTER CERTIFICATE - This is to certify that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food & Agriculture.

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

RS-F042UPR (07/12)

SIGNATURE \_\_\_\_\_

NET AMOUNT
TENDERED
CHANGE
CHECK#



## NON-HAZARDOUS SPECIAL WASTE &amp; ASBESTOS MANIFEST

UP45947

1319875

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

Bin #  
PT 3439  
1030 AM

## I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number N/A		b. Manifest Document Number		c. Page 1 of 1	
d. Generator's Name and Location: Ready Family Partnership, LP 7102 & 7104 Dublin Rd Dublin, CA 94568 415-388-4480			e. Generator's Mailing Address: Ready Family Partnership, LP 855 Redwood Hwy, Suite 177 Mill Valley, CA 94941 415-388-4480		
f. Phone:			g. Phone:		
If owner of the generating facility differs from the generator, provide:			i. Owner's Phone No.:		
h. Owner's Name:			i. Owner's Phone No.:		
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
38501317457	4/30/2014	Soil	001 CM	11	Y Tons
B					
C					
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
p. Generator Authorized Agent Name (Print) KIM GONTHIER		q. Signature K Gonthier		r. Date 10-18-13	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: INTRINSIC TRANSPORTATION 3250 DUTTON AVE Santa Rosa, CA (INT 725)		
b. Phone: 707-578-0960		
c. Driver Name (Print) Brad DeMarco	d. Signature B DeMarco	e. Date 10 18 13

## III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Vasco Rd. Landfill 4001 N. Vasco Rd. Livermore, CA 94551 925-447-0491		c. US EPA Number	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) KIM GONTHIER		f. Signature K Gonthier	g. Date 10-18-13

## IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			

Vasco Road Landfill

4001 N Vasco Road

Livermore, CA

925-447-0491

CUSTOMER

021591

INNOVATIVE CONSTRUCTION SOLUTIONS

4011 W CHANDLER AVE

SANTA ANA, CA 92704

38501317457

SITE

TICKET #

CELL

01

929981

WEIGHMASTER

IN - M. Pedroza OUT

G. MORA

DATE/TIME IN

DATE/TIME OUT

10-18-2013 10:54 am

10-18-2013 11:26 am

VEHICLE

CONTAINER

INT725

REFERENCE

BILL OF LADING

INVOICE

GROSS WEIGHT 78,500

NET TONS 18.44

TARE WEIGHT 41,620

NET WEIGHT 36,880

INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	TRACKING QTY				
18.44	TN	SW-CONT SOIL-ALT DAILY COVE DUBLIN				

WEIGHMASTER CERTIFICATE - This is to certify that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food & Agriculture.

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

NET AMOUNT

TENDERED

CHANGE

CHECK#

SIGNATURE

S-F042UPR (07/12)



## NON-HAZARDOUS SPECIAL WASTE &amp; ASBESTOS MANIFEST

Trk # 925  
UP 45947

1319883

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

Bin PT 3126

## I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number N/A		b. Manifest Document Number		c. Page 1 of 1		
d. Generator's Name and Location: Ready Family Partnership, LP 7102 & 7104 Dublin Rd Dublin, CA 94568 415-388-4400			e. Generator's Mailing Address: Ready Family Partnership, LP 655 Redwood Hwy, Suite 177 Mill Valley, CA 94941 415-388-4400			
f. Phone:			g. Phone:			
If owner of the generating facility differs from the generator, provide:						
h. Owner's Name:			i. Owner's Phone No.:			
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description		m. Containers No. Type	n. Total Quantity	o. Unit Wt/Vol
38501317457	4/30/2014	Soil		001 CM	11	Tons <input checked="" type="checkbox"/>
B.						
C.						
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.						
p. Generator Authorized Agent Name (Print) KIM GONTHIER		q. Signature Kim Gonthier		r. Date 10-18-13		

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Intrinsic Trans Inc 3250 Dutton Ave Santa Rosa CA 707 578 0960		
b. Phone:		
c. Driver Name (Print) Brad Dellmarco	d. Signature Brad Dellmarco	e. Date 10-18-13

## III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Vasco Rd. Landfill 4001 N. Vasco Rd. Livermore, CA 94551 925-447-0491		c. US EPA Number M. Pechora	d. Discrepancy Indication Space: Unpeeled
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) KIM GONTHIER		f. Signature Kim Gonthier	g. Date 10-18-13

## IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			

SITE	Vasco Road Landfill
	4001 N Vasco Road
	Livermore, CA 925-447-0491
CUSTOMER	021591
	INNOVATIVE CONSTRUCTION SOLUTIONS
	4011 W CHANDLER AVE
	SANTA ANA, CA 92704
	38501317457

GROSS WEIGHT	79,480	NET TONS	18.96	
TARE WEIGHT	41,560	NET WEIGHT	37,920	INBOUND

**WEIGHMASTER CERTIFICATE** - This is to certify that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food & Agriculture.

2121

**SIGNATURE** \_\_\_\_\_

NET AMOUNT
TENDERED
CHANGE
CHECK#



## NON-HAZARDOUS SPECIAL WASTE &amp; ASBESTOS MANIFEST

1319884

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

Bin # PT 3439

Trk # 725  
Lic # 4P95947

## I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number N/A		b. Manifest Document Number		c. Page 1 of		
d. Generator's Name and Location: Ready Family Partnership, LP 7102 & 7104 Dublin Rd Dublin, CA 94568 415-388-4480			e. Generator's Mailing Address: Ready Family Partnership, LP 855 Redwood Hwy, Suite 177 Mill Valley, CA 94041 415-388-4480			
f. Phone:			g. Phone:			
If owner of the generating facility differs from the generator, provide:						
h. Owner's Name:			i. Owner's Phone No.:			
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description		m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
38501317457	4/30/2014	Soil		001 CM	11	Tons
B						
C						
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.						
p. Generator Authorized Agent Name (Print) KIM GONTHIER			q. Signature Kim Gonthier		r. Date	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Intrinsic Trans Inc 3250 Dutton Ave Santa Rosa CA			(INT 725)		
b. Phone: 707 570 0690					
c. Driver Name (Print) Brad DeHara		d. Signature Brad DeHara		e. Date 10-18-13	

## III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Vasco Rd Landfill 4001 N. Vasco Rd. Livermore, CA 94551		c. US EPA Number M. Pedraza 925-447-0491	d. Discrepancy Indication Space: Impediorp		
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.					
e. Name of Authorized Agent (Print) Kim Gonthier		f. Signature Kim Gonthier		g. Date 10-18-13	

## IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:			
b. Phone:		d. Phone:			
e. Special Handling Instructions and Additional Information:					
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable					
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.					
g. Operator's Name and Title (Print)		h. Signature		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both					

Vasco Road Landfill

4001 N Vasco Road

Livermore, CA

925-447-0491

CUSTOMER

021591

INNOVATIVE CONSTRUCTION SOLUTIONS

4011 W CHANDLER AVE

SANTA ANA, CA 92704

38501317457

01 929885

WEIGHMASTER

M. Pedroza

DATE/TIME IN

DATE/TIME OUT

10-18-2013 7:28 am

10-18-2013 8:00 am

VEHICLE

CONTAINER

INT725

REFERENCE

BILL OF LADING

INVOICE

GROSS WEIGHT 75,260

NET TONS 16.76

TARE WEIGHT 41,740

NET WEIGHT 33,520

INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	TRACKING QTY				
16.76	TN	SW-CONT SOIL-ALT DAILY COVE DUBLIN				

WEIGHMASTER CERTIFICATE - This is to certify that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food & Agriculture.

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

RS-F042UPR (07/12)

SIGNATURE

NET AMOUNT

TENDERED

CHANGE

CHECK#





## NON-HAZARDOUS SPECIAL WASTE &amp; ASBESTOS MANIFEST

Trk 725  
Lic 004574

1319877

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

Bin # 202

## I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number N/A		b. Manifest Document Number		c. Page 1 of	
d. Generator's Name and Location: Ready Family Partnership, LP 7102 & 7104 Dublin Rd Dublin, CA 94568 415-388-4460			e. Generator's Mailing Address: Ready Family Partnership, LP 665 Redwood Hwy, Suite 177 Mill Valley, CA 94941 415-388-4460		
f. Phone:			g. Phone:		
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:			i. Owner's Phone No.:		
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
38501317457	4/30/2014	Soil	001 CM	11	Tons
B.					
C.					

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print) KIM GONTHIER	q. Signature K Gonthier	r. Date 10-18-13
--	----------------------------	---------------------

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: INTRANSIT TRANSPORTATION 3250 DUTTON AVE, SANTA ROSA, CA		
b. Phone: 707-572-0960		
c. Driver Name (Print) BRAD DELLARCO	d. Signature B Dellarco	e. Date 10-18-13

## III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Vasco Rd Landfill 4001 N. Vasco Rd. Livermore, CA 94551 925-447-0481	b. US EPA Number M. Pedraza	c. Discrepancy Indication Space: Inpediaca
---	--------------------------------	---

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

e. Name of Authorized Agent (Print) KIM GONTHIER	f. Signature Kim Gonthier	g. Date 10-18-13
---	------------------------------	---------------------

## IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			

SITE

Vasco Road Landfill

4001 N Vasco Road

Livermore, CA 925-447-0491

CUSTOMER

021591

INNOVATIVE CONSTRUCTION SOLUTIONS

4011 W CHANDLER AVE

SANTA ANA, CA 92704

38501317457

SITE

TICKET #

CELL

01

930033

WEIGHMASTER

DATE/TIME IN M. Pedroza OUT

DATE/TIME OUT

10-18-2013 2:30 pm

10-18-2013 3:01 pm

VEHICLE

CONTAINER

INVOICE

BILL OF LADING

INVOICE

GROSS WEIGHT 74,080

NET TONS

16.97

TARE WEIGHT 40,140

NET WEIGHT

33,940

INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	TRACKING QTY				
16.97	TN	SW-CONT SOIL-ALT DAILY COVE DUBLIN				

WEIGHMASTER CERTIFICATE - This is to certify that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food & Agriculture.

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

RS-F042UPR (07/12)

2/21

SIGNATURE \_\_\_\_\_

NET AMOUNT

TENDERED

CHANGE

CHECK#



## NON-HAZARDOUS SPECIAL WASTE &amp; ASBESTOS MANIFEST

1319705

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

Bin 3126

## I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number N/A		b. Manifest Document Number		c. Page 1 of 1		
d. Generator's Name and Location: Ready Family Partnership, LP 7102 & 7104 Dublin Rd Dublin, CA 94568 415-388-4460			e. Generator's Mailing Address: Ready Family Partnership, LP 655 Redwood Hwy, Suite 177 Mill Valley, CA 94941 415-388-4460			
f. Phone:			g. Phone:			
If owner of the generating facility differs from the generator, provide:						
h. Owner's Name:			i. Owner's Phone No.:			
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description		m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
38501317457	4/30/2014	Soil		001 CM	12	Tons
B						
C						
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.						
p. Generator Authorized Agent Name (Print) KIM GONTHIER		q. Signature Kgonthier		r. Date 11-9-13		

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Intrinsic Transport Services Inc 3250 Dutton Ave, Santa Rosa, CA NP13191		
b. Phone: 707-578-0960		
c. Driver Name (Print) RON BIANCO	d. Signature Ron Bianco	e. Date 11-9-13

## III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Vasco Rd. Landfill 4001 N. Vasco Rd. Livermore, CA 94551 925-447-0491		c. US EPA Number	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) Carlos Moran		f. Signature [Signature]	g. Date 11-9-13

## IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.			

SITE Vasco Road Landfill 4001 N Vasco Road Livermore, CA 925-447-0491	CUSTOMER 021591 INNOVATIVE CONSTRUCTION SOLUTIONS 4011 W CHANDLER AVE SANTA ANA, CA 92704 38501317457
--	--

SITE 01	TICKET # 933739	CELL
WEIGHMASTER IN - C. MORA OUT - M. Pedroza		
DATE/TIME IN 11-09-2013 1:35 pm		DATE/TIME OUT 11-9-2013 2:04 pm
VEHICLE INT725		CONTAINER
REFERENCE LIC# WP13191		INVOICE
BILL OF LADING		

GROSS WEIGHT	70,460	NET TONS	15.32	
TARE WEIGHT	39,820	NET WEIGHT	30,640	INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	TRACKING QTY				
15.32	TN	SW-CONT SOIL-ALT DAILY COVE DUBLIN				

WEIGHMASTER CERTIFICATE - This is to certify that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food & Agriculture.

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

NET AMOUNT
TENDERED
CHANGE
CHECK#

RS-F042UPR (07/12)

SIGNATURE \_\_\_\_\_



## NON-HAZARDOUS SPECIAL WASTE &amp; ASBESTOS MANIFEST

1319704

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

Bin # PT3439

## I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number N/A		b. Manifest Document Number		c. Page 1 of 1		
d. Generator's Name and Location: Ready Family Partnership, LP 7102 & 7104 Dublin Rd Dublin, CA 94568 415-388-4480		e. Generator's Mailing Address: Ready Family Partnership, LP 855 Redwood Hwy, Suite 177 Mill Valley, CA 94941 415-388-4480				
f. Phone:		g. Phone:				
If owner of the generating facility differs from the generator, provide:						
h. Owner's Name:			i. Owner's Phone No.:			
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description		m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
38501317457	4/30/2014	Soil		001 CM	12	Y
B						

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print) KIM GONTHIER		q. Signature K. Gonther	r. Date 11-9-13
--	--	----------------------------	--------------------

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: INTRINSIC TRANSPORTATION, INC. 7250 DUNTON AVE, SANTA ROSA, CA WP13191		
b. Phone: 707-578-0960		
c. Driver Name (Print) RON BIANCO	d. Signature Ron Bianco	e. Date 11-9-13

## III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Vasco Rd. Landfill 4001 N. Vasco Rd. Livermore, CA 94551 925-447-0491		c. US EPA Number	d. Discrepancy Indication Space: 
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) Carlos Menz		f. Signature [Signature]	g. Date 11-9-13

## IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			

SITE	Vasco Road Landfill 4001 N Vasco Road Livermore, CA 925-447-0491
CUSTOMER	021591 INNOVATIVE CONSTRUCTION SOLUTIONS 4011 W CHANDLER AVE SANTA ANA, CA 92704 38501317457

SITE	TICKET #	CELL
01	933686	
WEIGHMASTER		
C. MORA		
DATE/TIME IN	DATE/TIME OUT	
11-09-2013 7:54 am	11-9-2013 8:30 am	
VEHICLE	CONTAINER	
INT725		
REFERENCE		
WP13191	INVOICE	
BILL OF LADING		

		GROSS WEIGHT	74,420	NET TONS	17.13			
		TARE WEIGHT	40,160	NET WEIGHT	34,260	INBOUND		
QTY.	UNIT	DESCRIPTION			RATE	EXTENSION	TAX	TOTAL
0.00	YD	TRACKING QTY						
17.13	TN	SW-CONT SOIL-ALT DAILY COVE DUBLIN						

WEIGHMASTER CERTIFICATE - This is to certify that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food & Agriculture.

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

RS-F042UPR (07/12)

2/21

SIGNATURE \_\_\_\_\_

NET AMOUNT
TENDERED
CHANGE
CHECK#





## NON-HAZARDOUS SPECIAL WASTE &amp; ASBESTOS MANIFEST

1319703

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

Bin # 2777

## I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number N/A		b. Manifest Document Number		c. Page 1 of 1		
d. Generator's Name and Location: Ready Family Partnership, LP 7102 & 7104 Dublin Rd Dublin, CA 94568 415-388-4480			e. Generator's Mailing Address: Ready Family Partnership, LP 655 Redwood Hwy, Suite 177 Mill Valley, CA 94941 415-388-4480			
f. Phone:			g. Phone:			
If owner of the generating facility differs from the generator, provide:						
h. Owner's Name:			i. Owner's Phone No.:			
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description		m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
38501317457	4/30/2014	Soil		001 CM	12	Tons
B.						
C.						
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.						
p. Generator Authorized Agent Name (Print) KIM GONTHIER		q. Signature K. Gonther		r. Date 11-9-13		

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Intrinsic Transportation, Inc. 7250 Dutton Ave, Santa Rosa, CA WP13191		
b. Phone: 707 578-0960		
c. Driver Name (Print)	d. Signature	e. Date

## III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Vasco Rd Landfill 4001 N. Vasco Rd Livermore, CA 94551 925-447-0491		c. US EPA Number H. Peshora	d. Discrepancy Indication Space: Impedioru 11-9-13
b. I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) Ron D. Swco		f. Signature Ron Buena	g. Date 11-9-13

## IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
i. Date			
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



<b>SITE</b> Vasco Road Landfill 4001 N Vasco Road Livermore, CA 925-447-0491	
<b>CUSTOMER</b> 021591 INNOVATIVE CONSTRUCTION SOLUTIONS 4011 W CHANDLER AVE SANTA ANA, CA 92704 38501317457	

<b>SITE</b> 01	<b>TICKET #</b> 933708	<b>CELL</b>
<b>WEIGHMASTER</b>		
<b>IN</b> M. Pedroza		<b>OUT</b> C. MORA
<b>DATE/TIME IN</b> 11-09-2013 9:45 am		<b>DATE/TIME OUT</b> 11-09-2013 10:23 am
<b>VEHICLE</b>		<b>CONTAINER</b>
<b>INT725</b>		
<b>REFERENCE</b>		
<b>WP13191</b>		<b>INVOICE</b>
<b>BILL OF LADING</b>		

GROSS WEIGHT	75,360	NET TONS	17.63
TARE WEIGHT	40,100	NET WEIGHT	35,260

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	TRACKING QTY				
17.63	TN	SW-CONT SOIL-ALT DAILY COVE DUBLIN				

WEIGHMASTER CERTIFICATE - This is to certify that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food & Agriculture.

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

<b>NET AMOUNT</b>
TENDERED
CHANGE
CHECK#

RS-F042UPR (07/12)

2/21

SIGNATURE \_\_\_\_\_



## NON-HAZARDOUS SPECIAL WASTE &amp; ASBESTOS MANIFEST

BIN PT2491

1319702

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

## I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number N/A		b. Manifest Document Number		c. Page 1 of 1		
d. Generator's Name and Location: Ready Family Partnership, LP 7102 & 7104 Dublin Rd Dublin, CA 94568 415-388-4480		e. Generator's Mailing Address: Ready Family Partnership, LP 855 Redwood Hwy, Suite 177 Mill Valley, CA 94041 415-388-4480				
f. Phone:		g. Phone:				
If owner of the generating facility differs from the generator, provide:						
h. Owner's Name:			i. Owner's Phone No.:			
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description		m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
38501317457	4/30/2014	Soil		001CM	12	Y Tons
B						
C						

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print) KIM GONTHIER		q. Signature K Gonthier	r. Date 11-8-13
--	--	----------------------------	--------------------

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Inkster Transportation 3250 Dutton Ave, Santa Rosa, CA		
b. Phone: 707-578-0960 WP13191		
c. Driver Name (Print) Ron Diawco	d. Signature Ron Diawco	e. Date 11-9-13

## III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Vasco Rd. Landfill 4001 N. Vasco Rd. Livermore, CA 94551 925-447-0481		c. US EPA Number	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) Carlos Mon		f. Signature [Signature]	g. Date 11-9-13

## IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
i. Date			
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			

TE Vasco Road Landfill 4001 N Vasco Road Livermore, CA 925-447-0491
JSTOMER 021591 INNOVATIVE CONSTRUCTION SOLUTIONS 4011 W CHANDLER AVE SANTA ANA, CA 92704 38501317457

SITE 01	TICKET # 933723	CELL
WEIGHMASTER		
IN - C MORA OUT - M		Pedroza
DATE/TIME IN 11-09-2013 11:40 am		DATE/TIME OUT 11-9-2013 12:21 pm
VEHICLE INT725		CONTAINER
REFERENCE WP13191		INVOICE
BILL OF LADING		

GROSS WEIGHT	75,180	NET TONS	17.59	
TARE WEIGHT	40,000	NET WEIGHT	35,180	INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	TRACKING QTY				
17.59	TN	SW-CONT SOIL-ALT DAILY COVE DUBLIN				

WEIGHMASTER CERTIFICATE - This is to certify that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food & Agriculture.

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

2/21

RS-F042UPR (07/12)

SIGNATURE \_\_\_\_\_

NET AMOUNT
TENDERED
CHANGE
CHECK#



## NON-HAZARDOUS SPECIAL WASTE &amp; ASBESTOS MANIFEST

1319706

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

Bin # 202

## I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number N/A		b. Manifest Document Number		c. Page 1 of 1		
d. Generator's Name and Location: Ready Family Partnership, LP 7102 & 7104 Dublin Rd Dublin, CA 94568 415-388-4460			e. Generator's Mailing Address: Ready Family Partnership, LP 655 Redwood Hwy, Suite 177 Mill Valley, CA 94941 415-388-4460			
f. Phone:			g. Phone:			
If owner of the generating facility differs from the generator, provide:						
h. Owner's Name:			i. Owner's Phone No.:			
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description		m. Containers No.	n. Total Quantity	o. Unit Wt/Vol.
38501317457	4/30/2014	Soil		001 CM	12	Tons
B						
C						

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print) KIM GONTHIER		q. Signature Kgonthier		r. Date 11-9-13	
--	--	---------------------------	--	--------------------	--

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Intrinsic Transportation, Inc 3250 Dutton Ave, Santa Rosa, CA WA13191			
b. Phone: 707-578-0960			
c. Driver Name (Print) Ron BIANCO		d. Signature Ron Bianco	e. Date 11-9-13

## III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Vasco Rd. Landfill 4001 N. Vasco Rd. Livermore, CA 94551 925-447-0491		c. US EPA Number	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) Carlos Morn		f. Signature [Signature]	g. Date 11-9-13

## IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
i. Date			
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			

E Vasco Road Landfill 4001 N Vasco Road Livermore, CA 925-447-0491	
CUSTOMER 021591 INNOVATIVE CONSTRUCTION SOLUTIONS 4011 W CHANDLER AVE SANTA ANA, CA 92704 38501317457	

SITE 01	TICKET # 933755	CELL
WEIGHMASTER C. MORA		
DATE/TIME IN 11-09-2013 3:25 pm		DATE/TIME OUT 11-9-2013 4:09 pm
VEHICLE INT725		CONTAINER
REFERENCE WP13191		INVOICE
BILL OF LADING		

GROSS WEIGHT	72,900	NET TONS	17.17
TARE WEIGHT	38,560	NET WEIGHT	34,340

INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	TRACKING QTY				
17.17	TN	SW-CONT SOIL-ALT DAILY COVE DUBLIN				

WEIGHMASTER CERTIFICATE - This is to certify that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food & Agriculture.

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

NET AMOUNT
TENDERED
CHANGE
CHECK#

RS-F042UPR (07/12) 2/21 SIGNATURE \_\_\_\_\_



## NON-HAZARDOUS SPECIAL WASTE &amp; ASBESTOS MANIFEST

1319707

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

**I. GENERATOR** (Generator completes Ia-r)

a. Generator's US EPA ID Number N/A		b. Manifest Document Number		c. Page 1 of 1		
d. Generator's Name and Location: Ready Family Partnership, LP 7102 & 7104 Dublin Rd Dublin, CA 94568 f. Phone: 415-388-4480			e. Generator's Mailing Address: Ready Family Partnership, LP 655 Redwood Hwy, Suite 177 Mill Valley, CA 94941 g. Phone: 415-388-4480			
If owner of the generating facility differs from the generator, provide:						
h. Owner's Name:			i. Owner's Phone No.:			
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description		m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
38501317457	4/30/2014	Soil		001 CM	12	Tons
B.						
C.						
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.						
p. Generator Authorized Agent Name (Print) KIM GONTHIER		q. Signature K Gonthier		r. Date		

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Intrinsic Transportation Inc 3250 Duxton Ave Santa Rosa, CA 95405 b. Phone: 707-578-0960			c. Driver Name (Print) Ron Bianco			d. Signature Ron Bianco	e. Date 11-16-13
---	--	--	--------------------------------------	--	--	----------------------------	---------------------

**III. DESTINATION** (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Vasco Rd. Landfill 4001 N. Vasco Rd. Livermore, CA 94551		b. US EPA Number 925-447-0491	d. Discrepancy Indication Space:	
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.				
e. Name of Authorized Agent (Print) Santo Delgado		f. Signature Santo Delgado		g. Date 11/16/13

**IV. ASBESTOS** (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
i. Date			
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			

SITE	Vasco Road Landfill 4001 N Vasco Road Livermore, CA 925-447-0491
CUSTOMER	021591 INNOVATIVE CONSTRUCTION SOLUTIONS 4011 W CHANDLER AVE SANTA ANA, CA 92704 38501317457

SITE	TICKET #	CELL
01	934773	
WEIGHMASTER		
IN - S. De la Torre		OUT - C. MORA
DATE/TIME IN		DATE/TIME OUT
11-16-2013 10:47 am		11-16-2013 11:32 am
VEHICLE		CONTAINER
1		
REFERENCE		
WP13191		INVOICE
BILL OF LADING		

GROSS WEIGHT	74,980	NET TONS	17.35	
TARE WEIGHT	40,280	NET WEIGHT	34,700	INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	TRACKING QTY				
17.35	TN	SW-CONT SOIL-ALT DAILY COVE DUBLIN				

WEIGHMASTER CERTIFICATE - This is to certify that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food & Agriculture.

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

NET AMOUNT
TENDERED
CHANGE
CHECK#

RS-F042UPR (07/12)

SIGNATURE \_\_\_\_\_





## NON-HAZARDOUS SPECIAL WASTE &amp; ASBESTOS MANIFEST

1319705

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

Bin 3126

## I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number N/A		b. Manifest Document Number		c. Page 1 of 1		
d. Generator's Name and Location: Ready Family Partnership, LP 7102 & 7104 Dublin Rd Dublin, CA 94568 415-388-4460			e. Generator's Mailing Address: Ready Family Partnership, LP 655 Redwood Hwy, Suite 177 Mill Valley, CA 94941 415-388-4460			
f. Phone: 415-388-4460						
g. Phone: 415-388-4460						
If owner of the generating facility differs from the generator, provide:						
h. Owner's Name:			i. Owner's Phone No.:			
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description		m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
38501317457	4/30/2014	Soil		001 CM	12	Tons
B						
C						
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.						
p. Generator Authorized Agent Name (Print) KIM GONTHIER		q. Signature K Gonthier		r. Date 11-9-13		

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Intrinsic Transportation Inc 3250 Dutton Ave, Santa Rosa, CA NP13191		
b. Phone: 707-578-0960		
c. Driver Name (Print) RON BIANCO	d. Signature Ron Bianco	e. Date 11-9-13

## III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Vasco Rd. Landfill 4001 N. Vasco Rd. Livermore, CA 94551 925-447-0491		c. US EPA Number	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) Carlos Morn		f. Signature [Signature]	g. Date 11-9-13

## IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
i. Date			
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			

ITE	Vasco Road Landfill 4001 N Vasco Road Livermore, CA 925-447-0491
CUSTOMER	021591 INNOVATIVE CONSTRUCTION SOLUTIONS 4011 W CHANDLER AVE SANTA ANA, CA 92704 38501317457

SITE	01	TICKET #	933739	CELL	
WEIGHMASTER IN - C. MORA OUT - M. Pedroza					
DATE/TIME IN			11-09-2013 1:35 pm	DATE/TIME OUT 11-9-2013 2:04 pm	
VEHICLE			INT725	CONTAINER	
REFERENCE			LIC# WP13191	INVOICE	
BILL OF LADING					

GROSS WEIGHT	70,460	NET TONS	15.32	
TARE WEIGHT	39,820	NET WEIGHT	30,640	INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	TRACKING QTY				
15.32	TN	SW-CONT SOIL-ALT DAILY COVE DUBLIN				

WEIGHMASTER CERTIFICATE - This is to certify that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food & Agriculture.

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

NET AMOUNT
TENDERED
CHANGE
CHECK#

RS-F042UPR (07/12)

SIGNATURE \_\_\_\_\_



## NON-HAZARDOUS SPECIAL WASTE &amp; ASBESTOS MANIFEST

1319704

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is NOT asbestos waste, complete Sections I, II and III

Bin # PT3439

## I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number N/A		b. Manifest Document Number		c. Page 1 of 1	
d. Generator's Name and Location: Ready Family Partnership, LP 7102 & 7104 Dublin Rd Dublin, CA 94568 415-388-4480			e. Generator's Mailing Address: Ready Family Partnership, LP 855 Redwood Hwy, Suite 177 Mill Valley, CA 94941 415-388-4480		
f. Phone:			g. Phone:		
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:			i. Owner's Phone No.:		
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
38501317457	4/30/2014	Soil	001 CM	12	Y
B					
C					
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
KIM GONTHIER		Kgonthier		11-9-13	
p. Generator Authorized Agent Name (Print)		q. Signature		r. Date	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: INTRINSIC TRANSPORTATION, INC. 3250 DUTTON AVE, SANTA ROSA, CA WP13191		
b. Phone: 707-578-0960		
Ron Bianco		11-9-13
c. Driver Name (Print)	d. Signature	e. Date

## III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Vasco Rd. Landfill 4001 N. Vasco Rd. Livermore, CA 94551 925-447-0491		c. US EPA Number	d. Discrepancy Indication Space:
b. I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
Carlos Moran		11-9-13	
e. Name of Authorized Agent (Print)	f. Signature	g. Date	

## IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			

SITE	Vasco Road Landfill 4001 N Vasco Road Livermore, CA 925-447-0491
CUSTOMER	021591 INNOVATIVE CONSTRUCTION SOLUTIONS 4011 W CHANDLER AVE SANTA ANA, CA 92704 38501317457

SITE	TICKET #	CELL
01	933686	
WEIGHMASTER		
C-MORA		
DATE/TIME IN		DATE/TIME OUT
11-09-2013 7:54 am		11-9-2013 8:30 am
VEHICLE		CONTAINER
INT725		
REFERENCE		
WP13191		INVOICE
BILL OF LADING		

GROSS WEIGHT	74,420	NET TONS	17.13
TARE WEIGHT	40,160	NET WEIGHT	34,260
		INBOUND	

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	TRACKING QTY				
17.13	TN	SW-CONT SOIL-ALT DAILY COVE DUBLIN				

WEIGHMASTER CERTIFICATE - This is to certify that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food & Agriculture.

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RS-F042UPR (07/12)

2/21

SIGNATURE \_\_\_\_\_

NET AMOUNT
TENDERED
CHANGE
CHECK#



## NON-HAZARDOUS SPECIAL WASTE &amp; ASBESTOS MANIFEST

1319703

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is NOT asbestos waste, complete Sections I, II and III

Bin # 2777

## I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number N/A		b. Manifest Document Number		c. Page 1 of 1		
d. Generator's Name and Location: Ready Family Partnership, LP 7102 & 7104 Dublin Rd Dublin, CA 94568 415-388-4480			e. Generator's Mailing Address: Ready Family Partnership, LP 655 Redwood Hwy, Suite 177 Mill Valley, CA 94941 415-388-4480			
f. Phone:			g. Phone:			
If owner of the generating facility differs from the generator, provide:						
h. Owner's Name:			i. Owner's Phone No.:			
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description		m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
38501317457	4/30/2014	Soil		001 CM	12	Tons
B.						
C.						
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.						
p. Generator Authorized Agent Name (Print) KIM GONTHIER		q. Signature K. Gonther		r. Date 11-9-13		

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Integrative Transportation, Inc. 2250 Dutton Ave, Santa Rosa, CA WP13191		
b. Phone: 707 578-0960		
c. Driver Name (Print)	d. Signature	e. Date

## III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Vasco Rd. Landfill 4001 N. Vasco Rd. Livermore, CA 94551 925-447-0491		c. US EPA Number H. Pedroni	d. Discrepancy Indication Space: Impedioru 11-9-13
b. I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) Ron D. Awco		f. Signature Ron Buena	g. Date 11-9-13

## IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
i. Date			
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			

<b>SITE</b> Vasco Road Landfill 4001 N Vasco Road Livermore, CA 925-447-0491	
<b>CUSTOMER</b> 021591 INNOVATIVE CONSTRUCTION SOLUTIONS 4011 W CHANDLER AVE SANTA ANA, CA 92704 38501317457	

<b>SITE</b> 01	<b>TICKET #</b> 933708	<b>CELL</b>
<b>WEIGHMASTER</b>		
<b>IN</b> M. Pedroza		<b>OUT</b> C. MOBA
<b>DATE/TIME IN</b> 11-09-2013 9:45 am		<b>DATE/TIME OUT</b> 11-9-2013 10:23 am
<b>VEHICLE</b>		<b>CONTAINER</b>
<b>INT725</b>		
<b>REFERENCE</b>		
<b>WP13191</b>		<b>INVOICE</b>
<b>BILL OF LADING</b>		

GROSS WEIGHT	75,360	NET TONS	17.63
TARE WEIGHT	40,100	NET WEIGHT	35,260

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	TRACKING QTY				
17.63	TN	SW-CONT SOIL-ALT DAILY COVE DUBLIN				

WEIGHMASTER CERTIFICATE - This is to certify that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food & Agriculture.

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RS-F042UPR (07/12)

2/21

SIGNATURE \_\_\_\_\_

<b>NET AMOUNT</b>
TENDERED
CHANGE
CHECK#





## NON-HAZARDOUS SPECIAL WASTE &amp; ASBESTOS MANIFEST

Bin PT2491

1319702

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is NOT asbestos waste, complete Sections I, II and III

## I. GENERATOR (Generator completes la-r)

a. Generator's US EPA ID Number N/A		b. Manifest Document Number		c. Page 1 of 1	
d. Generator's Name and Location: Ready Family Partnership, LP 7102 & 7104 Dublin Rd Dublin, CA 94568 415-388-4480		e. Generator's Mailing Address: Ready Family Partnership, LP 855 Redwood Hwy, Suite 177 Mill Valley, CA 94941 415-388-4480			
f. Phone:		g. Phone:			
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:			i. Owner's Phone No.:		
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
38501317457	4/30/2014	Soil	001CM	12	Tons
B					
C					
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
p. Generator Authorized Agent Name (Print) KIM GONTHIER		q. Signature K Gonthier		r. Date 11-8-13	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Inkinci Transportation 3250 Dutton Ave, Santa Rosa, CA		
b. Phone: 707-578-0960 WP13191		
c. Driver Name (Print) Ron DIAWCO	d. Signature Ron DiaWCO	e. Date 11-9-13

## III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Vasco Rd Landfill 4001 N. Vasco Rd. Livermore, CA 94551 925-447-0491		c. US EPA Number	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) Carlos Mon	f. Signature Carlos Mon	g. Date 11-9-13	

## IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



FE Vasco Road Landfill 4001 N Vasco Road Livermore, CA 925-447-0491
JSTOMER 021591 INNOVATIVE CONSTRUCTION SOLUTIONS 4011 W CHANDLER AVE SANTA ANA, CA 92704 38501317457

SITE 01	TICKET # 933723	CELL
WEIGHMASTER IN - C. MORA OUT - M. Pedroza		
DATE/TIME IN 11-09-2013 11:40 am		DATE/TIME OUT 11-9-2013 12:21 pm
VEHICLE INT725		CONTAINER
REFERENCE WP13191		INVOICE
BILL OF LADING		

GROSS WEIGHT	75,180	NET TONS	17.59	
TARE WEIGHT	40,000	NET WEIGHT	35,180	INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	TRACKING QTY				
17.59	TN	SW-CONT SOIL-ALT DAILY COVE DUBLIN				

WEIGHMASTER CERTIFICATE - This is to certify that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food & Agriculture.

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2/21

SIGNATURE \_\_\_\_\_

NET AMOUNT
TENDERED
CHANGE
CHECK#



## NON-HAZARDOUS SPECIAL WASTE &amp; ASBESTOS MANIFEST

1319706

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is NOT asbestos waste, complete Sections I, II and III

Bin # 202

## I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number N/A		b. Manifest Document Number		c. Page 1 of 1		
d. Generator's Name and Location: Ready Family Partnership, LP 7102 & 7104 Dublin Rd Dublin, CA 94568 415-388-4460			e. Generator's Mailing Address: Ready Family Partnership, LP 655 Redwood Hwy, Suite 177 Mill Valley, CA 94941 415-388-4460			
f. Phone:			g. Phone:			
If owner of the generating facility differs from the generator, provide:						
h. Owner's Name:			i. Owner's Phone No.:			
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description		m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
38501317457	4/30/2014	Soil		001 CM	12	Tons
B						
C						

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

KIM GANTHER		K. Gantner		11-9-13	
p. Generator Authorized Agent Name (Print)		q. Signature		r. Date	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Intrinsic Transportation, Inc. 3250 Dutton Ave, Santa Rosa, CA WA13191					
b. Phone: 707-578-0960					
Ron Biondo		Ron Biondo		11-9-13	
c. Driver Name (Print)		d. Signature		e. Date	

## III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Vasco Rd. Landfill 4001 N. Vasco Rd. Livermore, CA 94551 925-447-0491		c. US EPA Number		d. Discrepancy Indication Space:	
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.					
Carlos Morn		[Signature]		11-9-13	
e. Name of Authorized Agent (Print)		f. Signature		g. Date	

## IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
i. Date			
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			

Vasco Road Landfill 4001 N Vasco Road Livermore, CA 925-447-0491	
CUSTOMER 021591 INNOVATIVE CONSTRUCTION SOLUTIONS 4011 W CHANDLER AVE SANTA ANA, CA 92704 38501317457	

SITE 01	TICKET # 933755	CELL
WEIGHMASTER C. MORA		
DATE/TIME IN 11-09-2013 3:25 pm		DATE/TIME OUT 11-9-2013 4:09 pm
VEHICLE INT725		CONTAINER
REFERENCE WP13191		INVOICE
BILL OF LADING		

GROSS WEIGHT	72,900	NET TONS	17.17
TARE WEIGHT	38,560	NET WEIGHT	34,340

INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	TRACKING QTY				
17.17	TN	SW-CONT SOIL-ALT DAILY COVE DUBLIN				

WEIGHMASTER CERTIFICATE - This is to certify that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food & Agriculture.

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

NET AMOUNT
TENDERED
CHANGE
CHECK#

RS-F042UPR (07/12)

2/21

SIGNATURE \_\_\_\_\_



## NON-HAZARDOUS SPECIAL WASTE &amp; ASBESTOS MANIFEST

1319707

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

**I. GENERATOR** (Generator completes Ia-r)

a. Generator's US EPA ID Number N/A		b. Manifest Document Number		c. Page 1 of 1		
d. Generator's Name and Location: Ready Family Partnership, LP 7102 & 7104 Dublin Rd Dublin, CA 94568 415-388-4480			e. Generator's Mailing Address: Ready Family Partnership, LP 655 Redwood Hwy, Suite 177 Mill Valley, CA 94941 415-388-4480			
f. Phone:			g. Phone:			
If owner of the generating facility differs from the generator, provide:						
h. Owner's Name:			i. Owner's Phone No.:			
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description		m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
38501317457	4/30/2014	Soil		001 CM	12	1/10
B						
C						

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.

p. Generator Authorized Agent Name (Print) KIM GONTHIER		q. Signature K Gonthier	r. Date
--	--	----------------------------	---------

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Intrinsic Transportation Inc 3250 Burton Ave Santa Rosa, CA 95405		
b. Phone: 707-578-0960		
c. Driver Name (Print) RON BIANCO	d. Signature Ron Bianco	e. Date 11-16-13

**III. DESTINATION** (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Vasco Rd. Landfill 4001 N. Vasco Rd. Livermore, CA 94551 925-447-0491		c. US EPA Number	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) Santo Delacruz		f. Signature Santo Delacruz	g. Date 11/16/13

**IV. ASBESTOS** (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			

SITE	Vasco Road Landfill
	4001 N Vasco Road
	Livermore, CA 925-447-0491
CUSTOMER	021591
	INNOVATIVE CONSTRUCTION SOLUTIONS
	4011 W CHANDLER AVE
	SANTA ANA, CA 92704
	38501317457

SITE	TICKET #	CELL
01	934773	
WEIGHMASTER		
IN - S. De la Torre		OUT - C. MORA
DATE/TIME IN	DATE/TIME OUT	
11-16-2013 10:47 am	11-16-2013 11:32 am	
VEHICLE	CONTAINER	
1		
REFERENCE		
WP13191		INVOICE
BILL OF LADING		

GROSS WEIGHT	74,980	NET TONS	17.35	
TARE WEIGHT	40,280	NET WEIGHT	34,700	INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	TRACKING QTY				
17.35	TN	SW-CONT SOIL-ALT DAILY COVE DUBLIN				

WEIGHMASTER CERTIFICATE - This is to certify that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food & Agriculture.

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

NET AMOUNT
TENDERED
CHANGE
CHECK#

RS-F042UPR (07/12)

SIGNATURE \_\_\_\_\_



From: (510) 782-5415  
Alma Valencia  
ICS NORCAL  
4721 Tidewater Ave  
Suite D  
Oakland, CA 94601

Origin ID: JBSA



Ship Date: 02DEC13  
ActWgt: 1.0 LB  
CAD: 7909922/INET3430

Delivery Address Bar Code



SHIP TO: (925) 543-5512

BILL SENDER

**Doug Glasco**  
**William Lyon Homes**  
**4000 Executive Parkway, Ste 250**

**SAN RAMON, CA 94583**

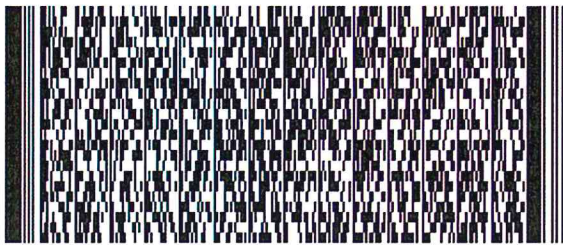
Ref #  
Invoice #  
PO #  
Dept #

**WED - 04 DEC AA**  
**\*\* 2DAY \*\***

TRK# 7972 9204 7165  
0201

**SB NGZA**

**94583**  
CA-US  
**OAK**



51AG489D5/1A9E

**After printing this label:**

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

**Warning:** Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on [fedex.com](http://fedex.com). FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.



## NON-HAZARDOUS SPECIAL WASTE &amp; ASBESTOS MANIFEST

B'n # PT 3/26

1319698

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

**I. GENERATOR** (Generator completes Ia-r)

a. Generator's US EPA ID Number N/A		b. Manifest Document Number		c. Page 1 of 1	
d. Generator's Name and Location: Ready Family Partnership, LP 7102 & 7104 Dublin Rd Dublin, CA 94568 415-388-4460		e. Generator's Mailing Address: Ready Family Partnership, LP 555 Redwood Hwy, Suite 177 Mill Valley, CA 94941 415-388-4460			
f. Phone:		g. Phone:			
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:			i. Owner's Phone No.:		
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
38501317457	4/30/2014	Soil	001 CM	12	Y Tons
B.					
C.					
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
p. Generator Authorized Agent Name (Print) KIM GONTHIER		q. Signature K. Gonthier		r. Date 11-5-13	

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Intrinsic Trans Inc 3250 Dutton Ave Santa Rosa CA		
b. Phone: 707 570 0966		
c. Driver Name (Print) Brad DeMauro	d. Signature B. DeMauro	e. Date 11-5-13

**III. DESTINATION** (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Vasco Rd. Landfill 4001 N. Vasco Rd. Livermore, CA 94551 925-447-0491		c. US EPA Number	d. Discrepancy Indication Space: 11500
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) M. Pedroni	f. Signature M. Pedroni	g. Date 11-5-13	

**IV. ASBESTOS** (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
i. Date			
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



SITE	Vasco Road Landfill 4001 N Vasco Road Livermore, CA 925-447-0491
CUSTOMER	021591 INNOVATIVE CONSTRUCTION SOLUTIONS 4011 W CHANDLER AVE SANTA ANA, CA 92704 38501317457

SITE	01	TICKET #	932881	CELL	
WEIGHMASTER M. Pedroza					
DATE/TIME IN			11-05-2013 10:23 am	DATE/TIME OUT 11-5-2013 10:50 am	
VEHICLE			INT725	CONTAINER	
REFERENCE				INVOICE	
BILL OF LADING					

GROSS WEIGHT	75,180	NET TONS	16.43	
TARE WEIGHT	42,320	NET WEIGHT	32,860	INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	TRACKING QTY				
16.43	TN	SW-CONT SOIL-ALT DAILY COVE DUBLIN				

WEIGHMASTER CERTIFICATE - This is to certify that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food & Agriculture.

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

RS-F042UPR (07/12)

SIGNATURE \_\_\_\_\_

NET AMOUNT
TENDERED
CHANGE
CHECK#



## NON-HAZARDOUS SPECIAL WASTE &amp; ASBESTOS MANIFEST

B.H. 202  
11:30

1319700

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

## I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number N/A		b. Manifest Document Number		c. Page 1 of 1	
d. Generator's Name and Location: Ready Family Partnership, LP 7102 & 7104 Dublin Rd Dublin, CA 94568 415-388-4460		e. Generator's Mailing Address: Ready Family Partnership, LP 655 Redwood Hwy, Suite 177 Mill Valley, CA 94041 415-388-4460			
f. Phone:		g. Phone:			
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:		i. Owner's Phone No.:			
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
38501317457	4/30/2014	Soil	001 CM	12	Y Pounds
B.					
C.					
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
p. Generator Authorized Agent Name (Print) KIM GONTHIER		q. Signature K. Gonthier		r. Date 11-5-13	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Indivistic Transportation 3250 Dutton Ave Santa Rosa, CA		
b. Phone: 707-590-0960		
c. Driver Name (Print) Brad DeMarco	d. Signature B. DeMarco	e. Date 11-5-13

## III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Vasco Rd. Landfill 4001 N. Vasco Rd. Livermore, CA 94551 925-447-0491		b. c. US EPA Number	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) M. Pedrosa	f. Signature M. Pedrosa	g. Date 11-5-13	

## IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			

ITE	Vasco Road Landfill 4001 N Vasco Road Livermore, CA 925-447-0491
CUSTOMER	021591 INNOVATIVE CONSTRUCTION SOLUTIONS 4011 W CHANDLER AVE SANTA ANA, CA 92704 38501317457

SITE 01	TICKET # 932934	CELL
WEIGHMASTER M. Pedroza		
DATE/TIME IN 11-05-2013 12:09 pm		DATE/TIME OUT 11-5-2013 12:36 pm
VEHICLE INT725		CONTAINER
REFERENCE INVOICE		
BILL OF LADING		

GROSS WEIGHT	75,320	NET TONS	17.13	
TARE WEIGHT	41,060	NET WEIGHT	34,260	INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	TRACKING QTY				
17.13	TN	SW-CONT SOIL-ALT DAILY COVE DUBLIN				

WEIGHMASTER CERTIFICATE - This is to certify that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food & Agriculture.

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

NET AMOUNT
TENDERED
CHANGE
CHECK#

RS-F042UPR (07/12)

SIGNATURE \_\_\_\_\_



## NON-HAZARDOUS SPECIAL WASTE &amp; ASBESTOS MANIFEST

1319699

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

B/A 2491

B/5

**I. GENERATOR** (Generator completes Ia-r)

a. Generator's US EPA ID Number N/A		b. Manifest Document Number		c. Page 1 of 1		
d. Generator's Name and Location: Ready Family Partnership, LP 7102 & 7104 Dublin Rd Dublin, CA 94568 f. Phone: 415-388-4480			e. Generator's Mailing Address: Ready Family Partnership, LP 655 Redwood Hwy, Suite 177 Mill Valley, CA 94941 g. Phone: 415-388-4480			
If owner of the generating facility differs from the generator, provide:						
h. Owner's Name:			i. Owner's Phone No.:			
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description		m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
38501317457	4/30/2014	Soil		001 CM	12	Y <del>Tons</del>
B.						
C.						
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.						
KIM GONTHIER		K Gonthier		11-5-13		
p. Generator Authorized Agent Name (Print)		q. Signature		r. Date		

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: INTRINSIC TRANSPORTATION 3250 Dutton Ave Santa Rosa, CA 95405		
b. Phone: 707-590-0960		
Brad DeMarco	B DeMarco	11-5-13
c. Driver Name (Print)	d. Signature	e. Date

**III. DESTINATION** (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Vasco Rd. Landfill 4001 N. Vasco Rd. Livermore, CA 94551 b. 925-447-0491		c. US EPA Number	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
Carlos Mora			11-5-13
e. Name of Authorized Agent (Print)	f. Signature	g. Date	

**IV. ASBESTOS** (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			

SITE	Vasco Road Landfill 4001 N Vasco Road Livermore, CA 925-447-0491
CUSTOMER	021591 INNOVATIVE CONSTRUCTION SOLUTIONS 4011 W CHANDLER AVE SANTA ANA, CA 92704 38501317457

SITE	TICKET #	CELL
01	932987	
WEIGHMASTER		
IN - C. MORA OUT - M. Pedroza		
DATE/TIME IN	DATE/TIME OUT	
11-05-2013 1:55 pm	11-5-2013 2:33 pm	
VEHICLE	CONTAINER	
INT725		
REFERENCE	INVOICE	
BILL OF LADING		

GROSS WEIGHT	74,040	NET TONS	15.86	
TARE WEIGHT	42,320	NET WEIGHT	31,720	INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	TRACKING QTY				
15.86	TN	SW-CONT SOIL-ALT DAILY COVE DUBLIN				

WEIGHMASTER CERTIFICATE - This is to certify that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food & Agriculture.

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

RS-F042UPR (07/12)

SIGNATURE \_\_\_\_\_

NET AMOUNT
TENDERED
CHANGE
CHECK#



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

3.4 2777  
315 PM

1319701

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is NOT asbestos waste, complete Sections I, II and III

## I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number N/A		b. Manifest Document Number		c. Page 1 of 1	
d. Generator's Name and Location: Ready Family Partnership, LP 7102 & 7104 Dublin Rd Dublin, CA 94568 415-388-4480			e. Generator's Mailing Address: Ready Family Partnership, LP 655 Redwood Hwy, Suite 177 Mill Valley, CA 94941 415-388-4480		
f. Phone: 415-388-4480			g. Phone: 415-388-4480		
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:			i. Owner's Phone No.:		
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description		m. Containers No. Type	n. Total Quantity
38501317457	4/30/2014	Soil		EO1 CM	12
B.					
C.					
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
p. Generator Authorized Agent Name (Print) KIM FIONTHIER		q. Signature K. Fionthier		r. Date 11/05/13	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Intrinsic Trails Inc 3250 Dutton Ave San Jose, CA		
b. Phone: 408 528-0960		
c. Driver Name (Print) D. Marco	d. Signature D. Marco	e. Date 11-5-13

## III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Vasco Rd Landfill 4001 N. Vasco Rd. Livermore, CA 94551 925-447-0491		c. US EPA Number	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) M. Pedraza	f. Signature M. Pedraza	g. Date 11-5-13	

## IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			

SITE	Vasco Road Landfill 4001 N Vasco Road Livermore, CA 925-447-0491
CUSTOMER	021591 INNOVATIVE CONSTRUCTION SOLUTIONS 4011 W CHANDLER AVE SANTA ANA, CA 92704 38501317457

SITE 01	TICKET # 933011	CELL
WEIGHMASTER M. Pedroza		
DATE/TIME IN 11-05-2013 3:44 pm		DATE/TIME OUT 11-5-2013 4:10 pm
VEHICLE INT725		CONTAINER
REFERENCE INVOICE		
BILL OF LADING		

GROSS WEIGHT	71,980	NET TONS	14.84	
TARE WEIGHT	42,300	NET WEIGHT	29,680	INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	TRACKING QTY				
14.84	TN	SW-CONT SOIL-ALT DAILY COVE DUBLIN				

WEIGHMASTER CERTIFICATE - This is to certify that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food & Agriculture.

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

NET AMOUNT
TENDERED
CHANGE
CHECK#

RS-F042UPR (07/12)

SIGNATURE \_\_\_\_\_





## NON-HAZARDOUS SPECIAL WASTE &amp; ASBESTOS MANIFEST

Bin PT 3126

700m

1319881

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

**I. GENERATOR** (Generator completes Ia-r)

a. Generator's US EPA ID Number N/A		b. Manifest Document Number		c. Page 1 of	
d. Generator's Name and Location: Ready Family Partnership, LP 7102 & 7104 Dublin Rd Dublin, CA 94508 415-388-4460		e. Generator's Mailing Address: Ready Family Partnership, LP 655 Redwood Hwy, Suite 177 Mill Valley, CA 94941 415-388-4460			
f. Phone:		g. Phone:			
h. Owner's Name:		i. Owner's Phone No.:			
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
38501317457	4/30/2014	Soil	001 CM	12	Tons
B.					
C.					
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
p. Generator Authorized Agent Name (Print) KIM GONTHIER		q. Signature Kgonthier		r. Date 11-1-13	

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: INTEGRIS TRANSPORTATION 3250 Dutton Ave Santa Rosa, CA		b. Phone: 707-578-0960	
c. Driver Name (Print) Brian De Marco		d. Signature B. De Marco	
e. Date 11-1-13			

**III. DESTINATION** (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Vasco Rd. Landfill 4001 N. Vasco Rd. Livermore, CA 94551		b. US EPA Number M. Pedhore 925-447-0491	c. Discrepancy Indication Space: Impedora 11-1-13
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) KIM GONTHIER KG		f. Signature Kgonthier KG	
g. Date			

**IV. ASBESTOS** (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
i. Date			
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			

SITE	Vasco Road Landfill
	4001 N Vasco Road Livermore, CA 925-447-0491
CUSTOMER	021591 INNOVATIVE CONSTRUCTION SOLUTIONS 4011 W CHANDLER AVE SANTA ANA, CA 92704 38501317457

SITE 01	TICKET # 932328	CELL
WEIGHMASTER M. Pedroza		
DATE/TIME IN 11-01-2013 7:23 am		DATE/TIME OUT 11-1-2013 7:52 am
VEHICLE INT725		CONTAINER
REFERENCE		INVOICE
BILL OF LADING		

GROSS WEIGHT	77,320	NET TONS	17.85	
TARE WEIGHT	41,620	NET WEIGHT	35,700	INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	TRACKING QTY				
17.85	TN	SW-CONT SOIL-ALT DAILY COVE DUBLIN				

WEIGHMASTER CERTIFICATE - This is to certify that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food & Agriculture.

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

2/21

RS-F042UPR (07/12)

SIGNATURE \_\_\_\_\_

NET AMOUNT
TENDERED
CHANGE
CHECK#

**NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST**Bin# PT3439  
10:20

1319695

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III**I. GENERATOR** (Generator completes Ia-r)

a. Generator's US EPA ID Number N/A		b. Manifest Document Number		c. Page 1 of 1	
d. Generator's Name and Location: Ready Family Partnership, LP 7102 & 7104 Dublin Rd Dublin, CA 94568 415-388-4480		e. Generator's Mailing Address: Ready Family Partnership, LP 655 Redwood Hwy, Suite 177 Mill Valley, CA 94941 415-388-4480			
f. Phone:		g. Phone:			
If owner of the generating facility differs from the generator, provide:		i. Owner's Phone No.:			
h. Owner's Name:		i. Owner's Phone No.:			
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
38501317457	4/30/2014	Soil	001 CM	12	Y Lbs
B					
C					
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
p. Generator Authorized Agent Name (Print) KIM GONTHIER		q. Signature K. Gonthier		r. Date 11-1-13	

**II. TRANSPORTER** (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: INTRINSIC TRANSPORTATION INC 3250 DUTTON AVE SANTA ROSA, CA		
b. Phone: 707-578-0960		
c. Driver Name (Print) BRAD DE MARCO	d. Signature B. DeMarco	e. Date 11-1-13

**III. DESTINATION** (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Vasco Rd. Landfill 4001 N. Vasco Rd. Livermore, CA 94551 925-447-0491		c. US EPA Number	d. Discrepancy Indication Space: 11/1/13
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) BRAD DE MARCO		f. Signature B. DeMarco	g. Date 11-1-13

**IV. ASBESTOS** (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			

SITE  
Vasco Road Landfill  
4001 N Vasco Road  
Livermore, CA 925-447-0491

CUSTOMER  
021591  
INNOVATIVE CONSTRUCTION SOLUTIONS  
4011 W CHANDLER AVE  
SANTA ANA, CA 92704  
38501317457

SITE	TICKET #	CELL
01	932414	
WEIGHMASTER		
S. De la Torre		
DATE/TIME IN	DATE/TIME OUT	
11-01-2013 10:46 am	11-1-2013 11:15 am	
VEHICLE	CONTAINER	
INT725		
REFERENCE	INVOICE	
BILL OF LADING		

GROSS WEIGHT	76,200	NET TONS	17.33	
TARE WEIGHT	41,540	NET WEIGHT	34,660	INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	TRACKING QTY				
17.33	TN	SW-CONT SOIL-ALT DAILY COVE DUBLIN				

WEIGHMASTER CERTIFICATE - This is to certify that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food & Agriculture.

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RS-F042UPR (07/12)

2/21

SIGNATURE \_\_\_\_\_

NET AMOUNT

TENDERED

CHANGE

CHECK#



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

1319696

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

Bin 202

12:00

## I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number N/A		b. Manifest Document Number		c. Page 1 of 1	
d. Generator's Name and Location: Ready Family Partnership, LP 7102 & 7104 Dublin Rd Dublin, CA 94568 415-388-4480		e. Generator's Mailing Address: Ready Family Partnership, LP 855 Redwood Hwy, Suite 177 Mill Valley, CA 94941 415-388-4480			
f. Phone:		g. Phone:			
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:			i. Owner's Phone No.:		
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
38501317457	4/30/2014	Soil	001 CM	12	Tons
B					
C					
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
p. Generator Authorized Agent Name (Print) KIM GONTHIER		q. Signature K Gonthier		r. Date 11-1-11	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Intrinsic Transportation Inc 3250 Dutton Ave, Santa Rosa, CA		
b. Phone: 707-578-0900		
c. Driver Name (Print) Brian DeMarco	d. Signature B DeMarco	e. Date 1-11-13

## III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Vasco Rd Landfill 4001 N. Vasco Rd Livermore, CA 94551 925-447-0491		c. US EPA Number	d. Discrepancy Indication Space:
b. I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) Dennis DeMarco	f. Signature D DeMarco	g. Date 11/1/13	

## IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		h. Signature	
i. Date			
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			

SITE	Vasco Road Landfill 4001 W Vasco Road Livermore, CA 925-447-0491
CUSTOMER	021591 INNOVATIVE CONSTRUCTION SOLUTIONS 4011 W CHANDLER AVE SANTA ANA, CA 92704 38501317457

SITE	TICKET #	CELL
01	932455	
WEIGHMASTER		
IN - S. De la Torre		OUT - M. Pedroz
DATE/TIME IN		DATE/TIME OUT
11-01-2013 12:41 pm		11-1-2013 1:18 pm
VEHICLE		CONTAINER
INT725		
REFERENCE		INVOICE
BILL OF LADING		

GROSS WEIGHT	75,800	NET TONS	17.81	
TARE WEIGHT	40,180	NET WEIGHT	35,620	INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	TRACKING QTY				
17.81	TN	SW-CONT SOIL-ALT DAILY COVE DUBLIN				

WEIGHMASTER CERTIFICATE - This is to certify that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food & Agriculture.

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2/21

RS-F042UPR (07/12)

SIGNATURE \_\_\_\_\_

NET AMOUNT
TENDERED
CHANGE
CHECK#





## NON-HAZARDOUS SPECIAL WASTE &amp; ASBESTOS MANIFEST

1319697

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

Bio PT 2491

1355

## I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number N/A		b. Manifest Document Number		c. Page 1 of 1	
d. Generator's Name and Location: Ready Family Partnership, LP 7102 & 7104 Dublin Rd Dublin, CA 94568 415-388-4460			e. Generator's Mailing Address: Ready Family Partnership, LP 655 Redwood Hwy, Suite 177 Mill Valley, CA 94941 415-388-4460		
f. Phone: 415-388-4460			g. Phone: 415-388-4460		
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:			i. Owner's Phone No.:		
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
38501317457	4/30/2014	Soil	001 CM	12	Y Tons
B.					
C.					
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
p. Generator Authorized Agent Name (Print) KIM GONTHIER		q. Signature K Gonthier		r. Date 11-1-13	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Integrity Transport Services, Inc. 3250 Durant Ave Santa Rosa, CA		
b. Phone: 707-578-0960		
c. Driver Name (Print) Brad DeMarco	d. Signature B DeMarco	e. Date 11-1-13

## III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Vasco Rd Landfill 4001 N. Vasco Rd Livermore, CA 94551 925-447-0401		c. US EPA Number	d. Discrepancy Indication Space:
b. I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) Sergio Vatore	f. Signature S Vatore	g. Date 11/1/13	

## IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		i. Date	
h. Signature			
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			



SITE  
Vasco Road Landfill  
4001 N Vasco Road  
Livermore, CA 925-447-0491

CUSTOMER  
021591  
INNOVATIVE CONSTRUCTION SOLUTIONS  
4011 W CHANDLER AVE  
SANTA ANA, CA 92704  
38501317457

SITE 01	TICKET # 932490	CELL
WEIGHMASTER S.De la Torre		
DATE/TIME IN 11-01-2013 2:37 pm		DATE/TIME OUT 11-1-2013 3:09 pm
VEHICLE INT725		CONTAINER
REFERENCE INVOICE		
BILL OF LADING		

GROSS WEIGHT 74,020 NET TONS 16.27  
TARE WEIGHT 41,480 NET WEIGHT 32,540 INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	TRACKING QTY				
16.27	TN	SW-CONT SOIL-ALT DAILY COVE DUBLIN				

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RS-F042UPR (07/12)

SIGNATURE \_\_\_\_\_

NET AMOUNT
TENDERED
CHANGE
CHECK#



## NON-HAZARDOUS SPECIAL WASTE &amp; ASBESTOS MANIFEST

1319882

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

Bin  
PT 2777  
840A

## I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number N/A		b. Manifest Document Number		c. Page 1 of 1		
d. Generator's Name and Location: Ready Family Partnership, LP 7102 & 7104 Dublin Rd Dublin, CA 94568 415-388-4460			e. Generator's Mailing Address: Ready Family Partnership, LP 655 Redwood Hwy, Suite 177 Mill Valley, CA 94941 415-388-4460			
f. Phone: 415-388-4460			g. Phone: 415-388-4460			
If owner of the generating facility differs from the generator, provide:						
h. Owner's Name:			i. Owner's Phone No.:			
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description		m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
38501317457	4/30/2014	Soil		001 CM	12	Y Tons
B.						
C.						
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.						
p. Generator Authorized Agent Name (Print) KIM GANTHIER		q. Signature K. Ganthier		r. Date 11-1-13		

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: INTRINSIC TRANSPORTATION INC 3250 DUTTON AVE SANTA ROSA, CA		
b. Phone: 707-578-0960		
c. Driver Name (Print) Brad D. Miller	d. Signature B. D. Miller	e. Date 11-1-13

## III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Vasco Rd. Landfill 4001 N. Vasco Rd. Livermore, CA 94551 925-447-0491		c. US EPA Number M. Pedron	d. Discrepancy Indication Space: Chapedroga
b. I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) KIM GANTHIER	f. Signature Kim Ganthier	g. Date 11-01-13	

## IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		i. Date	
h. Signature			
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.			

<b>SITE</b> Vasco Road Landfill 4001 N Vasco Road Livermore, CA 925-447-0491		<b>TICKET #</b> 01-932373	<b>CELL</b> 
<b>CUSTOMER</b> 021591 INNOVATIVE CONSTRUCTION SOLUTIONS 4011 W CHANDLER AVE SANTA ANA, CA 92704 38501317457		<b>WEIGHMASTER</b> 01-932373	
		<b>DATE/TIME IN</b> 01-2013 9:12 am	<b>DATE/TIME OUT</b> 01-2013 9:40 am
		<b>VEHICLE</b> 01-2013 9:12 am	
		<b>CONTAINER</b> 01-2013 9:40 am	
		<b>REFERENCE</b> 	
		<b>BILL OF LADING</b>	
		<b>INVOICE</b>	

		GROSS WEIGHT	75,940	NET TONS	17.12		
		TARE WEIGHT	41,700	NET WEIGHT	34,240	INBOUND	
QTY.	UNIT	DESCRIPTION			RATE	EXTENSION	TAX
0.00	YD	TRACKING QTY					
17.12	TN	SW-CONT SOIL-ALT DAILY COVE DUBLIN					

WEIGHMASTER CERTIFICATE - This is to certify that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food & Agriculture.

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RS-F042UPR (07/12)

2/21

SIGNATURE \_\_\_\_\_

<b>NET AMOUNT</b>
TENDERED
CHANGE
CHECK#



## NON-HAZARDOUS SPECIAL WASTE &amp; ASBESTOS MANIFEST

1319879

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

72-  
T/b 4P45994  
PT 3439

## I. GENERATOR (Generator completes la-r)

a. Generator's US EPA ID Number N/A		b. Manifest Document Number		c. Page 1 of	
d. Generator's Name and Location: Ready Family Partnership, LP 7102 & 7104 Dublin Rd Dublin, CA 94568 415-388-4460		e. Generator's Mailing Address: Ready Family Partnership, LP 655 Redwood Hwy, Suite 177 Mill Valley, CA 94941 415-388-4460			
f. Phone:		g. Phone:			
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:		i. Owner's Phone No.:			
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
38501317457	4/30/2014	Soil	001 CM	11	Y tons
B.					
C.					
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
p. Generator Authorized Agent Name (Print) KIM GONTHIER		q. Signature K Gonthier		r. Date 10-25-13	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Intrinsic Trans Inc Santa Rosa CA 3250 Dr. Hwy Ave		
b. Phone: 707 578 0960		
c. Driver Name (Print) Brad DeWane	d. Signature B DeWane	e. Date 10 25 13

## III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Vasco Rd. Landfill 4001 N. Vasco Rd. Livermore, CA 94551 925-447-0481		c. US EPA Number	d. Discrepancy Indication Space:
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) KIM GONTHIER		f. Signature K Gonthier	g. Date 10-25-13

## IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			

SITE

Vasco Road Landfill  
4001 N Vasco Road  
Livermore, CA 925-447-0491

CUSTOMER

021591  
INNOVATIVE CONSTRUCTION SOLUTIONS  
4011 W CHANDLER AVE  
SANTA ANA, CA 92704  
38501317457

SITE	TICKET #	CELL
01	931217	
WEIGHMASTER		
C. MORA		
DATE/TIME IN		DATE/TIME OUT
10-25-2013 12:41 pm		10-25-2013 1:06 pm
VEHICLE		CONTAINER
INT725		
REFERENCE		
BILL OF LADING		INVOICE

GROSS WEIGHT

76,900

NET TONS

17.54

TARE WEIGHT

41,820

NET WEIGHT

35,080

INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	TRACKING QTY				
17.54	TN	SW-CONT SOIL-ALT DAILY COVE DUBLIN				

WEIGHMASTER CERTIFICATE - This is to certify that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food & Agriculture.

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

S-F042UPR (07/12)

SIGNATURE \_\_\_\_\_

NET AMOUNT
TENDERED
CHANGE
CHECK#



# NON-HAZARDOUS SPECIAL WASTE & ASBESTOS MANIFEST

Trk # 725  
11/15/947

1319878

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

Bin 3126

## I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number N/A		b. Manifest Document Number		c. Page 1 of	
d. Generator's Name and Location: Ready Family Partnership, LP 7102 & 7104 Dublin Rd Dublin, CA 94568 415-388-4460		e. Generator's Mailing Address: Ready Family Partnership, LP 655 Redwood Hwy, Suite 177 Mill Valley, CA 94941 415-388-4460			
f. Phone:		g. Phone:			
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:		i. Owner's Phone No.:			
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description	m. Containers No.	n. Total Quantity	o. Unit Wt/Vol
38501317457	4/30/2014	Soil	001 CM	11	4 Tons
B.					
C.					
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
p. Generator Authorized Agent Name (Print) KIM GONTHIER		q. Signature K Gonthier		r. Date 10-25-13	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Intrinsic Trans Inc 3250 Dutton Ave Santa Rosa CA 707 578 0960		b. Phone:	
c. Driver Name (Print) Brad DeMarco	d. Signature B DeMarco	e. Date 10-25-13	

## III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Vasco Rd Landfill 4001 N. Vasco Rd. Livermore, CA 94551		c. US EPA Number	d. Discrepancy Indication Space:
b. Carlos Morn 925-447-0491			
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) KIM GONTHIER		f. Signature K Gonthier	g. Date 10-25-13

## IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		i. Date	
h. Signature			
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both			

Vasco Road Landfill  
4001 N Vasco Road  
Livermore, CA 925-447-0491

CUSTOMER

021591  
INNOVATIVE CONSTRUCTION SOLUTIONS  
4011 W CHANDLER AVE  
SANTA ANA, CA 92704  
38501317457

SITE 01	TICKET # 931182	CELL
WEIGHMASTER		
IN - C. MORA		OUT - M. Pedroza
DATE/TIME IN 10-25-2013 11:11 am		DATE/TIME OUT 10-25-2013 11:37 am
VEHICLE INT725		CONTAINER
REFERENCE		
BILL OF LADING		INVOICE

GROSS WEIGHT 78,620  
TARE WEIGHT 41,740

NET TONS 18.44  
NET WEIGHT 36,880

INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	TRACKING QTY				
18.44	TN	SW-CONT SOIL-ALT DAILY COVE DUBLIN				

WEIGHMASTER CERTIFICATE - This is to certify that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food & Agriculture.

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

RS-F042UPR (07/12)

SIGNATURE \_\_\_\_\_

NET AMOUNT
TENDERED
CHANGE
CHECK#





## NON-HAZARDOUS SPECIAL WASTE &amp; ASBESTOS MANIFEST

1319880

If waste is asbestos waste, complete Sections I, II, III and IV  
If waste is **NOT** asbestos waste, complete Sections I, II and III

BIN 202

## I. GENERATOR (Generator completes Ia-r)

a. Generator's US EPA ID Number N/A		b. Manifest Document Number		c. Page 1 of	
d. Generator's Name and Location: Ready Family Partnership, LP 7102 & 7104 Dublin Rd Dublin, CA 94568 415-388-4480			e. Generator's Mailing Address: Ready Family Partnership, LP 655 Redwood Hwy, Suite 177 Mill Valley, CA 94941 415-388-4480		
f. Phone: 415-388-4480					
g. Phone: 415-388-4480					
If owner of the generating facility differs from the generator, provide:					
h. Owner's Name:					
i. Owner's Phone No.:					
j. Waste Profile #	k. Exp. Date	l. Waste Shipping Name and Description		m. Containers No. Type	n. Total Quantity
38501317457	4/30/2014	Soil		001 CM	11
B					4 Tons
C					
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if this waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions. I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR 268 and is no longer a hazardous waste as defined by 40 CFR 261.					
p. Generator Authorized Agent Name (Print) KIM GONTHIER		q. Signature K. Gonther		r. Date 10-25-13	

## II. TRANSPORTER (Generator completes IIa-b and Transporter completes IIc-e)

a. Transporter's Name and Address: Intrinsic Trans Inc 3250 Dutton Ave Santa Rosa CA (INT725)		
b. Phone: 707 578 0960		
c. Driver Name (Print) Brad DeMarco	d. Signature B. DeMarco	e. Date 10 25 13

## III. DESTINATION (Generator complete IIIa-c and Destination Site completes IIId-g)

a. Disposal Facility and Site Address: Vasco Rd. Landfill 4001 N. Vasco Rd. Livermore, CA 94551 M. Petrova 925-447-0491		c. US EPA Number	d. Discrepancy Indication Space: 10-25-13
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.			
e. Name of Authorized Agent (Print) KIM GONTHIER	f. Signature Kim Gonther	g. Date	

## IV. ASBESTOS (Generator completes IVa-f and Operator complete IVg-i)

a. Operator's Name and Address:		c. Responsible Agency Name and Address:	
b. Phone:		d. Phone:	
e. Special Handling Instructions and Additional Information:			
f. <input type="checkbox"/> Friable <input type="checkbox"/> Non-Friable <input type="checkbox"/> Both % Friable % Non-Friable			
OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.			
g. Operator's Name and Title (Print)		i. Date	
*Operator refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.			

Vasco Road Landfill  
 4001 N Vasco Road  
 Livermore, CA 925-447-0491

CUSTOMER  
 021591  
 INNOVATIVE CONSTRUCTION SOLUTIONS  
 4011 W CHANDLER AVE  
 SANTA ANA, CA 92704  
 38501317457

01 931253	
WEIGHMASTER	
IN - M. Pedroza	OUT - C. MORA
DATE/TIME IN	DATE/TIME OUT
10-25-2013 2:36 pm	10-25-2013 3:07 pm
VEHICLE	CONTAINER
INT725	
REFERENCE	
BILL OF LADING	INVOICE

GROSS WEIGHT 76,880 NET TONS 18.23  
 TARE WEIGHT 40,420 NET WEIGHT 36,460 INBOUND

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
0.00	YD	TRACKING QTY				
18.23	TN	SW-CONT SOIL-ALT DAILY COVE DUBLIN				

WEIGHMASTER CERTIFICATE - This is to certify that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food & Agriculture.

The undersigned individual signing this document on behalf of Customer acknowledges that he or she has read and understands the terms and conditions on the reverse side and that he or she has the authority to sign this document on behalf of the customer.

NET AMOUNT
TENDERED
CHANGE
CHECK#

RS-F042UPR (07/12) SIGNATURE \_\_\_\_\_

**Appendix D**  
**Soil Gas Sampling Field Forms**

### Purge Volume Calculation

Boring diameter	2.25 in	Diameter of flared end of outer rod
Sandpack depth	18 in	Includes sandpack and half of dry bentonite pack
Sandpack total volume	72 in <sup>3</sup>	$V_{\text{total}} = L \times \pi/4 \times D^2$
Sandpack total volume	1173 cm <sup>3</sup>	Units conversion
Sandpack porosity	0.3 cm <sup>3</sup> /cm <sup>3</sup>	Engineering judgment
Sandpack pore volume	352 cm <sup>3</sup>	$V_{\text{pore}} = V_{\text{total}} \times n$
Tubing ID	0.125 in	Thick walled tubing
Tubing length	96 in	Assume 8 feet of sampling/purge line
Tubing volume	1.18 in <sup>3</sup>	$V = L \times \pi/4 \times D^2$
Tubing volume	19 cm <sup>3</sup>	Units conversion
ONE VOLUME	371 cm <sup>3</sup>	Sum of sand pack and tubing
	371 ml	
THREE VOLUMES	1113 ml	Purged amount at each location
	19 pulls	Number of pulls at 60 ml/pull

# SOIL GAS SAMPLING LOG

## IRIS ENVIRONMENTAL

### COMPLETE ONE LOG PER SAMPLING LOCATION

1 in<sup>3</sup>=16.387 ml, 1 gallon=2785.412 ml

Project: <u>13-945C</u>	Contract #: <u>Project Park Ave Building Cleaners</u>	Boring #: <u>SS-05</u>
Date: <u>10/8/2013</u>	Weather: <u>Sunny</u>	Sampler: <u>TK</u>
# of purge volumes: <u>~3 (1 pulls of 60ml)</u>	Leak check compound: <u>Helium</u>	Sample flow rate: <u>100-200 ml/min</u>

#### Helium Shroud

% Helium in shroud prior to sampling: <u>24.4</u>	% Helium in shroud post sampling: <u>~0.04 20.0</u> <sup>Purge</sup>
% Helium in sample line prior to sampling: <u>-0.04</u>	% Helium in sample line post sampling: <u>-0.04</u> <sup>Purge</sup>

#### Sample 1

Depth: <u>9"</u>	Time installed: <u>NA</u>	Calculated purge volume ( $R_{tube}^2 * 3.14 * L_{tube} + R_{borehole}^2 * 3.14 * H_{sandpack} * 0.3$ ): <u>see calc</u>
Sample start time: <u>0941</u>	Sample finish time: <u>0952</u>	Sample volume: <u>1 L</u>
Initial Summa vacuum: <u>-30</u>	Final Summa vacuum: <u>-4</u>	
Samples taken (circle): <u>Summa (TO15)</u>		
Notes: <u># 00164 all good</u>		

#### Sample Dup

Depth:	Time installed:	Calculated purge volume ( $R_{tube}^2 * 3.14 * L_{tube} + R_{borehole}^2 * 3.14 * H_{sandpack} * 0.3$ ):
Sample start time:	Sample finish time:	Sample volume:
Initial Summa vacuum:	Final Summa vacuum:	
Samples taken (circle): <u>Summa (TO15)</u>		
Notes:		

# SOIL GAS SAMPLING LOG

## IRIS ENVIRONMENTAL

### COMPLETE ONE LOG PER SAMPLING LOCATION

1 in<sup>3</sup>=16.387 ml, 1 gallon=2785.412 ml

Project: <u>Park Ave Cleaners Interim Action</u>	Contract #: <u>13-945 C</u>	Boring #: <u>SS-04</u>
Date: <u>10/8/13</u>	Weather: <u>Sunny</u>	Sampler: <u>C.P.</u>
# of purge volumes: <u>4 pulls of 60 ml</u> <u>~ 3 (2 pulls of 60 ml)</u> <span style="float: right;">BC 10/8/13</span>	Leak check compound: <u>Helium</u>	Sample flow rate: <u>100-200 mL/min</u>

#### Helium Shroud

% Helium in shroud prior to sampling: <u>20.6</u>	% Helium in shroud post sampling: <u>20.0</u>
% Helium in sample line prior to sampling: <u>-0.02</u>	% Helium in sample line post sampling: <u>-0.02</u>

*Purging OK - BC 10/8/13*  
*Purging*

#### Sample 1

Depth: <u>9"</u>	Time installed: <u>N/A</u>	Calculated purge volume ( $R_{tube}^2 * 3.14 * L_{tube} + R_{borehole}^2 * 3.14 * H_{sandpack} * 0.3$ ): <u>See calc</u>
Sample start time: <u>0826</u>	Sample finish time: <u>0847</u>	Sample volume: <u>1 L</u>
Initial Summa vacuum: <u>-30</u>	Final Summa vacuum: <u>-0</u>	
Samples taken (circle): <u>Summa (TO15)</u>		
Notes: <u>Can # 00114</u> <span style="float: right;"><u>all good</u></span>		

#### Sample Dup

Depth: <u>9"</u>	Time installed: <u>N/A</u>	Calculated purge volume ( $R_{tube}^2 * 3.14 * L_{tube} + R_{borehole}^2 * 3.14 * H_{sandpack} * 0.3$ ): <u>See calc</u>
Sample start time: <u>0826</u>	Sample finish time: <u>0847</u>	Sample volume: <u>1 L</u>
Initial Summa vacuum: <u>-30</u>	Final Summa vacuum: <u>-5</u>	
Samples taken (circle): <u>Summa (TO15)</u>		
Notes: <u>can # 00146</u> <span style="float: right;"><u>X-DUP</u> <u>all good</u></span>		

## CANISTER SAMPLING LOG

PROJECT NAME:

Park Avenue Cleaners

DATE:

10/8/2013

PROJECT NUMBER:

13-945 C

PAGE:

1 OF 1

FIELD STAFF:

B.C. &amp; T.K.

FIELD SAMPLE ID	LOCATION	CANISTER SERIAL NO.	FLOW CONTROLLER SERIAL NO.	VACUUM		TIME	
				START (in Hg)	END (in Hg)	START (hh:mm)	END (hh:mm)
SS-04	SS-04	00114	NA	-30	-4	0826	0847
X-DUP	SS-04	00146	NA	-30	-5	0826	0847
SS-05	SS-05	00164	NA	-30	-11	0941	0952

NOTES:

all good

SIGNATURE



DATE

10/8/13

IRIS ENVIRONMENTAL



# SOIL GAS SAMPLING LOG

## IRIS ENVIRONMENTAL

### COMPLETE ONE LOG PER SAMPLING LOCATION

1 in<sup>3</sup>=16.387 ml, 1 gallon=2785.412 ml

<b>Project:</b> Park Avenue Cleaners	<b>Contract #:</b> 13-945C	<b>Boring #:</b>
<b>Date:</b> 10/21/13	<b>Weather:</b> ~65°F sunny	<b>Sampler:</b> TK
<b># of purge volumes:</b> 3	<b>Leak check compound:</b> Helium	<b>Sample flow rate:</b>

### Helium Shroud

<b>% Helium in shroud prior to sampling:</b> 29.8	<b>% Helium in shroud post sampling:</b> 06.1
<b>% Helium in sample line prior to sampling:</b> 00.4	<b>% Helium in sample line post sampling:</b> 00.3

### Sample 1 SS-05 - 102113

<b>Depth:</b> —	<b>Time installed:</b> —	<b>Calculated purge volume</b> ( $R_{tube}^2 * 3.14 * L_{tube} + R_{borehole}^2 * 3.14 * H_{sandpack} * 0.3$ ):
<b>Sample start time:</b> 0952	<b>Sample finish time:</b> 1002	<b>Sample volume:</b> 1L
<b>Initial Summa vacuum:</b> -30	<b>Final Summa vacuum:</b> -5	
<b>Samples taken (circle):</b> Summa (TO15)		
<b>Notes:</b> Canister # 87		

### Sample Dup

<b>Depth:</b>	<b>Time installed:</b>	<b>Calculated purge volume</b> ( $R_{tube}^2 * 3.14 * L_{tube} + R_{borehole}^2 * 3.14 * H_{sandpack} * 0.3$ ):
<b>Sample start time:</b>	<b>Sample finish time:</b>	<b>Sample volume:</b>
<b>Initial Summa vacuum:</b>	<b>Final Summa vacuum:</b>	
<b>Samples taken (circle):</b> Summa (TO15)		
<b>Notes:</b>		

# SOIL GAS SAMPLING LOG

## IRIS ENVIRONMENTAL

### COMPLETE ONE LOG PER SAMPLING LOCATION

1 in<sup>3</sup>=16.387 ml, 1 gallon=2785.412 ml

Project: Park Avenue Cleaners	Contract #: 13-945C	Boring #:
Date: 10/21/13	Weather: -65°F Sunny	Sampler: TK
# of purge volumes: 3	Leak check compound: Helium	Sample flow rate:

#### Helium Shroud

% Helium in shroud prior to sampling: 30.9	% Helium in shroud post sampling: 13.8
% Helium in sample line prior to sampling: 00.2	% Helium in sample line post sampling: 00.1

#### Sample 1 SS - 04 - 102113

Depth: —	Time installed: —	Calculated purge volume ( $R_{tube}^2 * 3.14 * L_{tube} + R_{borehole}^2 * 3.14 * H_{sandpack} * 0.3$ ):
Sample start time: 1043	Sample finish time: 1054	Sample volume: 1L
Initial Summa vacuum: -30	Final Summa vacuum: -5	
Samples taken (circle): Summa (TO15)		
Notes:		

#### Sample Dup

Depth:	Time installed:	Calculated purge volume ( $R_{tube}^2 * 3.14 * L_{tube} + R_{borehole}^2 * 3.14 * H_{sandpack} * 0.3$ ):
Sample start time:	Sample finish time:	Sample volume:
Initial Summa vacuum:	Final Summa vacuum:	
Samples taken (circle): Summa (TO15)		
Notes:		

# SOIL GAS SAMPLING LOG

## IRIS ENVIRONMENTAL

### COMPLETE ONE LOG PER SAMPLING LOCATION

1 in<sup>3</sup>=16.387 ml, 1 gallon=2785.412 ml

<b>Project:</b> Park Avenue Cleaners	<b>Contract #:</b> 13-945C	<b>Boring #:</b> SV-01
<b>Date:</b> 11/18/13	<b>Weather:</b> overcast ~60°F	<b>Sampler:</b> TK1BC
<b># of purge volumes:</b> 3	<b>Leak check compound:</b> Helium	<b>Sample flow rate:</b>

### Helium Shroud

<b>% Helium in shroud prior to sampling:</b> 13.5	<b>% Helium in shroud post sampling:</b> 7.2
<b>% Helium in sample line prior to sampling:</b> 7	<b>% Helium in sample line post sampling:</b> -0.1

### Sample 1

<b>Depth:</b> 6.0	<b>Time installed:</b> NA	<b>Calculated purge volume</b> ( $R_{tube}^2 * 3.14 * L_{tube} + R_{borehole}^2 * 3.14 * H_{sandpack} * 0.3$ ):
<b>Sample start time:</b> 1155	<b>Sample finish time:</b> 1225	<b>Sample volume:</b> 1L
<b>Initial Summa vacuum:</b> -30	<b>Final Summa vacuum:</b> -5	
<b>Samples taken (circle):</b> Summa (TO15)		
<b>Notes:</b> Canister # 80 Shroud # 12		

### Sample Dup

<b>Depth:</b> 6.0	<b>Time installed:</b> NA	<b>Calculated purge volume</b> ( $R_{tube}^2 * 3.14 * L_{tube} + R_{borehole}^2 * 3.14 * H_{sandpack} * 0.3$ ):
<b>Sample start time:</b> 1155	<b>Sample finish time:</b> 1225	<b>Sample volume:</b> 1L
<b>Initial Summa vacuum:</b> -30	<b>Final Summa vacuum:</b> -5	
<b>Samples taken (circle):</b> Summa (TO15)		
<b>Notes:</b> Canister 422 Shroud # 12 Duplicate named SV-01-DUP w/fake time of 1235		

# SOIL GAS SAMPLING LOG

## IRIS ENVIRONMENTAL

### COMPLETE ONE LOG PER SAMPLING LOCATION

1 in<sup>3</sup>=16.387 ml, 1 gallon=2785.412 ml

<b>Project:</b> Park Avenue Cleaners	<b>Contract #:</b> 13-945C	<b>Boring #:</b> SV-03
<b>Date:</b> 11/18/13	<b>Weather:</b> overcast ~60 °F	<b>Sampler:</b> TL IBC
<b># of purge volumes:</b> 3	<b>Leak check compound:</b> Helium	<b>Sample flow rate:</b>

### Helium Shroud

<b>% Helium in shroud prior to sampling:</b> 17	<b>% Helium in shroud post sampling:</b> 8
<b>% Helium in sample line prior to sampling:</b> -0.1	<b>% Helium in sample line post sampling:</b> -1

### Sample 1

<b>Depth:</b> 5.5'	<b>Time installed:</b> NA	<b>Calculated purge volume</b> ( $R_{tube}^2 * 3.14 * L_{tube} + R_{borehole}^2 * 3.14 * H_{sandpack} * 0.3$ ):
<b>Sample start time:</b> 0945	<b>Sample finish time:</b> 0957	<b>Sample volume:</b> 1L
<b>Initial Summa vacuum:</b> -30	<b>Final Summa vacuum:</b> -5	
<b>Samples taken (circle):</b> Summa (TO15)		
<b>Notes:</b> canister # 107, shroud # 3		

### Sample Dup

<b>Depth:</b>	<b>Time installed:</b>	<b>Calculated purge volume</b> ( $R_{tube}^2 * 3.14 * L_{tube} + R_{borehole}^2 * 3.14 * H_{sandpack} * 0.3$ ):
<b>Sample start time:</b>	<b>Sample finish time:</b>	<b>Sample volume:</b>
<b>Initial Summa vacuum:</b>	<b>Final Summa vacuum:</b>	
<b>Samples taken (circle):</b> Summa (TO15)		
<b>Notes:</b>		

# SOIL GAS SAMPLING LOG

## IRIS ENVIRONMENTAL

### COMPLETE ONE LOG PER SAMPLING LOCATION

1 in<sup>3</sup>=16.387 ml, 1 gallon=2785.412 ml

<b>Project:</b> Park Avenue Cleaners	<b>Contract #:</b> 13-945C	<b>Boring #:</b> SV-04
<b>Date:</b> 11/18/13	<b>Weather:</b> overcast ~ 60°F	<b>Sampler:</b> TK/BC
<b># of purge volumes:</b> 3	<b>Leak check compound:</b> Helium	<b>Sample flow rate:</b>

### Helium Shroud

<b>% Helium in shroud prior to sampling:</b> 25	<b>% Helium in shroud post sampling:</b> 18
<b>% Helium in sample line prior to sampling:</b> -0.1	<b>% Helium in sample line post sampling:</b> -0.9

### Sample 1

<b>Depth:</b> 5.5	<b>Time installed:</b> NA	<b>Calculated purge volume</b> ( $R_{tube}^2 * 3.14 * L_{tube} + R_{borehole}^2 * 3.14 * H_{sandpack} * 0.3$ ):
<b>Sample start time:</b> 1255	<b>Sample finish time:</b> 1304	<b>Sample volume:</b> 1L
<b>Initial Summa vacuum:</b> -28	<b>Final Summa vacuum:</b> -4	

**Samples taken (circle):** Summa (TO15)

**Notes:** canister # 89 Shroud # 9  
\* Note canister 112 leaked (sampling manifold in a funky spot inside shroud - bad fit between canister + manifold)

### Sample Dup

<b>Depth:</b>	<b>Time installed:</b>	<b>Calculated purge volume</b> ( $R_{tube}^2 * 3.14 * L_{tube} + R_{borehole}^2 * 3.14 * H_{sandpack} * 0.3$ ):
<b>Sample start time:</b>	<b>Sample finish time:</b>	<b>Sample volume:</b>
<b>Initial Summa vacuum:</b>	<b>Final Summa vacuum:</b>	

**Samples taken (circle):** Summa (TO15)

**Notes:**

# SOIL GAS SAMPLING LOG

## IRIS ENVIRONMENTAL

### COMPLETE ONE LOG PER SAMPLING LOCATION

1 in<sup>3</sup>=16.387 ml, 1 gallon=2785.412 ml

<b>Project:</b> Park Avenue Cleaners	<b>Contract #:</b> 13-945C	<b>Boring #:</b> SV-06
<b>Date:</b> 11/18/13	<b>Weather:</b> overcast ~60°F	<b>Sampler:</b> TK/BC
<b># of purge volumes:</b> 3	<b>Leak check compound:</b> Helium	<b>Sample flow rate:</b>

### Helium Shroud

<b>% Helium in shroud prior to sampling:</b> 26.5	<b>% Helium in shroud post sampling:</b> 11
<b>% Helium in sample line prior to sampling:</b> 0	<b>% Helium in sample line post sampling:</b> -1

### Sample 1

<b>Depth:</b> 5.5	<b>Time installed:</b> NA	<b>Calculated purge volume</b> ( $R_{tube}^2 * 3.14 * L_{tube} + R_{borehole}^2 * 3.14 * H_{sandpack} * 0.3$ ):
<b>Sample start time:</b> 1352	<b>Sample finish time:</b> 1402	<b>Sample volume:</b> 1L
<b>Initial Summa vacuum:</b> -30	<b>Final Summa vacuum:</b> -5	
<b>Samples taken (circle):</b> Summa (TO15)		
<b>Notes:</b> Canister #137 Shroud #19		

### Sample Dup

<b>Depth:</b>	<b>Time installed:</b>	<b>Calculated purge volume</b> ( $R_{tube}^2 * 3.14 * L_{tube} + R_{borehole}^2 * 3.14 * H_{sandpack} * 0.3$ ):
<b>Sample start time:</b>	<b>Sample finish time:</b>	<b>Sample volume:</b>
<b>Initial Summa vacuum:</b>	<b>Final Summa vacuum:</b>	
<b>Samples taken (circle):</b> Summa (TO15)		
<b>Notes:</b>		

# SOIL GAS SAMPLING LOG

## IRIS ENVIRONMENTAL

### COMPLETE ONE LOG PER SAMPLING LOCATION

1 in<sup>3</sup>=16.387 ml, 1 gallon=2785.412 ml

<b>Project:</b> Park Avenue Cleaners	<b>Contract #:</b> 13-945C	<b>Boring #:</b> SV-07
<b>Date:</b> 11/18/13	<b>Weather:</b> overcast ~60°F	<b>Sampler:</b> TK1BC
<b># of purge volumes:</b> 3	<b>Leak check compound:</b> Helium	<b>Sample flow rate:</b>

### Helium Shroud

<b>% Helium in shroud prior to sampling:</b> 18.5	<b>% Helium in shroud post sampling:</b> 10.9
<b>% Helium in sample line prior to sampling:</b> 0	<b>% Helium in sample line post sampling:</b> -0.3

### Sample 1

<b>Depth:</b> 5.5	<b>Time installed:</b> NA	<b>Calculated purge volume</b> ( $R_{tube}^2 * 3.14 * L_{tube} + R_{borehole}^2 * 3.14 * H_{sandpack} * 0.3$ ):
<b>Sample start time:</b> 1038	<b>Sample finish time:</b> 1048	<b>Sample volume:</b> 1L
<b>Initial Summa vacuum:</b> -30	<b>Final Summa vacuum:</b> -3	
<b>Samples taken (circle):</b> Summa (TO15)		
<b>Notes:</b> canister # 270, shroud # V		

### Sample Dup

<b>Depth:</b>	<b>Time installed:</b>	<b>Calculated purge volume</b> ( $R_{tube}^2 * 3.14 * L_{tube} + R_{borehole}^2 * 3.14 * H_{sandpack} * 0.3$ ):
<b>Sample start time:</b>	<b>Sample finish time:</b>	<b>Sample volume:</b>
<b>Initial Summa vacuum:</b>	<b>Final Summa vacuum:</b>	
<b>Samples taken (circle):</b> Summa (TO15)		
<b>Notes:</b>		



# SOIL GAS SAMPLING LOG

## IRIS ENVIRONMENTAL

### COMPLETE ONE LOG PER SAMPLING LOCATION

1 in<sup>3</sup>=16.387 ml, 1 gallon=2785.412 ml

<b>Project:</b> Park Avenue Cleaners	<b>Contract #:</b> 13-945C	<b>Boring #:</b> SV-08
<b>Date:</b> 11/18/13	<b>Weather:</b> overcast ~60°F	<b>Sampler:</b> TK1BC
<b># of purge volumes:</b> 3	<b>Leak check compound:</b> Helium	<b>Sample flow rate:</b>

### Helium Shroud

<b>% Helium in shroud prior to sampling:</b> 17.1	<b>% Helium in shroud post sampling:</b> 9.8
<b>% Helium in sample line prior to sampling:</b> 0	<b>% Helium in sample line post sampling:</b> ~0.2

### Sample 1

<b>Depth:</b> 6.0	<b>Time installed:</b> NA	<b>Calculated purge volume</b> ( $R_{tube}^2 * 3.14 * L_{tube} + R_{borehole}^2 * 3.14 * H_{sandpack} * 0.3$ ):
<b>Sample start time:</b> 1101	<b>Sample finish time:</b> 1110	<b>Sample volume:</b> 1L
<b>Initial Summa vacuum:</b> -30	<b>Final Summa vacuum:</b> -3	
<b>Samples taken (circle):</b> Summa (TO15)		
<b>Notes:</b> canister # 51 Shroud # I		

### Sample Dup

<b>Depth:</b>	<b>Time installed:</b>	<b>Calculated purge volume</b> ( $R_{tube}^2 * 3.14 * L_{tube} + R_{borehole}^2 * 3.14 * H_{sandpack} * 0.3$ ):
<b>Sample start time:</b>	<b>Sample finish time:</b>	<b>Sample volume:</b>
<b>Initial Summa vacuum:</b>	<b>Final Summa vacuum:</b>	
<b>Samples taken (circle):</b> Summa (TO15)		
<b>Notes:</b>		

# SOIL GAS SAMPLING LOG

## IRIS ENVIRONMENTAL

### COMPLETE ONE LOG PER SAMPLING LOCATION

1 in<sup>3</sup>=16.387 ml, 1 gallon=2785.412 ml

<b>Project:</b> Park Avenue Cleaners	<b>Contract #:</b> 13-945C	<b>Boring #:</b> 85-01
<b>Date:</b> 11/18/13	<b>Weather:</b> overcast ~ 60°F	<b>Sampler:</b> TK-1BC
<b># of purge volumes:</b> 3	<b>Leak check compound:</b> Helium	<b>Sample flow rate:</b>

### Helium Shroud

<b>% Helium in shroud prior to sampling:</b> 36.1	<b>% Helium in shroud post sampling:</b> 17
<b>% Helium in sample line prior to sampling:</b> 0	<b>% Helium in sample line post sampling:</b> - 0.01

### Sample 1

<b>Depth:</b>	<b>Time installed:</b> NA	<b>Calculated purge volume</b> ( $R_{tube}^2 * 3.14 * L_{tube} + R_{borehole}^2 * 3.14 * H_{sandpack} * 0.3$ ):
<b>Sample start time:</b> 1450	<b>Sample finish time:</b> 1457	<b>Sample volume:</b> 1L
<b>Initial Summa vacuum:</b> -30	<b>Final Summa vacuum:</b> -4	
<b>Samples taken (circle):</b> Summa (TO15)		
<b>Notes:</b> canister # 135, shroud # 14		

### Sample Dup

<b>Depth:</b>	<b>Time installed:</b>	<b>Calculated purge volume</b> ( $R_{tube}^2 * 3.14 * L_{tube} + R_{borehole}^2 * 3.14 * H_{sandpack} * 0.3$ ):
<b>Sample start time:</b>	<b>Sample finish time:</b>	<b>Sample volume:</b>
<b>Initial Summa vacuum:</b>	<b>Final Summa vacuum:</b>	
<b>Samples taken (circle):</b> Summa (TO15)		
<b>Notes:</b>		

# SOIL GAS SAMPLING LOG

## IRIS ENVIRONMENTAL

### COMPLETE ONE LOG PER SAMPLING LOCATION

1 in<sup>3</sup>=16.387 ml, 1 gallon=2785.412 ml

<b>Project:</b> Park Avenue Cleaners	<b>Contract #:</b> 13-945C	<b>Boring #:</b> SS-03
<b>Date:</b> 11/18/13	<b>Weather:</b> overcast ~ 60°F	<b>Sampler:</b> TL/BC
<b># of purge volumes:</b> 3	<b>Leak check compound:</b> Helium	<b>Sample flow rate:</b>

### Helium Shroud

<b>% Helium in shroud prior to sampling:</b> 29	<b>% Helium in shroud post sampling:</b> 20
<b>% Helium in sample line prior to sampling:</b> 0	<b>% Helium in sample line post sampling:</b> - 0.02

### Sample 1

<b>Depth:</b> Sub-slab	<b>Time installed:</b> NA	<b>Calculated purge volume</b> ( $R_{tube}^2 * 3.14 * L_{tube} + R_{borehole}^2 * 3.14 * H_{sandpack} * 0.3$ ):
<b>Sample start time:</b> 1511	<b>Sample finish time:</b> 1520	<b>Sample volume:</b> 1L
<b>Initial Summa vacuum:</b> -30	<b>Final Summa vacuum:</b> -5	
<b>Samples taken (circle):</b> Summa (TO15)		
<b>Notes:</b> Shroud #4		

### Sample Dup

<b>Depth:</b>	<b>Time installed:</b>	<b>Calculated purge volume</b> ( $R_{tube}^2 * 3.14 * L_{tube} + R_{borehole}^2 * 3.14 * H_{sandpack} * 0.3$ ):
<b>Sample start time:</b>	<b>Sample finish time:</b>	<b>Sample volume:</b>
<b>Initial Summa vacuum:</b>	<b>Final Summa vacuum:</b>	
<b>Samples taken (circle):</b> Summa (TO15)		
<b>Notes:</b>		

# SOIL GAS SAMPLING LOG

## IRIS ENVIRONMENTAL

### COMPLETE ONE LOG PER SAMPLING LOCATION

1 in<sup>3</sup>=16.387 ml, 1 gallon=2785.412 ml

<b>Project:</b> Park Avenue Cleaners	<b>Contract #:</b> 13-945C	<b>Boring #:</b> SS-04
<b>Date:</b> 11/18/13	<b>Weather:</b> overcast ~40°F	<b>Sampler:</b> TE/BC
<b># of purge volumes:</b> 3	<b>Leak check compound:</b> Helium	<b>Sample flow rate:</b>

### Helium Shroud

<b>% Helium in shroud prior to sampling:</b> 28.3	<b>% Helium in shroud post sampling:</b> 16.6
<b>% Helium in sample line prior to sampling:</b> 0	<b>% Helium in sample line post sampling:</b> -0.09

### Sample 1

<b>Depth:</b> Sub-slab	<b>Time installed:</b> NA	<b>Calculated purge volume</b> ( $R_{tube}^2 * 3.14 * L_{tube} + R_{borehole}^2 * 3.14 * H_{sandpack} * 0.3$ ):
<b>Sample start time:</b> 1540	<b>Sample finish time:</b> 1551	<b>Sample volume:</b> 1L
<b>Initial Summa vacuum:</b> -20	<b>Final Summa vacuum:</b> -5	
<b>Samples taken (circle):</b> Summa (TO15)		
<b>Notes:</b> Shroud # 17		

### Sample Dup

<b>Depth:</b>	<b>Time installed:</b>	<b>Calculated purge volume</b> ( $R_{tube}^2 * 3.14 * L_{tube} + R_{borehole}^2 * 3.14 * H_{sandpack} * 0.3$ ):
<b>Sample start time:</b>	<b>Sample finish time:</b>	<b>Sample volume:</b>
<b>Initial Summa vacuum:</b>	<b>Final Summa vacuum:</b>	
<b>Samples taken (circle):</b> Summa (TO15)		
<b>Notes:</b>		

# SOIL GAS SAMPLING LOG

## IRIS ENVIRONMENTAL

### COMPLETE ONE LOG PER SAMPLING LOCATION

1 in<sup>3</sup>=16.387 ml, 1 gallon=2785.412 ml

<b>Project:</b> Park Avenue Cleaners	<b>Contract #:</b> 13-945C	<b>Boring #:</b> SS-05
<b>Date:</b> 11/18/13	<b>Weather:</b> overcast ~ 60°F	<b>Sampler:</b> TK IBC
<b># of purge volumes:</b> 3	<b>Leak check compound:</b> Helium	<b>Sample flow rate:</b>

### Helium Shroud

<b>% Helium in shroud prior to sampling:</b> 36.1	<b>% Helium in shroud post sampling:</b> 17
<b>% Helium in sample line prior to sampling:</b> 0	<b>% Helium in sample line post sampling:</b> -0.01

### Sample 1

<b>Depth:</b>	<b>Time installed:</b> NA	<b>Calculated purge volume</b> ( $R_{tube}^2 * 3.14 * L_{tube} + R_{borehole}^2 * 3.14 * H_{sandpack} * 0.3$ ):
<b>Sample start time:</b> 1431	<b>Sample finish time:</b> 1436	<b>Sample volume:</b> 1L
<b>Initial Summa vacuum:</b> -30	<b>Final Summa vacuum:</b> -5	
<b>Samples taken (circle):</b> Summa (TO15)		
<b>Notes:</b> canister # 190, shroud # 20		

### Sample Dup

<b>Depth:</b>	<b>Time installed:</b>	<b>Calculated purge volume</b> ( $R_{tube}^2 * 3.14 * L_{tube} + R_{borehole}^2 * 3.14 * H_{sandpack} * 0.3$ ):
<b>Sample start time:</b>	<b>Sample finish time:</b>	<b>Sample volume:</b>
<b>Initial Summa vacuum:</b>	<b>Final Summa vacuum:</b>	
<b>Samples taken (circle):</b> Summa (TO15)		
<b>Notes:</b>		

**Appendix E**  
**Photo Documentation**



**Photo #1:** View of slot excavation area, concrete debris and shear wall bracing inside 7102 tenant space per IRAP.



**Photo #2:** View of three slot excavation areas in 7102 tenant space with shear wall bracing per IRAP. The other two slot excavation areas between these areas were completed when the concrete slurry fully cured.





**Photo #3:** View of a slot excavation area in the 7102 tenant space being backfilled with concrete slurry.



**Photo #4:** View of the general excavation area at 7104 tenant space prior to backfilling with concrete slurry. Excavator is located atop completed slot excavation area.



**Photo #5:** View of sub-slab depressurization system piping on top of pea gravel at 7102 tenant space. Pea gravel was then placed atop the PVC piping per IRAP.



**Photo #6:** View of sub-slab depressurization piping on top of pea gravel at 7104 tenant space. Pea gravel was then placed atop the PVC piping per IRAP.





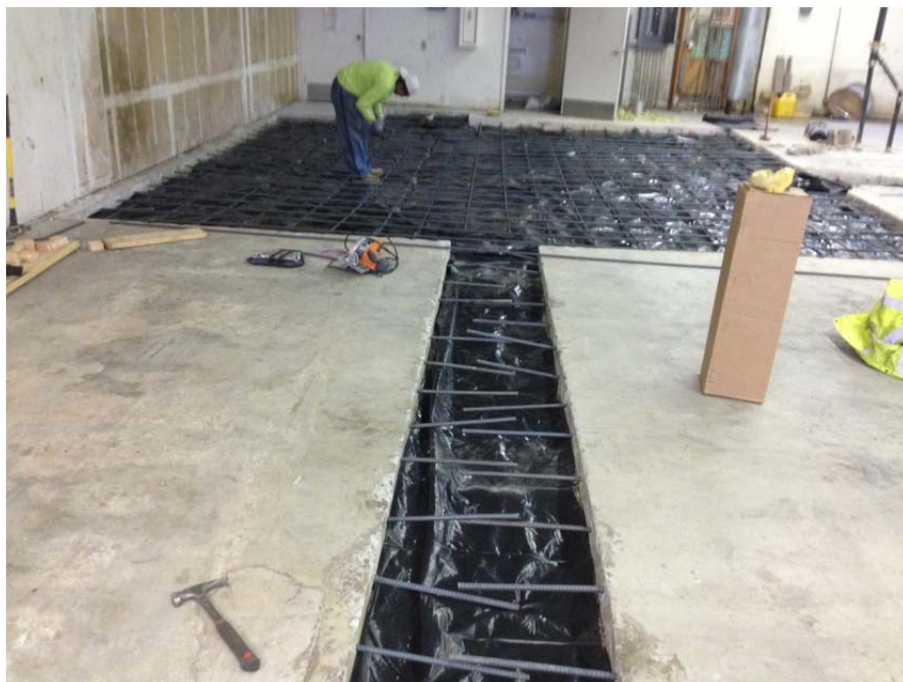
**Photo #7:** Sub-slab depressurization system through shear wall from the 7102 tenant space into the 7104 tenant space.



**Photo #8:** Sub-slab depressurization system and capped piping exiting building at rear of 7102 tenant space.

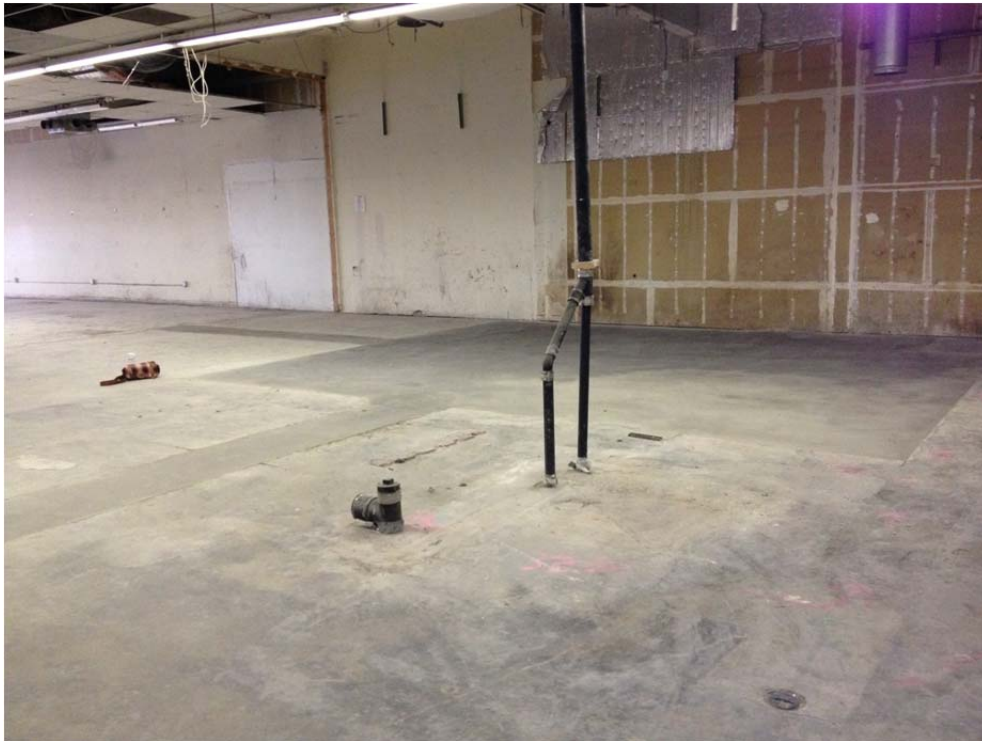


**Photo #9:** Completed sub-slab depressurization system vault box located at rear of 7102 tenant space.



**Photo #10:** View of visqueen placed on top of pea gravel and overlaying rebar prior to pouring concrete slab in 7104 tenant space. This was also done for the 7102 tenant space in the same manner.





**Photo #11:** View of 7104 tenant space after completion.



**Photo #12:** View of 7102 tenant space after completion.