# Appendix D

## CE Schmidt Technical Memorandum

## Results of the July 13, 2011, Follow-Up Surface Flux Chamber Testing and Ambient Air Testing at the DGS Building Located in Sacramento, California (8/15/2011)

***CE Schmidt, Ph.D.***
***Environmental Consultant***

August 15, 2011

Mr. Chris Corpuz, MS, CIH
Western Regional Manager
La Croix Davis LLC
3685 Mt. Diablo Blvd., Suite 210
Lafayette, CA 94549

Dear Mr. Corpuz:

Enclosed please find a copy of the Technical Memorandum for the follow-up testing conducted on July 13, 2011 at the DSG building located in Sacramento, California.

If you have any questions, please feel free to call.

Sincerely,

CE Schmidt, Ph.D.

Attachments - Technical Memorandum

**19200 Live Oak Road Red Bluff, CA 96080 (530) 529-4256 Fax- 4878**

***CE Schmidt, Ph.D.***
***Environmental Consultant***

# *TECHNICAL MEMORANDUM*

Results of the July 13, 2011 Follow-Up Surface Flux Chamber
Testing and Ambient Air Testing at the DSG Building
Located in Sacramento, California

Prepared For:

Mr. Chris Corpuz, MS, CIH
Western Regional Manager
La Croix Davis LLC
3685 Mt. Diablo Blvd., Suite 210
Lafayette, CA 94549

Prepared By:

Dr. C.E. Schmidt
Environmental Consultant
19200 Live Oak Road
Red Bluff, California 96080

August 2011



*19200 Live Oak Road Red Bluff, California 96080 (530) 529-4256 Fax-4878* ***ceschmidt.com***

***CE Schmidt, Ph.D.***
***Environmental Consultant***

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*19200 Live Oak Road Red Bluff, California 96080 (530) 529-4256 Fax-4878* ***ceschmidt.com***

*CE Schmidt, Ph.D.*
*Environmental Consultant*

## EXECUTIVE SUMMARY

A follow-up engineering evaluation was conducted at selected locations on various floors of the Department of General Services (DGS) building located in Sacramento, California on July 13, 2011. The testing was conducted in support of building remodeling activities in order to assist in identifying potential sources of odors detected and reported from different parts of the building. The general project mission was to assess odor and volatile organic compound (VOC) emission sources in relation to decomposing vinyl composite tile (VCT) and levels of odor and VOCs in selected study rooms in the building.

A site survey and a detailed screening activity was conducted on May 2, 2011 and a potential source of odors was identified, namely decomposing VCT and adhesive, and measurements were made on selected locations and various condition of floor/floor covering. Testing included surface flux chamber testing and ambient air testing in selected rooms. This testing effort identified the decomposing VCT as the odor source. Test conditions included undisturbed VCT, decomposing VCT, and slab where VCT and adhesive was removed as part of remodeling activities. Flowing these activities, a room-by-room survey was performed by LaCroix Davis and locations where the c characteristic 'odor' was observed along with the condition of the VCT. Based on these data, eight rooms were selected flowing the same testing protocols, and the follow-up testing effort was conducted.

The objectives of the follow-up testing effort were:

**o** ***Conduct source (USEAP flux chamber) testing on locations representative of the candidate odor source including decomposing VCT adhesive identifying the odor source(s) and quantifying the odor/odor related VOCs emitted to the indoor building air;***

***o Conduct ambient air testing in the areas where source testing is conducted in order to relate ambient odor/odor relate compounds to suspected odor sources, and***

***o Provide a valid data set of odor and odor related VOCs, including source flux and ambient concentration data, that can be used to predict odor/compound levels throughout the building (using CIH ventilation modeling) and estimate exposure to compounds as related to these sources.***



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Project study compounds were detected using ASTM Method E679-94 for olfactory odor, USEPA Method TO-15 full scan for volatile organic compounds (VOCs), and USEPA Method TO-15 selective ion mode (SIM) for lower level analysis of selected VOCs. The scope of work completed is provided in Table 1.

In total, eight rooms were selected for flux chamber and ambient air testing based on the LaCroix Davis comprehensive building survey. In each room, two locations were selected for flux chamber testing on VCT that showed signs of tile decomposition. In addition, an ambient air sample set was collected in each test room. The test rooms were selected based on the odor ranking in the room (high odor, moderate odor, low odor)and the condition of the VCT. Weight was also given to the distribution of room selection between floors so as to obtain spatial representativeness. Four rooms were selected that had high odors, and four rooms were selected that had moderate to low odors based on survey information.

The results of the ambient air testing in the rooms where flux chamber testing was performed showed a total of 12 VOCs and odor detected above reporting limits in one or more rooms for the TO-15 VOC full scan analysis as given below along with the maximum values observed.

| **COMPOUND** | **MAXIMUM** | |
|---|---|---|
| | **DETECTED** | |
| | **(ppbv)** | |
| **Odor (Dilution/Threshold)** | 14 D/T | |
| | | |
| Chloromethane | 1.9 | |
| Ethanol | 22 | |
| Trichlorofluoromethane | 1.9 | |
| Acetone | 200 | E |
| Dichloromethane | 1.5 | |
| Carbon disulfide | 0.97 | |
| Vinyl acetate | 0.90 | |
| 2-Butanone | 19 | |
| Benzene | 1.2 | |
| Toluene | 1.0 | |
| 2-Hexanone | 0.45 | |
| 1,2,4-Trimethylbenzene | 0.75 | |

E- exceeded instrument calibration; estimated value.



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These data were similar to the detailed screen data, and compounds common to the undisturbed VCT surface flux data may be related to the decomposing VCT and useful for remodeling purposes.

The results of the ambient air testing in the rooms where flux chamber testing showed a total of three of the four compounds investigated by TO-15 selective ion mode (SIM) detected above reporting limits in one or more rooms. These data are given below along with the maximum values observed for the data set. These data provide information regarding selected compounds of interest found in the study areas. Note the 'E' flag values indicates that they are estimated values using a sensitive technique, and may lie between SIM and full scan sensitivity levels.

| **COMPOUND** | **MAXIMUM** | |
|---|---|---|
| | **DETECTED** | |
| | (ppbv) | |
| Dichloromethane | 2.6 | E |
| Benzene | 0.88 | E |
| Toluene | 1.1 | E |
| tert-butyl benzene | 0.019 | J |

The results of the flux chamber sampling showed at total of three VOCs and odor detected above reporting limits for the TO-15 VOC full scan analysis: acetone, dichloromethane, and 2-butanone as shown below. The VOCs found above reporting limits in the ambient air samples strongly correlated to these data. These data on undisturbed VCT show fewer compounds and lower flux rates as compared to other test data where VCT was removed, are similar to undisturbed flux data, and correlate will with ambient data, although other compounds are found in ambient air that are not similar to the flux data on undisturbed VCT and are thus related to outdoor air (building ventilation) and other indoor air sources.

| **COMPOUND** | **MAXIMUM** | |
|---|---|---|
| | **FLUX** | |
| | **ug/m2,min-1** | |
| | | |
| **Odor (D/T)/m2,min-1** | **0.69** | |
| | | |
| Acetone | 0.96 | |
| Dichloromethane | 0.22 | |
| 2-Butanone | 0.15 | |



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*CE Schmidt, Ph.D.*
*Environmental Consultant*

The results of the flux chamber testing in the rooms showed a total of two of the four compounds investigated by TO-15 (SIM detected above reporting limits in one or more rooms. These data are given below along with the maximum values observed for the data set.

| COMPOUND | MAXIMUM | |
|---|---|---|
| | DETECTED | |
| | ug/m2,min-1 | |
| | | |
| Dichloromethane | 0.078 | |
| Benzene | 0.045 | |

These data correlate well with the ambient data and fit nicely with the full scan TO-15 flux data.

These data can be used to assist in identifying potential odor, VOCs and sources in other locations as needed in the building as related to the decomposing VCT air emission source.



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***CE Schmidt, Ph.D.***
***Environmental Consultant***

## I. INTRODUCTION

This technical memorandum describes the follow-up field testing that was conducted in order to assess air emissions of odor and odor related compounds from various test surfaces in the DGS building and indoor air quality associated with potential sources of odor and odor related compounds. Follow-up testing was conducted by Dr. C.E. Schmidt and a field tech on July 13, 2011. Site preparation conducted by LaCroix Davis LLC. This testing effort is considered to be a 'detailed screening effort' since only a limited data set was collected for the purposes of engineering and potential exposure evaluation.

This memorandum includes a discussion of the testing methodology, quality control procedures, results, discussion of the results, and summary statements.



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## II. TEST METHODOLOGY

Testing for surface flux was conducted using the USEPA recommended Surface Isolation Flux Chamber technology (USEPA. Radian Corporation, February 1986) and standard indoor air sampling methods . Flux chamber sampling was performed on various test surfaces as per the testing protocol.

The operation of the surface flux chamber is given below:

1) Flux chamber, sweep air, sample collection equipment, and field documents were located on-site.

2) The site information, location information, equipment information, date, and proposed time of testing were documented on the Emissions Measurement Field Data Sheet.

3) The exact test location was selected and placed on the source sealing the chamber to the surface using a fabricated collar.

4) The sweep air flow our ultra high purity air was initiated and the rotometer, which regulates the flow rate to 5.0 liters per minute. A constant sweep air flow rate was maintained throughout the measurement for each sampling location.

5) Flux chamber data were recorded every residence interval (6 minutes) for five intervals, or 30 minutes.

6) At steady-state (assumed to be greater than 5 residence intervals sample collection was performed by interfacing the sample container (canister or tedlar bag-decompression lung) to the purged, sample line and filling the container with sample gas or collecting the desired sample following sample collection protocols as per the workplan.

7) After sample collection the sample collection information was documented on the data sheet.

8) After sampling, the flux measurement was discontinued by shutting off the sweep air, removing the chamber, and securing the equipment. The chamber was cleaned by dry wipe with a clean paper towel as needed and the sample lines were purged with UHP air.

9) Sampling locations were recorded on the field data sheet. The equipment was then relocated to the next test location and steps 1) through 8) were repeated.



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Indoor air testing was performed by filling either a tedlar bag with room air, collected at 5' above the floor using a decompression lung, or by opening the valve on an evacuated canister also held at 5' above the floor. Indoor air samples were collected as grab samples. Note that indoor air samples were collected immediately on entrance into a room selected for testing. This was done so that activity in the room including entering and leaving the room did not cause am incidental, abnormal ventilation of the room.

Testing was conducted from around 6:00 PM until around 1:00 AM in an attempt to collect data with less room and floor activity so as to improve the correlation of levels of compounds and odor found in indoor ambient air and surface flux measurements made in the selected test rooms.



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## III. QUALITY CONTROL

Control procedures that were used to assure that data of sufficient quality resulted from the engineering evaluation are described below. The application and frequency of these procedures were developed to meet the program data quality objectives as described in the prior project source test protocols or quality assurance project plans (Schmidt, C.E., July 2010).

Field Documentation -- A field notebook containing data forms, including sample chain-of-custody (COC) forms, was maintained for the testing program. Attachment A contains the Emission Measurement Data Sheets.

Chain-of-Custody -- COC forms were not used for field data collection. Field data were recorded on the Chain-of-Custody forms provided in Attachment B.

**ASTM E-679-04 for Olfactory Odors**

Field Blank Sample – One field blank sample was collected by filling a tedlar bag sample with high purity air and submitting the sample blind for analysis. The odor concentration was 11 D/T, which is common for the method. These data indicate acceptable method performance.

Replicate Sample- A second tedlar bag sample was collected from a flux chamber test and submitted for analysis as s replicate sample. The replicate sample pair (SF-17A-2-0/-0R) had a relative percent difference (RPD) of 0.0 (criteria of 50 RPD). These data indicate acceptable method performance.

**USEPA Method TO-15 GC/MS; Full Scan Analysis**

Laboratory Control Spike Recovery Analysis and Duplicate –Four control spike samples were analyzed using a standard containing sixteen of the study compounds. All spike compounds were reported for all spike samples within the QC criteria of 70%-to-130%. These data indicate acceptable method performance.

These samples were also analyzed in duplicate, and similar results were observed. All duplicate spike compound analyses were reported within QC criteria of 75%-to-125%. These data represent acceptable method performance.

Laboratory Method Blank – Four laboratory method blank samples were analyzed and one compound, acetone, was detected above reporting limits in one of the four samples (1.01 ppbv; RL of 0.57 ppbv). These data indicate acceptable method performance.



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Media Sample Blank – One media blank sample was collected by filling a canister sample with high purity air and submitting the sample blind for analysis. One compounds, acetone, was detected in the blank sample above reporting limits at 6.56 ug/m3 (0.25 ug/m2,min-1). This compounds can be subtracted from the data set if needed. These data indicate acceptable method performance.

Field Replicate QC Sample – Two field replicate samples were collected and analyzed. The precision criteria for field replicate samples is 50 RPD. One sample/replicate pair (SF-17A-1-C/-1-CR) had one compound detected common to both above the reporting limit, and these data showed acceptable precision with an RPD of 15. The other sample/replicate pair (SF-17A-2-C/-2-CR) had no compounds in common over the reporting limit. These data demonstrate acceptable method performance.

**USEPA Method TO-15 GC/MS; Selective Ion Mode (SIM) Analysis**

Laboratory Control Spike Recovery Analysis and Duplicate –One control spike sample was analyzed using a standard containing the three of the four SIM compounds. All spike compounds were reported for all spike samples within the QC criteria of 70%-to-130%. These data indicate acceptable method performance.

The sample was also analyzed in duplicate, and similar results were observed. All duplicate spike compound analyses were reported within QC criteria of 75%-to-125%. These data represent acceptable method performance.

Laboratory Duplicate QC Sample – Two laboratory control samples were analyzed in duplicate and all data were found within the precision criteria of 25 RPD. These data indicate acceptable method performance.

Laboratory Method Blank – One laboratory method blank sample was analyzed for the four SIM compounds, and no compounds were reported above method detection limits. These data indicate acceptable method performance.

Media Sample Blank – One media blank sample were collected by filling a canister sample with high purity air and submitting the sample blind for analysis. One compound, dichloromethane, was detected above the reporting limit for the SIM analysis at 0.75 ug/m3 (0.029 ug/m2,min-1). This compound can be subtracted from the data set as needed. These data indicate acceptable method performance.

Field Replicate QC Sample – Two field replicate samples were collected and analyzed. The precision criteria for field replicate samples is 50 RPD. Both sample/replicate pairs (SF-17A-1-C/-



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1-CR; SF-17A-2-C/-2-CR ) had one compound detected common to both above the reporting limit, and these data showed acceptable precision with an RPD of 36 for both samples. These data demonstrate acceptable method performance.



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## IV. RESULTS AND DISCUSSIONS

A summary of the field sample collection activities is provided in Table 1. All field data for the on site surface flux chamber and ambient air testing along with sample identification and sample ID data are presented in Table 1. The results of the ambient air testing and analysis of VOCs are reported in Tables 2A, 2B, 2C, and 2D; all full scan TO-15 data and odor data are reported in Table 2A, and only those data found above the reporting limits are reported in Table 2B. TO-15 SIM data are reported in Table 2C. And ambient data from both Round #1 and Round #2 testing are reported in Table 2D for ease of comparison. Ambient air data are reported in the units of ppbv, ug/m3, and dilution-to-threshold (D/T) as appropriate.

The results of the flux chamber testing and analysis of VOCs are reported in Tables 3A, 3B, 3C, and 3D; all TO-15 full scan data and odor data are reported in Table 3A, and only those data found above the reporting limits are reported in Table 3B. TO-15 SIM data are reported in Table 3C, and flux data from both Round #1 and Round #2 testing are reported in Table 3D for ease of comparison. Flux units are reported in units of ug/m2,min-1 for VOCs and Odor Units/m2,min-1 (Odor Units are D/T).

Surface flux data for a surface area source are calculated using measured target compound concentrations and flux chamber operating parameter data (sweep air flow rate of 5.0 liters per minute [or 0.005 m3/min] plus advective flow [m3/min], surface area of 0.13 square meters [$m^2$]). The site emissions can be calculated by multiplying the flux by the surface area of the source. The flux is calculated from the sweep air flow rate Q (cubic meters per minute [$m^3$/min]), the species concentration Yi (micrograms per cubic meter [mg/$m^3$)], and exposure to the chamber surface area A (square meters [$m^2$]), as follows:

$$Fi = (Q)\ (Yi)\ /\ (A)$$

Emission rate of from the test pile can be calculated by multiplying unit or average flux data per compound by surface area and reported as a function of area source.



*19200 Live Oak Road Red Bluff, California 96080 (530) 529-4256 Fax-4878* ***ceschmidt.com***

## V. SUMMARY

An engineering evaluation was performed on selected test surfaces in the DGS building. Testing was conducted for the purpose of: evaluating the sources of and emissions from potential odor sources. The following is a summary of activities and results associated with this objective:

- Surface flux measurements of study compounds were measured from multiple locations on test using the USEPA recommended surface flux chamber technology. This technology quantitatively measures flux at the test surface of study compounds.

- Indoor air quality was sampled using conventional indoor air sampling methods in the rooms where flux chamber testing occurred. Two locations per room were selected for testing on VCT with decomposing edges or wide spacing between tile.

- Field and laboratory quality control data indicate acceptable data quality for the methods used. System blank levels were acceptable and precision between replicate field samples were all within quality control limits.

- The results of the ambient air testing in the rooms where flux chamber testing was performed showed a total of 12 VOCs and odor detected above reporting limits in one or more rooms for the TO-15 VOC full scan analysis. This list of compound is similar to the data collected during the first testing event.

- The results of the ambient air testing in the rooms where flux chamber testing showed a total of three of the four compounds investigated by TO-15 selective ion mode (SIM) detected above reporting limits in one or more rooms. These data provide information regarding selected compounds of interest found in the study areas.

- The results of the flux chamber sampling showed at total of three VOCs and odor detected above reporting limits for the TO-15 VOC full scan analysis: acetone, dichloromethane, and 2-butanone as shown below. The VOCs found above reporting limits in the ambient air samples strongly correlated to these data. These data on undisturbed VCT show fewer compounds and lower flux rates as compared to other test data where VCT was removed, are similar to undisturbed flux data, and correlate will with ambient data, although other compounds are found in ambient air that are not similar to the flux data on undisturbed VCT and are thus related to outdoor air (building ventilation) and other indoor air sources.

- The results of the flux chamber testing in the rooms showed a total of two of the four compounds investigated by TO-15 (SIM detected above reporting limits in one or more

rooms. These data are useful for understanding the type and level of compounds emitted from undisturbed, decomposing VCT.

- These data can be used to assist in identifying odor sources in the DGS building and quantifying emissions potential from undisturbed, decomposing VCT. They may also prove useful for planning purposes in regard to building renovation.

- These data indicated that a likely source of odor and related odor compounds is the decomposing VCT found in some locations. Predictions of potential impact to indoor air quality can be made using these flux data and surface area information along with ventilation data for rooms with odor or rooms showing signs of VCT decomposition.

- The indoor air quality data collected during the follow-up testing event can be used to evaluate exposure by comparing these data to health-based criteria. Note that this data set is limited by the number of samples taken (one sample per room) and the frequency of testing (one event), and is not equivalent to a detailed and robust air monitoring program.

REFERENCES

USEPA. 1986. "Measurement of Gaseous Emission Rates From Land Surfaces Using an Emission Isolation Flux Chamber, Users Guide." EPA Environmental Monitoring Systems Laboratory, Las Vegas, Nevada, EPA Contract No. 68-02-3889, Work Assignment No. 18, Radian Corporation, February 1986. NTIS # PB 86-223161.

*CE Schmidt, Ph.D.*
*Environmental Consultant*

ATTACHMENT A

EMISSION MEASUREMENT DATA SHEETS

*CE Schmidt, Ph.D.*
*Environmental Consultant*

ATTACHMENT B

CHAIN OF CUSTODY

**19200 Live Oak Road Red Bluff, CA 96080 (530) 529-4256 Fax- 4878**

*CE Schmidt, Ph.D.*
*Environmental Consultant*

ATTACHMENT C

LABORATORY REPORTS

Table 1. Summary of Field Sample Collection Information and Field Data for Round #2 Testing; July 13-14, 2011.

| DATE | TIME | SOURCE | CONDITION | LOCATION | Odor ID |
|---|---|---|---|---|---|
| 7/13/2011 | 2020 | Flux on Tile in Room 23C, Seams | Tiles with wide seams | Location 1 | SF-23C-1-O |
| 7/13/2011 | 2014 | Flux on Tile in Room 23C, Seams | Tiles with wide seams | Location 2 | SF-23C-2-O |
| 7/13/2011 | 1921 | Ambinet Air in Room 23C | Air sample in room as found | Center of Room | A-O-23C |
| | | | | | |
| 7/13/2011 | 2037 | Flux on Tile in Room 22E, Seams | Tiles with wide seams | Location 1 | SF-22E-1-O |
| 7/13/2011 | 2037 | Flux on Tile in Room 22E, Seams | Tiles with wide seams | Location 2 | SF-22E-2-O |
| 7/13/2011 | 1913 | Ambient Air in Room 22E | Air sample in room as found | Center of Room | A-O-22E |
| | | | | | |
| 7/13/2011 | 2110 | | Tiles with wide seams | Location 1 | SF-20B-1-O |
| 7/13/2011 | 2110 | Flux on Tile in Room 20B, Seams | Tiles with wide seams | Location 2 | SF-20B-2-O |
| 7/13/2011 | 1904 | Ambient Air in Room 20B | Air sample in room as found | Center of Room | A-O-20B |
| | | | | | |
| 7/13/2011 | 2137 | Flux on Tile in Room 19A, Seams | Tiles with wide seams | Location 1 | SF-19A-1-O |
| 7/13/2011 | 2137 | Flux on Tile in Room 19A, Seams | Tiles with wide seams | Location 2 | SF-19A-2-O |
| 7/13/2011 | 1855 | Ambient Air in Room 19A | Air sample in room as found | Center of Room | A-O-19A |
| | | | | | |
| 7/13/2011 | 2230 | Flux on Tile in Room 17A, Seams | Tiles with wide seams | Location 1 | SF-17A-1-O |
| 7/13/2011 | 2230 | Flux on Tile in Room 17A, Seams | Replicatecanister sample | Location 1 | NA |
| 7/13/2011 | 2230 | Flux on Tile in Room 17A, Seams | Tiles with wide seams | Location 2 | SF-17A-2-O |
| 7/13/2011 | 2230 | Flux on Tile in Room 17A, Seams | Replicate odor sample | Location 2 | SF-17A-2-O-R |
| 7/13/2011 | 1895 | Ambient Air in Room 17A | Air sample in room as found | Center of Room | A-O-17A |
| | | | | | |
| 7/13/2011 | 2302 | Flux on Tile in Room 14B, Seams | Tiles with wide seams | Location 1 | SF-14B-1-O |
| 7/13/2011 | 2302 | Flux on Tile in Room 14B, Seams | Tiles with wide seams | Location 2 | SF-14B-2-O |
| 7/13/2011 | 1834 | Ambient Air in Room 14B | Air sample in room as found | Center of Room | A-O-14B |
| | | | | | |
| 7/13/2011 | 2339 | Flux on Tile in Room 7B, Seams | Tiles with wide seams | Location 1 | SF-7B-1-O |
| 7/13/2011 | 2339 | Flux on Tile in Room 7B, Seams | Tiles with wide seams | Location 2 | SF-7B-2-O |
| 7/13/2011 | 1826 | Ambient Air in Room 7B | Air sample in room as found | Center of Room | A-O-7B |
| | | | | | |
| 7/13/2011 | 2409 | Flux on Tile in Room 4B, Seams | Tiles with wide seams | Location 1 | SF-4B-1-O |
| 7/13/2011 | 2409 | Flux on Tile in Room 4B, Seams | Tiles with wide seams | Location 2 | SF-4B-2-O |
| 7/13/2011 | 1815 | Ambient Air Room 4B | Air sample in room as found | Center of Room | A-O-4B |
| | | | | | |
| 7/14/2011 | 2434 | Method Blank Sample | Ultra High Purity Air in Media | NA | SF-MB-1-O |

Table 1. Summary of Field Sample Collection Information and Field Data for Round #2 Testing; July 13-14, 2011.

| TO-15 | IN SURF | IN AIR | OUT SURF | OUT AIR | Rel Hum | Bar Press | COMMENT |
|---|---|---|---|---|---|---|---|
| ID | F | F | F | F | % | " Hg | |
| SF-23C-1-C | 71 | 71 | 71 | 73 | 43 | 29.45 | |
| SF-23C-2-C | 71 | 71 | 71 | 73 | 43 | 29.45 | |
| A-C-23C | NA | NA | NA | NA | NA | NA | |
| | | | | | | | |
| SF-22E-1-C | 72 | 72 | 72 | 72 | 40 | 29.46 | |
| SF-22E-2-C | 72 | 72 | 72 | 72 | 40 | 29 | |
| A-C-22E | 72 | 72 | 72 | 72 | NA | NA | |
| | | | | | | | |
| SF-20B-1-C | 71 | 71 | 71 | 72 | 44 | 29.50 | |
| SF-20B-2-C | 71 | 72 | 71 | 72 | 44 | 29.50 | |
| A-C-20B | NA | NA | NA | NA | NA | 29.50 | |
| | | | | | | | |
| SF-19A-1-C | 73 | 73 | 73 | 73 | 44 | 29.52 | |
| SF-19A-2-C | 73 | 73 | 73 | 73 | 44 | 29.52 | |
| A-C-19A | NA | NA | NA | NA | NA | NA | |
| | | | | | | | |
| SF-17A-1-C | NA | NA | NA | NA | 45 | 29.55 | |
| SF-17A-1-C-R | NA | NA | NA | NA | 45 | 29.55 | Replicate canister sampe |
| SF-17A-2-C | NA | NA | NA | NA | 45 | 29.55 | |
| NA | NA | NA | NA | NA | 45 | 29.55 | Replicate bag sample |
| A-C-17A | NA | NA | NA | NA | NA | NA | |
| | | | | | | | |
| SF-14B-1-C | 72 | 72 | 73 | 73 | 42 | 29.59 | |
| SF-14B-2-C | 72 | 72 | 73 | 73 | 42 | 29.59 | |
| A-C-14B | NA | NA | NA | NA | NA | NA | |
| | | | | | | | |
| SF-7B-1-C | 71 | 72 | 72 | 73 | 42 | 29.70 | |
| SF-7B-2-C | 71 | 72 | 71 | 72 | 42 | 29.7 | |
| A-C-7B | NA | NA | NA | NA | NA | NA | |
| | | | | | | | |
| SF-4B-1-C | 71 | 71 | 71 | 71 | 47 | 29.73 | Highest odor observed, more so at 0009 |
| SF-4B-2-C | NA | NA | NA | NA | 47 | 29.73 | |
| A-C-4B | NA | NA | NA | NA | NA | NA | |
| | | | | | | | |
| SF-MB-1-C | NA | NA | NA | NA | NA | NA | Pure Air Blank |

Table 2A. Summary of All Round #2 Ambient Air VOC and Odor Data (ppbv, ug/m3, and D/T).

| METHOD | COMPOUND | A-C-23C | | A-C-23C | | A-C-22E | | A-C-22E | | A-C-20E |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Undist Tile | | Undist Tile | | Undist Tile | | Undist Tile | | Undist Tile |
| | | (ppbv) | | (ug/m3) | | (ppbv) | | (ug/m3) | | (ppbv) |
| Odor Panel | Odor (Dilution/Threshold) | 10 D/T | | | | 10 D/T | | | | 14 D/T |
| | | | | | | | | | | |
| TO-15 | Dichlorodifluoromethane | 0.47 | J | 2.32 | J | 0.48 | J | 2.39 | J | 0.27 |
| TO-15 | Chloromethane | 0.27 | U | 0.56 | U | **1.02** | | **2.12** | | 0.27 |
| TO-15 | Freon 114 | 0.28 | U | 1.95 | U | 0.28 | U | 1.95 | U | 0.27 |
| TO-15 | Vinyl chloride | 0.28 | U | 0.71 | U | 0.28 | U | 0.71 | U | 0.27 |
| TO-15 | 1,3-Butadiene | 0.29 | U | 0.63 | U | 0.29 | U | 0.63 | U | 0.28 |
| TO-15 | Bromomethane | 0.28 | U | 1.08 | U | 0.28 | U | 1.08 | U | 0.27 |
| TO-15 | Chloroethane | 0.28 | U | 0.73 | U | 0.28 | U | 0.73 | U | 0.27 |
| TO-15 | Ethanol | 0.92 | U | 1.74 | U | **11.97** | | **22.56** | | 0.89 |
| TO-15 | Trichlorofluoromethane | 0.47 | J | 2.63 | J | 0.45 | J | 2.54 | J | 0.55 |
| TO-15 | Acetone | 7.91 | B | 18.78 | B | **197.30** | E | **468.61** | E | **8.95** |
| TO-15 | 2-propanol | 0.70 | U | 1.73 | U | 0.70 | U | 1.73 | U | 0.68 |
| TO-15 | t-Butanol | 0.20 | U | 0.61 | U | 0.20 | U | 0.61 | U | 0.20 |
| TO-15 | Methyl iodide | 0.08 | U | 0.47 | U | 0.08 | U | 0.47 | U | 0.08 |
| TO-15 | 1,1-Dichloroethene | 0.54 | U | 2.14 | U | 0.54 | U | 2.14 | U | 0.53 |
| TO-15 | Acrylonitrile | 0.31 | U | 0.67 | U | 0.31 | U | 0.67 | U | 0.30 |
| TO-15 | Freon 113 | 0.27 | U | 2.09 | U | 0.27 | U | 2.09 | U | 0.27 |
| TO-15 | Allyl chloride | 0.24 | U | 0.74 | U | 0.24 | U | 0.74 | U | 0.23 |
| TO-15 | Dichloromethane | 0.67 | J | 2.33 | J | 0.64 | J | 2.23 | J | **0.72** |
| TO-15 | Carbon disulfide | 0.23 | U | 0.71 | U | 0.23 | U | 0.71 | U | **0.97** |
| TO-15 | trans-1,2-Dichloroethene | 0.18 | U | 0.70 | U | 0.18 | U | 0.70 | U | 0.17 |
| TO-15 | Methyl tert butyl ether | 0.18 | U | 0.66 | U | 0.18 | U | 0.66 | U | 0.18 |
| TO-15 | Propionitrile | 0.25 | U | 0.57 | U | 0.25 | U | 0.57 | U | 0.25 |
| TO-15 | 1,1-Dichloroethane | 0.27 | U | 1.10 | U | 0.27 | U | 1.10 | U | 0.26 |
| TO-15 | Vinyl acetate | 0.22 | U | 0.76 | U | 0.27 | J | 0.94 | J | 0.21 |
| TO-15 | 2-Butanone | **0.93** | | **2.75** | | **19.05** | | **56.14** | | **0.85** |
| TO-15 | Diisopropyl ether | 0.17 | U | 0.70 | U | 0.17 | U | 0.70 | U | 0.16 |
| TO-15 | Hexane | 0.18 | U | 0.64 | U | 0.18 | U | 0.64 | U | 0.18 |
| TO-15 | Methacrylonitrile | 0.25 | U | 0.70 | U | 0.25 | U | 0.70 | U | 0.25 |
| TO-15 | Ethyl acetate | 0.22 | U | 0.78 | U | 0.22 | U | 0.78 | U | 0.21 |
| TO-15 | Bromochloromethane | 0.13 | U | 0.69 | U | 0.13 | U | 0.69 | U | 0.13 |
| TO-15 | Tetrahydrofuran | 0.31 | U | 0.91 | U | 0.46 | J | 1.37 | J | 0.30 |
| TO-15 | Isobutyl alcohol | 0.41 | U | 1.23 | U | 0.41 | U | 1.23 | U | 0.40 |

Table 2A. Summary of All Round #2 Ambient Air VOC and Odor Data (ppbv, ug/m3, and D/T).

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **TO-15** | cis-1,2-Dichloroethene | 0.28 | U | 1.09 | U | 0.28 | U | 1.09 | U | 0.27 |
| **TO-15** | 2,2-Dichloropropane | 0.22 | U | 1.01 | U | 0.22 | U | 1.01 | U | 0.21 |
| **TO-15** | Chloroform | 0.27 | U | 1.33 | U | 0.27 | U | 1.33 | U | 0.27 |
| **TO-15** | 1,1,1-Trichloroethane | 0.27 | U | 1.49 | U | 0.27 | U | 1.49 | U | 0.27 |
| **TO-15** | 1,2-Dichloroethane | 0.28 | U | 1.12 | U | 0.28 | U | 1.12 | U | 0.27 |
| **TO-15** | 1,1-Dichloropropene | 0.16 | U | 0.74 | U | 0.16 | U | 0.74 | U | 0.16 |
| **TO-15** | Cyclohexane | 0.19 | U | 0.65 | U | 0.19 | U | 0.65 | U | 0.18 |
| **TO-15** | Benzene | 0.55 | U | 1.76 | U | **1.16** | | **3.69** | | 0.54 |
| **TO-15** | Carbon tetrachloride | 0.27 | U | 1.72 | U | 0.27 | U | 1.72 | U | 0.27 |
| **TO-15** | 2,2,4-Trimethylpentane | 0.13 | U | 0.63 | U | 0.13 | U | 0.63 | U | 0.13 |
| **TO-15** | n-Heptane | 0.20 | J | 0.80 | J | 0.15 | U | 0.61 | U | 0.15 |
| **TO-15** | 1,2-Dichloropropane | 0.28 | U | 1.28 | U | 0.28 | U | 1.28 | U | 0.27 |
| **TO-15** | 1,4 Dioxane | 0.50 | U | 1.81 | U | 0.50 | U | 1.81 | U | 0.49 |
| **TO-15** | Dibromomethane | 0.09 | U | 0.66 | U | 0.09 | U | 0.66 | U | 0.09 |
| **TO-15** | Trichloroethene | 0.28 | U | 1.48 | U | 0.28 | U | 1.48 | U | 0.27 |
| **TO-15** | Bromodichloromethane | 0.10 | U | 0.66 | U | 0.10 | U | 0.66 | U | 0.10 |
| **TO-15** | Methyl methacrylate | 0.17 | U | 0.68 | U | 0.17 | U | 0.68 | U | 0.16 |
| **TO-15** | 4-Methyl-2-pentanone | 0.19 | U | 0.76 | U | 0.45 | J | 1.85 | J | 0.18 |
| **TO-15** | cis-1,3-Dichloropropene | 0.28 | U | 1.29 | U | 0.28 | U | 1.29 | U | 0.28 |
| **TO-15** | Toluene | **0.84** | | **3.15** | | 0.55 | U | 2.08 | U | 0.54 |
| **TO-15** | trans-1,3-Dichloropropene | 0.28 | U | 1.26 | U | 0.28 | U | 1.26 | U | 0.27 |
| **TO-15** | 1,1,2-Trichloroethane | 0.27 | U | 1.49 | U | 0.27 | U | 1.49 | U | 0.27 |
| **TO-15** | Ethyl methacrylate | 0.15 | U | 0.69 | U | 0.15 | U | 0.69 | U | 0.14 |
| **TO-15** | 2-Hexanone | 0.18 | U | 0.72 | U | **0.45** | | **1.83** | | 0.17 |
| **TO-15** | 1,3-Dichloropropane | 0.16 | U | 0.75 | U | 0.16 | U | 0.75 | U | 0.16 |
| **TO-15** | Octane | 0.13 | U | 0.63 | U | 0.13 | U | 0.63 | U | 0.13 |
| **TO-15** | Dibromochloromethane | 0.10 | U | 0.84 | U | 0.10 | U | 0.84 | U | 0.10 |
| **TO-15** | 1,2-Dibromoethane | 0.28 | U | 2.14 | U | 0.28 | U | 2.14 | U | 0.27 |
| **TO-15** | Tetrachloroethene | 0.27 | U | 1.85 | U | 0.27 | U | 1.85 | U | 0.27 |
| **TO-15** | Chlorobenzene | 0.27 | U | 1.26 | U | 0.27 | U | 1.26 | U | 0.27 |
| **TO-15** | 1,1,1,2-Tetrachloroethane | 0.10 | U | 0.70 | U | 0.10 | U | 0.70 | U | 0.10 |
| **TO-15** | Ethylbenzene | 0.28 | U | 1.21 | U | 0.28 | U | 1.21 | U | 0.27 |
| **TO-15** | m,p-Xylenes | 0.55 | U | 2.40 | U | 0.55 | U | 2.40 | U | 0.54 |
| **TO-15** | Nonane | 0.12 | U | 0.62 | U | 0.12 | U | 0.62 | U | 0.11 |
| **TO-15** | Styrene | 0.28 | U | 1.18 | U | 0.28 | U | 1.18 | U | 0.27 |
| **TO-15** | Bromoform | 0.07 | U | 0.68 | U | 0.07 | U | 0.68 | U | 0.06 |
| **TO-15** | o-Xylene | 0.27 | U | 1.19 | U | 0.27 | U | 1.19 | U | 0.27 |

Table 2A. Summary of All Round #2 Ambient Air VOC and Odor Data (ppbv, ug/m3, and D/T).

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **TO-15** | 1,1,2,2-Tetrachloroethane | 0.27 | U | 1.88 | U | 0.27 | U | 1.88 | U | 0.27 |
| **TO-15** | 1,2,3-Trichloropropane | 0.12 | U | 0.73 | U | 0.12 | U | 0.73 | U | 0.12 |
| **TO-15** | t-1,4-Dichloro-2-butene | 0.17 | U | 0.85 | U | 0.17 | U | 0.85 | U | 0.16 |
| **TO-15** | 2-Chlorotoluene | 0.13 | U | 0.68 | U | 0.13 | U | 0.68 | U | 0.13 |
| **TO-15** | 4-Chlorotoluene | 0.13 | U | 0.67 | U | 0.13 | U | 0.67 | U | 0.12 |
| **TO-15** | n-Propylbenzene | 0.18 | U | 0.91 | U | 0.18 | U | 0.91 | U | 0.18 |
| **TO-15** | Isopropylbenzene | 0.19 | U | 0.92 | U | 0.19 | U | 0.92 | U | 0.18 |
| **TO-15** | 4-Ethyltoluene | 0.15 | U | 0.75 | U | 0.15 | U | 0.75 | U | 0.15 |
| **TO-15** | 1,3,5-Trimethylbenzene | 0.28 | U | 1.40 | U | 0.28 | U | 1.40 | U | 0.28 |
| **TO-15** | Decane | 0.12 | U | 0.73 | U | 0.12 | U | 0.73 | U | 0.15 |
| **TO-15** | tert-butyl benzene | 0.16 | U | 0.90 | U | 0.16 | U | 0.90 | U | 0.16 |
| **TO-15** | 1,2,4-Trimethylbenzene | 0.27 | U | 1.34 | U | 0.27 | U | 1.34 | U | 0.27 |
| **TO-15** | i-Butylbenzene | 0.16 | U | 0.90 | U | 0.16 | U | 0.90 | U | 0.16 |
| **TO-15** | sec-butylbenzene | 0.17 | U | 0.96 | U | 0.17 | U | 0.96 | U | 0.17 |
| **TO-15** | 1,3-Dichlorobenzene | 0.55 | U | 3.29 | U | 0.55 | U | 3.29 | U | 0.53 |
| **TO-15** | Isopropyltoluene | 0.17 | U | 0.94 | U | 0.17 | U | 0.94 | U | 0.17 |
| **TO-15** | Benzyl chloride | 0.32 | U | 1.63 | U | 0.32 | U | 1.63 | U | 0.31 |
| **TO-15** | 1,4-Dichlorobenzene | 0.55 | U | 3.29 | U | 0.55 | U | 3.29 | U | 0.53 |
| **TO-15** | n-Butylbenzene | 0.16 | U | 0.88 | U | 0.16 | U | 0.88 | U | 0.16 |
| **TO-15** | 1,2-Dichlorobenzene | 0.54 | U | 3.22 | U | 0.54 | U | 3.22 | U | 0.52 |
| **TO-15** | 1,2-Dibromo-3-chloropropane | 0.36 | U | 3.47 | U | 0.36 | U | 3.47 | U | 0.35 |
| **TO-15** | Tetraethyl lead | 0.13 | U | 1.70 | U | 0.13 | U | 1.70 | U | 0.12 |
| **TO-15** | 1,2,4-Trichlorobenzene | 1.10 | U | 8.19 | U | 1.10 | U | 8.19 | U | 1.07 |
| **TO-15** | Naphthalene | 0.24 | U | 1.24 | U | 0.33 | J | 1.73 | J | 0.23 |
| **TO-15** | Hexachlorobutadiene | 0.55 | U | 5.89 | U | 0.55 | U | 5.89 | U | 0.54 |

**Bold**- levels above reporting limits (RL)
J- level above MDL but below RL
U- level below MDL
B- compound found in lab blank
R- sample replicate
Yellow highlighted samples indicate one or more samples reported above RL for the data set.

Table 2A. Summary of All Round #2 Ambient Air VOC and Odor Data (ppbv, ug/m3, and D/T).

| | A-C-20B | | A-C-19A | | A-C-19A | | A-C-17A | | A-C-17A | | A-C-14B | | A-C-14B | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Undist Tile | | Undist Tile | | Undist Tile | | Undist Tile | | Undist Tile | | Undist Tile | | Undist Tile | |
| | (ug/m3) | | (ppbv) | | (ug/m3) | | (ppbv) | | (ug/m3) | | (ppbv) | | (ug/m3) | |
| | | | 13 D/T | | | | 15 D/T | | | | 10 D/T | | | |
| | | | | | | | | | | | | | | |
| U | 1.35 | U | 0.47 | J | 2.30 | J | 0.59 | J | 2.93 | J | 0.53 | J | 2.63 | J |
| U | 0.55 | U | 0.26 | U | 0.54 | U | **1.85** | | **3.81** | | 0.53 | J | 1.10 | J |
| U | 1.89 | U | 0.27 | U | 1.87 | U | 0.27 | U | 1.90 | U | 0.26 | U | 1.83 | U |
| U | 0.69 | U | 0.27 | U | 0.69 | U | 0.27 | U | 0.70 | U | 0.26 | U | 0.67 | U |
| U | 0.62 | U | 0.28 | U | 0.61 | U | 0.28 | U | 0.62 | U | 0.27 | U | 0.60 | U |
| U | 1.05 | U | 0.27 | U | 1.04 | U | 0.27 | U | 1.06 | U | 0.26 | U | 1.02 | U |
| U | 0.71 | U | 0.27 | U | 0.71 | U | 0.27 | U | 0.72 | U | 0.26 | U | 0.69 | U |
| U | 1.69 | U | 0.89 | U | 1.67 | U | **10.25** | | **19.32** | | **22.30** | | **42.03** | |
| J | 3.07 | J | 0.47 | J | 2.62 | J | 0.59 | J | 3.29 | J | 0.55 | J | 3.07 | J |
| | **21.25** | | 9.65 | B | 22.91 | B | **111.71** | E | **265.32** | E | **9.48** | | **22.52** | |
| U | 1.67 | U | 0.68 | U | 1.66 | U | 0.69 | U | 1.69 | U | 0.66 | U | 1.62 | U |
| U | 0.59 | U | 0.19 | U | 0.59 | U | 0.20 | U | 0.60 | U | 0.19 | U | 0.57 | U |
| U | 0.46 | U | 0.08 | U | 0.45 | U | 0.08 | U | 0.46 | U | 0.08 | U | 0.44 | U |
| U | 2.08 | U | 0.52 | U | 2.06 | U | 0.53 | U | 2.10 | U | 0.51 | U | 2.02 | U |
| U | 0.65 | U | 0.30 | U | 0.65 | U | 0.30 | U | 0.66 | U | 0.29 | U | 0.63 | U |
| U | 2.03 | U | 0.26 | U | 2.02 | U | 0.27 | U | 2.05 | U | 0.26 | U | 1.97 | U |
| U | 0.72 | U | 0.23 | U | 0.71 | U | 0.23 | U | 0.73 | U | 0.22 | U | 0.70 | U |
| | **2.50** | | 0.64 | J | 2.22 | J | **1.04** | | **3.60** | | **0.86** | | **2.99** | |
| | **3.02** | | 0.22 | U | 0.69 | U | 0.22 | U | 0.70 | U | 0.22 | U | 0.67 | U |
| U | 0.68 | U | 0.17 | U | 0.68 | U | 0.17 | U | 0.69 | U | 0.17 | U | 0.66 | U |
| U | 0.64 | U | 0.18 | U | 0.63 | U | 0.18 | U | 0.64 | U | 0.17 | U | 0.62 | U |
| U | 0.56 | U | 0.25 | U | 0.55 | U | 0.25 | U | 0.56 | U | 0.24 | U | 0.54 | U |
| U | 1.06 | U | 0.26 | U | 1.05 | U | 0.26 | U | 1.07 | U | 0.25 | U | 1.03 | U |
| U | 0.74 | U | 0.21 | U | 0.73 | U | **0.90** | | **3.16** | | 0.20 | U | 0.72 | U |
| | **2.51** | | **1.24** | | **3.64** | | **14.41** | | **42.47** | | **0.91** | | **2.68** | |
| U | 0.68 | U | 0.16 | U | 0.68 | U | 0.16 | U | 0.69 | U | 0.16 | U | 0.66 | U |
| U | 0.62 | U | 0.18 | U | 0.62 | U | 0.18 | U | 0.63 | U | 0.17 | U | 0.60 | U |
| U | 0.68 | U | 0.25 | U | 0.67 | U | 0.25 | U | 0.68 | U | 0.24 | U | 0.66 | U |
| U | 0.75 | U | 0.21 | U | 0.75 | U | 0.21 | U | 0.76 | U | 0.20 | U | 0.73 | U |
| U | 0.67 | U | 0.13 | U | 0.67 | U | 0.13 | U | 0.68 | U | 0.12 | U | 0.65 | U |
| U | 0.88 | U | 0.30 | U | 0.87 | U | 0.59 | J | 1.73 | J | 0.29 | U | 0.85 | U |
| U | 1.20 | U | 0.39 | U | 1.19 | U | 0.40 | U | 1.21 | U | 0.38 | U | 1.16 | U |

Table 2A. Summary of All Round #2 Ambient Air VOC and Odor Data (ppbv, ug/m3, and D/T).

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| U | 1.06 | U | 0.27 | U | 1.05 | U | 0.27 | U | 1.07 | U | 0.26 | U | 1.03 | U |
| U | 0.98 | U | 0.21 | U | 0.98 | U | 0.21 | U | 0.99 | U | 0.21 | U | 0.95 | U |
| U | 1.29 | U | 0.26 | U | 1.28 | U | 0.27 | U | 1.30 | U | 0.26 | U | 1.25 | U |
| U | 1.45 | U | 0.26 | U | 1.44 | U | 0.27 | U | 1.46 | U | 0.26 | U | 1.40 | U |
| U | 1.08 | U | 0.27 | U | 1.08 | U | 0.27 | U | 1.09 | U | 0.26 | U | 1.05 | U |
| U | 0.71 | U | 0.16 | U | 0.71 | U | 0.16 | U | 0.72 | U | 0.15 | U | 0.69 | U |
| U | 0.63 | U | 0.18 | U | 0.63 | U | 0.18 | U | 0.64 | U | 0.18 | U | 0.61 | U |
| U | 1.71 | U | 0.53 | U | 1.70 | U | 0.54 | U | 1.72 | U | 0.52 | U | 1.66 | U |
| U | 1.67 | U | 0.26 | U | 1.65 | U | 0.27 | U | 1.68 | U | 0.26 | U | 1.62 | U |
| U | 0.61 | U | 0.13 | U | 0.60 | U | 0.13 | U | 0.61 | U | 0.13 | U | 0.59 | U |
| U | 0.59 | U | 0.14 | U | 0.59 | U | 0.15 | U | 0.60 | U | 0.14 | U | 0.58 | U |
| U | 1.24 | U | 0.27 | U | 1.23 | U | 0.27 | U | 1.25 | U | 0.26 | U | 1.20 | U |
| U | 1.76 | U | 0.49 | U | 1.75 | U | 0.49 | U | 1.77 | U | 0.47 | U | 1.71 | U |
| U | 0.64 | U | 0.09 | U | 0.63 | U | 0.09 | U | 0.64 | U | 0.09 | U | 0.62 | U |
| U | 1.44 | U | 0.27 | U | 1.43 | U | 0.27 | U | 1.45 | U | 0.26 | U | 1.39 | U |
| U | 0.64 | U | 0.10 | U | 0.64 | U | 0.10 | U | 0.65 | U | 0.09 | U | 0.62 | U |
| U | 0.66 | U | 0.16 | U | 0.66 | U | 0.16 | U | 0.67 | U | 0.16 | U | 0.64 | U |
| U | 0.74 | U | 0.18 | U | 0.74 | U | 0.24 | J | 0.96 | J | 0.18 | U | 0.72 | U |
| U | 1.25 | U | 0.27 | U | 1.24 | U | 0.28 | U | 1.26 | U | 0.27 | U | 1.21 | U |
| U | 2.02 | U | **1.01** | | **3.79** | | **0.83** | | **3.12** | | 0.62 | J | 2.32 | J |
| U | 1.23 | U | 0.27 | U | 1.22 | U | 0.27 | U | 1.24 | U | 0.26 | U | 1.19 | U |
| U | 1.45 | U | 0.26 | U | 1.44 | U | 0.27 | U | 1.46 | U | 0.26 | U | 1.40 | U |
| U | 0.67 | U | 0.14 | U | 0.66 | U | 0.14 | U | 0.67 | U | 0.14 | U | 0.65 | U |
| U | 0.70 | U | 0.17 | U | 0.69 | U | 0.33 | J | 1.37 | J | 0.16 | U | 0.67 | U |
| U | 0.73 | U | 0.16 | U | 0.72 | U | 0.16 | U | 0.73 | U | 0.15 | U | 0.70 | U |
| U | 0.61 | U | 0.13 | U | 0.60 | U | 0.13 | U | 0.61 | U | 0.13 | U | 0.59 | U |
| U | 0.81 | U | 0.09 | U | 0.81 | U | 0.10 | U | 0.82 | U | 0.09 | U | 0.79 | U |
| U | 2.08 | U | 0.27 | U | 2.06 | U | 0.27 | U | 2.09 | U | 0.26 | U | 2.01 | U |
| U | 1.80 | U | 0.26 | U | 1.78 | U | 0.27 | U | 1.81 | U | 0.26 | U | 1.74 | U |
| U | 1.22 | U | 0.26 | U | 1.21 | U | 0.27 | U | 1.23 | U | 0.26 | U | 1.18 | U |
| U | 0.68 | U | 0.10 | U | 0.67 | U | 0.10 | U | 0.68 | U | 0.10 | U | 0.66 | U |
| U | 1.17 | U | 0.27 | U | 1.16 | U | 0.27 | U | 1.18 | U | 0.26 | U | 1.14 | U |
| U | 2.33 | U | 0.53 | U | 2.31 | U | 0.55 | J | 2.39 | J | 0.52 | U | 2.25 | U |
| U | 0.60 | U | 0.11 | U | 0.59 | U | 0.11 | U | 0.60 | U | 0.11 | U | 0.58 | U |
| U | 1.14 | U | 0.27 | U | 1.13 | U | 0.27 | U | 1.15 | U | 0.26 | U | 1.11 | U |
| U | 0.66 | U | 0.06 | U | 0.66 | U | 0.06 | U | 0.67 | U | 0.06 | U | 0.64 | U |
| U | 1.15 | U | 0.26 | U | 1.14 | U | 0.27 | U | 1.16 | U | 0.26 | U | 1.12 | U |

Table 2A. Summary of All Round #2 Ambient Air VOC and Odor Data (ppbv, ug/m3, and D/T).

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| U | 1.82 | U | 0.26 | U | 1.81 | U | 0.27 | U | 1.83 | U | 0.26 | U | 1.76 | U |
| U | 0.71 | U | 0.12 | U | 0.70 | U | 0.12 | U | 0.72 | U | 0.11 | U | 0.69 | U |
| U | 0.82 | U | 0.16 | U | 0.82 | U | 0.16 | U | 0.83 | U | 0.16 | U | 0.80 | U |
| U | 0.66 | U | 0.13 | U | 0.65 | U | 0.13 | U | 0.66 | U | 0.12 | U | 0.64 | U |
| U | 0.65 | U | 0.12 | U | 0.64 | U | 0.13 | U | 0.65 | U | 0.12 | U | 0.63 | U |
| U | 0.88 | U | 0.18 | U | 0.87 | U | 0.18 | U | 0.89 | U | 0.17 | U | 0.85 | U |
| U | 0.89 | U | 0.18 | U | 0.89 | U | 0.26 | J | 1.28 | J | 0.18 | U | 0.87 | U |
| U | 0.73 | U | 0.15 | U | 0.72 | U | 0.34 | J | 1.65 | J | 0.14 | U | 0.70 | U |
| U | 1.35 | U | 0.27 | U | 1.34 | U | 0.28 | U | 1.36 | U | 0.27 | U | 1.31 | U |
| J | 0.87 | J | 0.12 | U | 0.70 | U | 0.25 | J | 1.44 | J | 0.12 | U | 0.68 | U |
| U | 0.87 | U | 0.16 | U | 0.86 | U | 0.16 | U | 0.88 | U | 0.15 | U | 0.84 | U |
| U | 1.30 | U | 0.26 | U | 1.29 | U | **0.75** | | **3.67** | | 0.26 | U | 1.26 | U |
| U | 0.87 | U | 0.16 | U | 0.86 | U | 0.16 | U | 0.88 | U | 0.15 | U | 0.84 | U |
| U | 0.93 | U | 0.17 | U | 0.92 | U | 0.20 | J | 1.12 | J | 0.16 | U | 0.90 | U |
| U | 3.19 | U | 0.53 | U | 3.16 | U | 0.53 | U | 3.21 | U | 0.51 | U | 3.09 | U |
| U | 0.91 | U | 0.17 | U | 0.91 | U | 0.41 | J | 2.27 | J | 0.16 | U | 0.88 | U |
| U | 1.58 | U | 0.30 | U | 1.57 | U | 0.31 | U | 1.59 | U | 0.30 | U | 1.53 | U |
| U | 3.19 | U | 0.53 | U | 3.16 | U | 0.53 | U | 3.21 | U | 0.51 | U | 3.09 | U |
| U | 0.86 | U | 0.15 | U | 0.85 | U | 0.16 | U | 0.86 | U | 0.15 | U | 0.83 | U |
| U | 3.12 | U | 0.52 | U | 3.10 | U | 0.52 | U | 3.15 | U | 0.50 | U | 3.03 | U |
| U | 3.37 | U | 0.35 | U | 3.34 | U | 0.35 | U | 3.39 | U | 0.34 | U | 3.26 | U |
| U | 1.65 | U | 0.12 | U | 1.64 | U | 0.13 | U | 1.66 | U | 0.12 | U | 1.60 | U |
| U | 7.94 | U | 1.06 | U | 7.88 | U | 1.08 | U | 8.00 | U | 1.04 | U | 7.70 | U |
| U | 1.20 | U | 0.23 | U | 1.19 | U | 0.23 | U | 1.21 | U | 0.22 | U | 1.16 | U |
| U | 5.71 | U | 0.53 | U | 5.67 | U | 0.54 | U | 5.75 | U | 0.52 | U | 5.53 | U |

Table 2A. Summary of All Round #2 Ambient Air VOC and Odor Data (ppbv, ug/m3, and D/T).

| A-C-7B | | A-C-7B | | A-C-4B | | A-C-4B | | SF-MB-1-C | | SF-MB-1-C | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Undist Tile | | Undist Tile | | Undist Tile | | Undist Tile | | Media Blank | | Media Blank | |
| (ppbv) | | (ug/m3) | | (ppbv) | | (ug/m3) | | (ppbv) | | (ug/m3) | |
| 11 D/T | | | | 12 D/T | | | | 11 D/T | | | |
| | | | | | | | | | | | |
| 0.50 | J | 2.46 | J | 0.52 | J | 2.58 | J | 0.21 | U | 1.04 | U |
| 0.56 | J | 1.15 | J | 0.57 | J | 1.17 | J | 0.20 | U | 0.42 | U |
| 0.27 | U | 1.87 | U | 0.28 | U | 1.95 | U | 0.21 | U | 1.45 | U |
| 0.27 | U | 0.69 | U | 0.28 | U | 0.71 | U | 0.21 | U | 0.53 | U |
| 0.28 | U | 0.61 | U | 0.29 | U | 0.63 | U | 0.21 | U | 0.47 | U |
| 0.27 | U | 1.04 | U | 0.28 | U | 1.08 | U | 0.21 | U | 0.81 | U |
| 0.27 | U | 0.71 | U | 0.66 | J | 1.75 | J | 0.21 | U | 0.55 | U |
| **5.16** | | **9.72** | | **2.36** | | **4.45** | | 0.69 | U | 1.30 | U |
| 0.56 | J | 3.16 | J | **1.85** | | **10.41** | | 0.21 | U | 1.17 | U |
| **10.88** | | **25.84** | | **8.75** | | **20.77** | | **2.76** | | **6.56** | |
| 0.68 | U | 1.66 | U | 0.70 | U | 1.73 | U | 0.52 | U | 1.29 | U |
| 0.19 | U | 0.59 | U | 0.20 | U | 0.61 | U | 0.15 | U | 0.46 | U |
| 0.08 | U | 0.45 | U | 0.08 | U | 0.47 | U | 0.06 | U | 0.35 | U |
| 0.52 | U | 2.06 | U | 0.54 | U | 2.14 | U | 0.40 | U | 1.60 | U |
| 0.30 | U | 0.65 | U | 0.31 | U | 0.67 | U | 0.23 | U | 0.50 | U |
| 0.26 | U | 2.02 | U | 0.27 | U | 2.09 | U | 0.20 | U | 1.56 | U |
| 0.23 | U | 0.71 | U | 0.24 | U | 0.74 | U | 0.18 | U | 0.55 | U |
| **1.50** | | **5.22** | | 0.59 | J | 2.06 | J | 0.39 | J | 1.37 | J |
| 0.22 | U | 0.69 | U | 0.23 | U | 0.71 | U | 0.17 | U | 0.53 | U |
| 0.17 | U | 0.68 | U | 0.18 | U | 0.70 | U | 0.13 | U | 0.53 | U |
| 0.18 | U | 0.63 | U | 0.18 | U | 0.66 | U | 0.14 | U | 0.49 | U |
| 0.25 | U | 0.55 | U | 0.25 | U | 0.57 | U | 0.19 | U | 0.43 | U |
| 0.26 | U | 1.05 | U | 0.27 | U | 1.10 | U | 0.20 | U | 0.82 | U |
| 0.21 | U | 0.73 | U | 0.22 | U | 0.76 | U | 0.16 | U | 0.57 | U |
| 0.30 | J | 0.90 | J | 0.48 | J | 1.40 | J | 0.19 | J | 0.56 | J |
| 0.16 | U | 0.68 | U | 0.17 | U | 0.70 | U | 0.13 | U | 0.52 | U |
| 0.18 | U | 0.62 | U | 0.18 | U | 0.64 | U | 0.20 | J | 0.69 | J |
| 0.25 | U | 0.67 | U | 0.25 | U | 0.70 | U | 0.19 | U | 0.52 | U |
| 0.21 | U | 0.75 | U | 0.22 | U | 0.78 | U | 0.16 | U | 0.58 | U |
| 0.13 | U | 0.67 | U | 0.13 | U | 0.69 | U | 0.10 | U | 0.52 | U |
| 0.30 | U | 0.87 | U | 0.31 | U | 0.91 | U | 0.23 | U | 0.68 | U |
| 0.39 | U | 1.19 | U | 0.41 | U | 1.23 | U | 0.30 | U | 0.92 | U |

Table 2A. Summary of All Round #2 Ambient Air VOC and Odor Data (ppbv, ug/m3, and D/T).

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.27 | U | 1.05 | U | 0.28 | U | 1.09 | U | 0.21 | U | 0.82 | U |
| 0.21 | U | 0.98 | U | 0.22 | U | 1.01 | U | 0.16 | U | 0.76 | U |
| 0.26 | U | 1.28 | U | 0.27 | U | 1.33 | U | 0.20 | U | 1.00 | U |
| 0.26 | U | 1.44 | U | 0.27 | U | 1.49 | U | 0.20 | U | 1.11 | U |
| 0.27 | U | 1.08 | U | 0.28 | U | 1.12 | U | 0.21 | U | 0.83 | U |
| 0.16 | U | 0.71 | U | 0.16 | U | 0.74 | U | 0.12 | U | 0.55 | U |
| 0.18 | U | 0.63 | U | 0.19 | U | 0.65 | U | 0.14 | U | 0.49 | U |
| 0.53 | U | 1.70 | U | **0.88** | | **2.81** | | 0.41 | U | 1.32 | U |
| 0.26 | U | 1.65 | U | 0.27 | U | 1.72 | U | 0.20 | U | 1.28 | U |
| 0.13 | U | 0.60 | U | 0.13 | U | 0.63 | U | 0.10 | U | 0.47 | U |
| 0.14 | U | 0.59 | U | 0.15 | U | 0.61 | U | 0.11 | U | 0.46 | U |
| 0.27 | U | 1.23 | U | 0.28 | U | 1.28 | U | 0.21 | U | 0.95 | U |
| 0.49 | U | 1.75 | U | 0.50 | U | 1.81 | U | 0.38 | U | 1.35 | U |
| 0.09 | U | 0.63 | U | 0.09 | U | 0.66 | U | 0.07 | U | 0.49 | U |
| 0.27 | U | 1.43 | U | 0.28 | U | 1.48 | U | 0.21 | U | 1.11 | U |
| 0.10 | U | 0.64 | U | 0.10 | U | 0.66 | U | 0.07 | U | 0.50 | U |
| 0.16 | U | 0.66 | U | 0.17 | U | 0.68 | U | 0.12 | U | 0.51 | U |
| 0.18 | U | 0.74 | U | 0.19 | U | 0.76 | U | 0.14 | U | 0.57 | U |
| 0.27 | U | 1.24 | U | 0.28 | U | 1.29 | U | 0.21 | U | 0.96 | U |
| 0.57 | J | 2.13 | J | **0.82** | | **3.10** | | 1.03 | U | 3.88 | U |
| 0.27 | U | 1.22 | U | 0.28 | U | 1.26 | U | 0.21 | U | 0.94 | U |
| 0.26 | U | 1.44 | U | 0.27 | U | 1.49 | U | 0.20 | U | 1.11 | U |
| 0.14 | U | 0.66 | U | 0.15 | U | 0.69 | U | 0.11 | U | 0.51 | U |
| 0.17 | U | 0.69 | U | 0.18 | U | 0.72 | U | 0.13 | U | 0.53 | U |
| 0.16 | U | 0.72 | U | 0.16 | U | 0.75 | U | 0.12 | U | 0.56 | U |
| 0.13 | U | 0.60 | U | 0.13 | U | 0.63 | U | 0.10 | U | 0.47 | U |
| 0.09 | U | 0.81 | U | 0.10 | U | 0.84 | U | 0.07 | U | 0.63 | U |
| 0.27 | U | 2.06 | U | 0.28 | U | 2.14 | U | 0.21 | U | 1.60 | U |
| 0.26 | U | 1.78 | U | 0.27 | U | 1.85 | U | 0.20 | U | 1.38 | U |
| 0.26 | U | 1.21 | U | 0.27 | U | 1.26 | U | 0.20 | U | 0.94 | U |
| 0.10 | U | 0.67 | U | 0.10 | U | 0.70 | U | 0.08 | U | 0.52 | U |
| 0.27 | U | 1.16 | U | 0.28 | U | 1.21 | U | 0.21 | U | 0.90 | U |
| 0.53 | U | 2.31 | U | 0.55 | U | 2.40 | U | 0.82 | U | 3.58 | U |
| 0.11 | U | 0.59 | U | 0.12 | U | 0.62 | U | 0.09 | U | 0.46 | U |
| 0.27 | U | 1.13 | U | 0.28 | U | 1.18 | U | 0.21 | U | 0.88 | U |
| 0.06 | U | 0.66 | U | 0.07 | U | 0.68 | U | 0.05 | U | 0.51 | U |
| 0.26 | U | 1.14 | U | 0.27 | U | 1.19 | U | 0.20 | U | 0.89 | U |

Table 2A. Summary of All Round #2 Ambient Air VOC and Odor Data (ppbv, ug/m3, and D/T).

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.26 | U | 1.81 | U | 0.27 | U | 1.88 | U | 0.20 | U | 1.40 | U |
| 0.12 | U | 0.70 | U | 0.12 | U | 0.73 | U | 0.09 | U | 0.55 | U |
| 0.16 | U | 0.82 | U | 0.17 | U | 0.85 | U | 0.12 | U | 0.63 | U |
| 0.13 | U | 0.65 | U | 0.13 | U | 0.68 | U | 0.10 | U | 0.51 | U |
| 0.12 | U | 0.64 | U | 0.13 | U | 0.67 | U | 0.10 | U | 0.50 | U |
| 0.18 | U | 0.87 | U | 0.18 | U | 0.91 | U | 0.14 | U | 0.68 | U |
| 0.18 | U | 0.89 | U | 0.19 | U | 0.92 | U | 0.14 | U | 0.69 | U |
| 0.15 | U | 0.72 | U | 0.15 | U | 0.75 | U | 0.11 | U | 0.56 | U |
| 0.27 | U | 1.34 | U | 0.28 | U | 1.40 | U | 0.21 | U | 1.04 | U |
| 0.14 | J | 0.80 | J | 0.12 | U | 0.73 | U | 0.19 | U | 1.08 | U |
| 0.16 | U | 0.86 | U | 0.16 | U | 0.90 | U | 0.12 | U | 0.67 | U |
| 0.26 | U | 1.29 | U | 0.27 | U | 1.34 | U | 0.20 | U | 1.00 | U |
| 0.16 | U | 0.86 | U | 0.16 | U | 0.90 | U | 0.12 | U | 0.67 | U |
| 0.17 | U | 0.92 | U | 0.17 | U | 0.96 | U | 0.13 | U | 0.71 | U |
| 0.53 | U | 3.16 | U | 0.55 | U | 3.29 | U | 0.41 | U | 2.45 | U |
| 0.17 | U | 0.91 | U | 0.17 | U | 0.94 | U | 0.13 | U | 0.70 | U |
| 0.30 | U | 1.57 | U | 0.32 | U | 1.63 | U | 0.24 | U | 1.22 | U |
| 0.53 | U | 3.16 | U | 0.55 | U | 3.29 | U | 0.41 | U | 2.45 | U |
| 0.15 | U | 0.85 | U | 0.16 | U | 0.88 | U | 0.12 | U | 0.66 | U |
| 0.52 | U | 3.10 | U | 0.54 | U | 3.22 | U | 0.40 | U | 2.40 | U |
| 0.35 | U | 3.34 | U | 0.36 | U | 3.47 | U | 0.27 | U | 2.59 | U |
| 0.12 | U | 1.64 | U | 0.13 | U | 1.70 | U | 0.10 | U | 1.27 | U |
| 1.06 | U | 7.88 | U | 1.10 | U | 8.19 | U | 0.82 | U | 6.11 | U |
| 0.23 | U | 1.19 | U | 0.24 | U | 1.24 | U | 0.18 | U | 0.92 | U |
| 0.53 | U | 5.67 | U | 0.55 | U | 5.89 | U | 0.41 | U | 4.39 | U |

Table 2A.  Summary of All Round #2 Ambient Air VOC and Odor Data (ppbv, ug/m3, and D/T).

| COMPOUND |
| --- |
| |
| |
| **Odor (Dilution/Threshold)** |
| |
| Dichlorodifluoromethane |
| Chloromethane |
| Freon 114 |
| Vinyl chloride |
| 1,3-Butadiene |
| Bromomethane |
| Chloroethane |
| Ethanol |
| Trichlorofluoromethane |
| Acetone |
| 2-propanol |
| t-Butanol |
| Methyl iodide |
| 1,1-Dichloroethene |
| Acrylonitrile |
| Freon 113 |
| Allyl chloride |
| Dichloromethane |
| Carbon disulfide |
| trans-1,2-Dichloroethene |
| Methyl tert butyl ether |
| Propionitrile |
| 1,1-Dichloroethane |
| Vinyl acetate |
| 2-Butanone |
| Diisopropyl ether |
| Hexane |
| Methacrylonitrile |
| Ethyl acetate |
| Bromochloromethane |
| Tetrahydrofuran |
| Isobutyl alcohol |

Table 2A. Summary of All Round #2 Ambient Air VOC and Odor Data (ppbv, ug/m3, and D/T).

| |
|---|
| cis-1,2-Dichloroethene |
| 2,2-Dichloropropane |
| Chloroform |
| 1,1,1-Trichloroethane |
| 1,2-Dichloroethane |
| 1,1-Dichloropropene |
| Cyclohexane |
| Benzene |
| Carbon tetrachloride |
| 2,2,4-Trimethylpentane |
| n-Heptane |
| 1,2-Dichloropropane |
| 1,4 Dioxane |
| Dibromomethane |
| Trichloroethene |
| Bromodichloromethane |
| Methyl methacrylate |
| 4-Methyl-2-pentanone |
| cis-1,3-Dichloropropene |
| Toluene |
| trans-1,3-Dichloropropene |
| 1,1,2-Trichloroethane |
| Ethyl methacrylate |
| 2-Hexanone |
| 1,3-Dichloropropane |
| Octane |
| Dibromochloromethane |
| 1,2-Dibromoethane |
| Tetrachloroethene |
| Chlorobenzene |
| 1,1,1,2-Tetrachloroethane |
| Ethylbenzene |
| m,p-Xylenes |
| Nonane |
| Styrene |
| Bromoform |
| o-Xylene |

Table 2A. Summary of All Round #2 Ambient Air VOC and Odor Data (ppbv, ug/m3, and D/T).

| |
|---|
| 1,1,2,2-Tetrachloroethane |
| 1,2,3-Trichloropropane |
| t-1,4-Dichloro-2-butene |
| 2-Chlorotoluene |
| 4-Chlorotoluene |
| n-Propylbenzene |
| Isopropylbenzene |
| 4-Ethyltoluene |
| 1,3,5-Trimethylbenzene |
| Decane |
| tert-butyl benzene |
| 1,2,4-Trimethylbenzene |
| i-Butylbenzene |
| sec-butylbenzene |
| 1,3-Dichlorobenzene |
| Isopropyltoluene |
| Benzyl chloride |
| 1,4-Dichlorobenzene |
| n-Butylbenzene |
| 1,2-Dichlorobenzene |
| 1,2-Dibromo-3-chloropropane |
| Tetraethyl lead |
| 1,2,4-Trichlorobenzene |
| Naphthalene |
| Hexachlorobutadiene |

Table 2B. Summary of Round #2 Ambient Air VOC and Odor Data Above Reporting Limits (ppbv, ug/m3, D/T).

| METHOD | COMPOUND | A-C-23C | | A-C-23C | | A-C-22E | | A-C-22E | | A-C-20B |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Undist Tile | | Undist Tile | | Undist Tile | | Undist Tile | | Undist Tile |
| | | (ppbv) | | (ug/m3) | | (ppbv) | | (ug/m3) | | (ppbv) |
| Odor Panel | Odor (Dilution/Threshold) | 10 D/T | | | | 10 D/T | | | | 14 D/T |
| | | | | | | | | | | |
| TO-15 | Chloromethane | 0.27 | U | 0.56 | U | **1.02** | | **2.12** | | 0.27 |
| TO-15 | Ethanol | 0.92 | U | 1.74 | U | **11.97** | | **22.56** | | 0.89 |
| TO-15 | Trichlorofluoromethane | 0.47 | J | 2.63 | J | 0.45 | J | 2.54 | J | 0.55 |
| TO-15 | Acetone | 7.91 | B | 18.78 | B | **197.30** | E | **468.61** | E | **8.95** |
| TO-15 | Dichloromethane | 0.67 | J | 2.33 | J | 0.64 | J | 2.23 | J | **0.72** |
| TO-15 | Carbon disulfide | 0.23 | U | 0.71 | U | 0.23 | U | 0.71 | U | **0.97** |
| TO-15 | Vinyl acetate | 0.22 | U | 0.76 | U | 0.27 | J | 0.94 | J | 0.21 |
| TO-15 | 2-Butanone | **0.93** | | **2.75** | | **19.05** | | **56.14** | | **0.85** |
| TO-15 | Benzene | 0.55 | U | 1.76 | U | **1.16** | | **3.69** | | 0.54 |
| TO-15 | Toluene | **0.84** | | **3.15** | | 0.55 | U | 2.08 | U | 0.54 |
| TO-15 | 2-Hexanone | 0.18 | U | 0.72 | U | **0.45** | | **1.83** | | 0.17 |
| TO-15 | 1,2,4-Trimethylbenzene | 0.27 | U | 1.34 | U | 0.27 | U | 1.34 | U | 0.27 |

**Bold**- levels above reporting limits (RL)
J- level above MDL but below RL
U- level below MDL
B- compound found in lab blank
R- sample replicate
Yellow highlighted samples indicate one or more samples reported above RL for the data set.

Table 2B. Summary of Round #2 Ambient Air VOC and Odor Data Above Reporting Limits (ppbv, ug/m3, D/T).

| | A-C-20B | | A-C-19A | | A-C-19A | | A-C-17A | | A-C-17A | | A-C-14B | | A-C-14B | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Undist Tile | | Undist Tile | | Undist Tile | | Undist Tile | | Undist Tile | | Undist Tile | | Undist Tile | |
| | (ug/m3) | | (ppbv) | | (ug/m3) | | (ppbv) | | (ug/m3) | | (ppbv) | | (ug/m3) | |
| | | | 13 D/T | | | | 15 D/T | | | | 10 D/T | | | |
| | | | | | | | | | | | | | | |
| U | 0.55 | U | 0.26 | U | 0.54 | U | **1.85** | | **3.81** | | 0.53 | J | 1.10 | J |
| U | 1.69 | U | 0.89 | U | 1.67 | U | **10.25** | | **19.32** | | **22.30** | | **42.03** | |
| J | 3.07 | J | 0.47 | J | 2.62 | J | 0.59 | J | 3.29 | J | 0.55 | J | 3.07 | J |
| | **21.25** | | 9.65 | B | 22.91 | B | **111.71** | E | **265.32** | E | **9.48** | | **22.52** | |
| | **2.50** | | 0.64 | J | 2.22 | J | **1.04** | | **3.60** | | **0.86** | | **2.99** | |
| | **3.02** | | 0.22 | U | 0.69 | U | 0.22 | U | 0.70 | U | 0.22 | U | 0.67 | U |
| U | 0.74 | U | 0.21 | U | 0.73 | U | **0.90** | | **3.16** | | 0.20 | U | 0.72 | U |
| | **2.51** | | **1.24** | | **3.64** | | **14.41** | | **42.47** | | **0.91** | | **2.68** | |
| U | 1.71 | U | 0.53 | U | 1.70 | U | 0.54 | U | 1.72 | U | 0.52 | U | 1.66 | U |
| U | 2.02 | U | **1.01** | | **3.79** | | **0.83** | | **3.12** | | 0.62 | J | 2.32 | J |
| U | 0.70 | U | 0.17 | U | 0.69 | U | 0.33 | J | 1.37 | J | 0.16 | U | 0.67 | U |
| U | 1.30 | U | 0.26 | U | 1.29 | U | **0.75** | | **3.67** | | 0.26 | U | 1.26 | U |

Table 2B. Summary of Round #2 Ambient Air VOC and Odor Data Above Reporting Limits (ppbv, ug/m3, D/T).

| A-C-7B | | A-C-7B | | A-C-4B | | A-C-4B | | SF-MB-1-C | | SF-MB-1-C | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Undist Tile | | Undist Tile | | Undist Tile | | Undist Tile | | Media Blank | | Media Blank | |
| (ppbv) | | (ug/m3) | | (ppbv) | | (ug/m3) | | (ppbv) | | (ug/m3) | |
| 11 D/T | | | | 12 D/T | | | | 11 D/T | | | |
| | | | | | | | | | | | |
| 0.56 | J | 1.15 | J | 0.57 | J | 1.17 | J | 0.20 | U | 0.42 | U |
| **5.16** | | **9.72** | | **2.36** | | **4.45** | | 0.69 | U | 1.30 | U |
| 0.56 | J | 3.16 | J | **1.85** | | **10.41** | | 0.21 | U | 1.17 | U |
| **10.88** | | **25.84** | | **8.75** | | **20.77** | | **2.76** | | **6.56** | |
| **1.50** | | **5.22** | | 0.59 | J | 2.06 | J | 0.39 | J | 1.37 | J |
| 0.22 | U | 0.69 | U | 0.23 | U | 0.71 | U | 0.17 | U | 0.53 | U |
| 0.21 | U | 0.73 | U | 0.22 | U | 0.76 | U | 0.16 | U | 0.57 | U |
| 0.30 | J | 0.90 | J | 0.48 | J | 1.40 | J | 0.19 | J | 0.56 | J |
| 0.53 | U | 1.70 | U | **0.88** | | **2.81** | | 0.41 | U | 1.32 | U |
| 0.57 | J | 2.13 | J | **0.82** | | **3.10** | | 1.03 | U | 3.88 | U |
| 0.17 | U | 0.69 | U | 0.18 | U | 0.72 | U | 0.13 | U | 0.53 | U |
| 0.26 | U | 1.29 | U | 0.27 | U | 1.34 | U | 0.20 | U | 1.00 | U |

Table 2B. Summary of Round #2 Ambient Air VOC and Odor Data Above Reporting Limits (ppbv, ug/m3, D/T).

| COMPOUND | MAXIMUM DETECTED (ppbv) |
|---|---|
| **Odor (Dilution/Threshold)** | 14 |
| | |
| Chloromethane | 1.9 |
| Ethanol | 22 |
| Trichlorofluoromethane | 1.9 |
| Acetone | 200 |
| Dichloromethane | 1.5 |
| Carbon disulfide | 0.97 |
| Vinyl acetate | 0.90 |
| 2-Butanone | 19 |
| Benzene | 1.2 |
| Toluene | 1.0 |
| 2-Hexanone | 0.45 |
| 1,2,4-Trimethylbenzene | 0.75 |


| COMPOUND | MAXIMUM DETECTED (ppbv) |
|---|---|
| **Odor (Dilution/Threshold)** | 14 |
| | |
| Chloromethane | 1.9 |
| Ethanol | 22 |
| Trichlorofluoromethane | 1.9 |
| Acetone | 200 |
| Dichloromethane | 1.5 |
| Carbon disulfide | 0.97 |
| Vinyl acetate | 0.90 |
| 2-Butanone | 19 |
| Benzene | 1.2 |
| Toluene | 1.0 |
| 2-Hexanone | 0.45 |
| 1,2,4-Trimethylbenzene | 0.75 |

Table 2C. Summary of SIM Compounds by TO-15; Concentration Data (ppbv, ug/m3).

| METHOD | COMPOUND | A-C-23C | | A-C-23C | | A-C-22E | | A-C-22E | | A-C-20B |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Undist Tile | | Undist Tile | | Undist Tile | | Undist Tile | | Undist Tile |
| | | (ppbv) | | (ug/m3) | | (ppbv) | | (ug/m3) | | (ppbv) |
| Odor Panel | Odor (Dilution/Threshold) | 10 D/T | | | | 10 D/T | | | | 14 D/T |
| | | | | | | | | | | |
| TO-15 SIM | Dichloromethane | 2.560 | E | 8.884 | E | 1.338 | E | 4.645 | E | 0.606 |
| TO-15 SIM | Benzene | 0.875 | E | 2.794 | E | 0.863 | E | 2.754 | E | 0.445 |
| TO-15 SIM | Toluene | 1.073 | E | 4.039 | E | 0.237 | E | 0.892 | E | 0.341 |
| TO-15 SIM | tert-butyl benzene | 0.041 | U | 0.224 | U | 0.041 | U | 0.224 | U | 0.019 |

**Bold**- levels above reporting limits (RL)
J- level above MDL but below RL
U- level below MDL
B- compound found in lab blank
R- sample replicate
Yellow highlighted samples indicate one or more samples reported above RL for the data set.

Table 2C. Summary of SIM Compounds by TO-15; Concentration Data (ppbv, ug/m3).

| | A-C-20B | | A-C-19A | | A-C-19A | | A-C-17A | | A-C-17A | | A-C-14B | | A-C-14B | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Undist Tile | | Undist Tile | | Undist Tile | | Undist Tile | | Undist Tile | | Undist Tile | | Undist Tile | |
| | (ug/m3) | | (ppbv) | | (ug/m3) | | (ppbv) | | (ug/m3) | | (ppbv) | | (ug/m3) | |
| | | | 13 D/T | | | | 15 D/T | | | | 10 D/T | | | |
| | | | | | | | | | | | | | | |
| | 2.103 | | 0.198 | | 0.687 | | 0.269 | E | 0.932 | E | 0.703 | | 2.440 | |
| | 1.422 | | 0.248 | | 0.791 | | 0.107 | E | 0.342 | E | 0.186 | | 0.595 | |
| | 1.286 | | 0.655 | | 2.466 | | 0.762 | E | 2.867 | E | 0.442 | | 1.663 | |
| J | 0.103 | J | 0.016 | U | 0.086 | U | 0.016 | U | 0.088 | U | 0.015 | U | 0.084 | U |

Table 2C. Summary of SIM Compounds by TO-15; Concentration Data (ppbv, ug/m3).

| A-C-7B | | A-C-7B | | A-C-4B | | A-C-4B | | SF-MB-1-C | | SF-MB-1-C | | COMPOUND |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Undist Tile | | Undist Tile | | Undist Tile | | Undist Tile | | Media Blank | | Media Blank | | |
| (ppbv) | | (ug/m3) | | (ppbv) | | (ug/m3) | | (ppbv) | | (ug/m3) | | |
| 11 D/T | | | | 12 D/T | | | | 11 D/T | | | | Odor (Dilution/Threshold) |
| | | | | | | | | | | | | |
| 0.697 | | 2.418 | | 0.169 | | 0.587 | | 0.217 | | 0.754 | | Dichloromethane |
| 0.195 | | 0.624 | | 0.339 | | 1.083 | | 0.021 | U | 0.066 | U | Benzene |
| 0.340 | | 1.281 | | 0.693 | | 2.611 | | 0.021 | U | 0.078 | U | Toluene |
| 0.016 | U | 0.086 | U | 0.016 | U | 0.090 | U | 0.012 | U | 0.067 | U | tert-butyl benzene |

| COMPOUND |
|---|
| |
| |
| Odor (Dilution/Threshold) |
| |
| Dichloromethane |
| Benzene |
| Toluene |
| tert-butyl benzene |

Table 2C. Summary of SIM Compounds by TO-15; Concentration Data (ppbv, ug/m3).

| MAXIMUM DETECTED (ppbv) | |
|---|---|
| 14 | |
| | |
| 2.6 | E |
| 0.88 | E |
| 1.1 | E |
| 0.019 | J |

| MAXIMUM DETECTED (ppbv) | |
|---|---|
| 14 | |
| | |
| 2.6 | E |
| 0.88 | E |
| 1.1 | E |
| 0.019 | J |

Table 2D. Comparison of Round #2 (Top) Ambient Data to Round #1 (Bottom) Ambient Data.

| METHOD | COMPOUND | A-C-23C | | A-C-23C | | A-C-22E | | A-C-22E | | A-C-20B |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Undist Tile | | Undist Tile | | Undist Tile | | Undist Tile | | Undist Tile |
| | Round #2 Ambient Data | (ppbv) | | (ug/m3) | | (ppbv) | | (ug/m3) | | (ppbv) |
| Odor Panel | Odor (Dilution/Threshold) | 10 D/T | | | | 10 D/T | | | | 14 D/T |
| | | | | | | | | | | |
| TO-15 | Chloromethane | 0.27 | U | 0.56 | U | **1.02** | | **2.12** | | 0.27 |
| TO-15 | Ethanol | 0.92 | U | 1.74 | U | **11.97** | | **22.56** | | 0.89 |
| TO-15 | Trichlorofluoromethane | 0.47 | J | 2.63 | J | 0.45 | J | 2.54 | J | 0.55 |
| TO-15 | Acetone | 7.91 | B | 18.78 | B | **197.30** | E | **468.61** | E | **8.95** |
| TO-15 | Dichloromethane | 0.67 | J | 2.33 | J | 0.64 | J | 2.23 | J | **0.72** |
| TO-15 | Carbon disulfide | 0.23 | U | 0.71 | U | 0.23 | U | 0.71 | U | **0.97** |
| TO-15 | Vinyl acetate | 0.22 | U | 0.76 | U | 0.27 | J | 0.94 | J | 0.21 |
| TO-15 | 2-Butanone | **0.93** | | **2.75** | | **19.05** | | **56.14** | | **0.85** |
| TO-15 | Benzene | 0.55 | U | 1.76 | U | **1.16** | | **3.69** | | 0.54 |
| TO-15 | Toluene | **0.84** | | **3.15** | | 0.55 | U | 2.08 | U | 0.54 |
| TO-15 | 2-Hexanone | 0.18 | U | 0.72 | U | **0.45** | | **1.83** | | 0.17 |
| TO-15 | 1,2,4-Trimethylbenzene | 0.27 | U | 1.34 | U | 0.27 | U | 1.34 | U | 0.27 |

| METHOD | COMPOUND | AA-21B-01-C | | AA-21B-01-C | | AA-19B-01-C | | AA-19B-01-C | | AA-22B-01-C |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 21B Scraped | | 21B Scraped | | 19B Adhesive | | 19B Adhesive | | 22B Undisturb |
| | Round #1 Ambient Data | (ppbv) | | (ug/m3) | | (ppbv) | | (ug/m3) | | (ppbv) |
| Odor Panel | Odor (Dilution/Threshold) | 13 D/T | | | | 11 D/T | | | | 16 D/T |
| | | | | | | | | | | |
| TO-15 | Acetone | **10.12** | | **24.04** | | **10.14** | | **24.09** | | **8.08** |
| TO-15 | 2-Butanone | 0.23 | U | 0.67 | U | **0.74** | | **2.17** | | 0.55 |
| TO-15 | Benzene | 0.25 | U | 0.80 | U | **1.73** | | **5.54** | | 0.36 |

**Bold**- levels above reporting limits (RL)
J- level above MDL but below RL
U- level below MDL
R- sample replicate
Yellow highlighted samples indicate one or more samples reported above RL for the data set.

Table 2D. Comparison of Round #2 (Top) Ambient Data to Round #1 (Bottom) Ambient Data.

| | A-C-20B | | A-C-19A | | A-C-19A | | A-C-17A | | A-C-17A | | A-C-14B | | A-C-14B | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Undist Tile | | Undist Tile | | Undist Tile | | Undist Tile | | Undist Tile | | Undist Tile | | Undist Tile | |
| | (ug/m3) | | (ppbv) | | (ug/m3) | | (ppbv) | | (ug/m3) | | (ppbv) | | (ug/m3) | |
| | | | 13 D/T | | | | 15 D/T | | | | 10 D/T | | | |
| | | | | | | | | | | | | | | |
| U | 0.55 | U | 0.26 | U | 0.54 | U | **1.85** | | **3.81** | | 0.53 | J | 1.10 | J |
| U | 1.69 | U | 0.89 | U | 1.67 | U | **10.25** | | **19.32** | | **22.30** | | **42.03** | |
| J | 3.07 | J | 0.47 | J | 2.62 | J | 0.59 | J | 3.29 | J | 0.55 | J | 3.07 | J |
| | **21.25** | | 9.65 | B | 22.91 | B | **111.71** | E | **265.32** | E | **9.48** | | **22.52** | |
| | **2.50** | | 0.64 | J | 2.22 | J | **1.04** | | **3.60** | | **0.86** | | **2.99** | |
| | **3.02** | | 0.22 | U | 0.69 | U | 0.22 | U | 0.70 | U | 0.22 | U | 0.67 | U |
| U | 0.74 | U | 0.21 | U | 0.73 | U | **0.90** | | **3.16** | | 0.20 | U | 0.72 | U |
| | **2.51** | | **1.24** | | **3.64** | | **14.41** | | **42.47** | | **0.91** | | **2.68** | |
| U | 1.71 | U | 0.53 | U | 1.70 | U | 0.54 | U | 1.72 | U | 0.52 | U | 1.66 | U |
| U | 2.02 | U | **1.01** | | **3.79** | | **0.83** | | **3.12** | | 0.62 | J | 2.32 | J |
| U | 0.70 | U | 0.17 | U | 0.69 | U | 0.33 | J | 1.37 | J | 0.16 | U | 0.67 | U |
| U | 1.30 | U | 0.26 | U | 1.29 | U | **0.75** | | **3.67** | | 0.26 | U | 1.26 | U |

| | AA-22B-01-C | | AA-22B-02-C | | AA-22B-02-C | | SF-BLK-01-C | | SF-BLK-01-C | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 22B Undisturb | | 22B Adhesive | | 22B Adhesive | | Method Blk | | Method Blk | |
| | (ug/m3) | | (ppbv) | | (ug/m3) | | (ppbv) | | (ug/m3) | |
| | | | 12 D/T | | | | 10 D/T | | | |
| | | | | | | | | | | |
| | **19.19** | | **12.19** | | **28.94** | | 0.56 | J | 1.32 | J |
| J | 1.63 | J | **0.61** | | **1.81** | | 0.19 | U | 0.57 | U |
| J | 1.16 | J | **1.78** | | **5.68** | | 0.21 | U | 0.68 | U |

Table 2D. Comparison of Round #2 (Top) Ambient Data to Round #1 (Bottom) Ambient Data.

| A-C-7B | | A-C-7B | | A-C-4B | | A-C-4B | | SF-MB-1-C | | SF-MB-1-C | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Undist Tile | | Undist Tile | | Undist Tile | | Undist Tile | | Media Blank | | Media Blank | |
| (ppbv) | | (ug/m3) | | (ppbv) | | (ug/m3) | | (ppbv) | | (ug/m3) | |
| 11 D/T | | | | 12 D/T | | | | 11 D/T | | | |
| | | | | | | | | | | | |
| 0.56 | J | 1.15 | J | 0.57 | J | 1.17 | J | 0.20 | U | 0.42 | U |
| **5.16** | | **9.72** | | **2.36** | | **4.45** | | 0.69 | U | 1.30 | U |
| 0.56 | J | 3.16 | J | **1.85** | | **10.41** | | 0.21 | U | 1.17 | U |
| **10.88** | | **25.84** | | **8.75** | | **20.77** | | **2.76** | | **6.56** | |
| **1.50** | | **5.22** | | 0.59 | J | 2.06 | J | 0.39 | J | 1.37 | J |
| 0.22 | U | 0.69 | U | 0.23 | U | 0.71 | U | 0.17 | U | 0.53 | U |
| 0.21 | U | 0.73 | U | 0.22 | U | 0.76 | U | 0.16 | U | 0.57 | U |
| 0.30 | J | 0.90 | J | 0.48 | J | 1.40 | J | 0.19 | J | 0.56 | J |
| 0.53 | U | 1.70 | U | **0.88** | | **2.81** | | 0.41 | U | 1.32 | U |
| 0.57 | J | 2.13 | J | **0.82** | | **3.10** | | 1.03 | U | 3.88 | U |
| 0.17 | U | 0.69 | U | 0.18 | U | 0.72 | U | 0.13 | U | 0.53 | U |
| 0.26 | U | 1.29 | U | 0.27 | U | 1.34 | U | 0.20 | U | 1.00 | U |

Table 2D. Comparison of Round #2 (Top) Ambient Data to Round #1 (Bottom) Ambient Data.

| COMPOUND | MAXIMUM | |
|---|---|---|
| | DETECTED | |
| | | |
| Odor (Dilution/Threshold) | 14 D/T | |
| | (ppbv) | |
| Chloromethane | 1.85 | |
| Ethanol | 22.30 | |
| Trichlorofluoromethane | 1.85 | |
| Acetone | 197.30 | E |
| Dichloromethane | 1.50 | |
| Carbon disulfide | 0.97 | |
| Vinyl acetate | 0.90 | |
| 2-Butanone | 19.05 | |
| Benzene | 1.16 | |
| Toluene | 1.01 | |
| 2-Hexanone | 0.45 | |
| 1,2,4-Trimethylbenzene | 0.75 | |

| COMPOUND | MAXIMUM | |
|---|---|---|
| | DETECTED | |
| Odor (Dilution/Threshold) | 14 D/T | |
| | (ppbv) | |
| Chloromethane | 1.85 | |
| Ethanol | 22.30 | |
| Trichlorofluoromethane | 1.85 | |
| Acetone | 197.30 | E |

Table 2D. Comparison of Round #2 (Top) Ambient Data to Round #1 (Bottom) Ambient Data.

| | | |
|---|---|---|
| Dichloromethane | **1.50** | |
| Carbon disulfide | **0.97** | |
| Vinyl acetate | **0.90** | |
| 2-Butanone | **19.05** | |
| Benzene | **1.16** | |
| Toluene | **1.01** | |
| 2-Hexanone | **0.45** | |
| 1,2,4-Trimethylbenzene | **0.75** | |

Table 3A. Summary of All Round #2 Flux Data for VOCs and Odor (ug/m2,min-1 and D/T per m2,min-1).

| METHOD | COMPOUND | SF-23C-1-C | | SF-23C-2-C | | SF-22E-1-C | | SF-22E-2-C | |
|---|---|---|---|---|---|---|---|---|---|
| | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | |
| | | Tile Seams | | Tile Seams | | Tile Seams | | Tile Seams | |
| | Round #2 Flux Testing | Location #1 | | Location #2 | | Location #1 | | Location #2 | |
| Odor Panel | Odor (D/T)/m2,min-1 | 0.58 | | 0.65 | | 0.50 | | 0.58 | |
| | | | | | | | | | |
| TO-15 | Dichlorodifluoromethane | 0.051 | U | 0.052 | U | 0.051 | U | 0.05236 | U |
| TO-15 | Chloromethane | 0.021 | U | 0.021 | U | 0.021 | U | 0.021175 | U |
| TO-15 | Freon 114 | 0.072 | U | 0.073 | U | 0.072 | U | 0.07315 | U |
| TO-15 | Vinyl chloride | 0.026 | U | 0.027 | U | 0.026 | U | 0.02695 | U |
| TO-15 | 1,3-Butadiene | 0.023 | U | 0.024 | U | 0.023 | U | 0.02387 | U |
| TO-15 | Bromomethane | 0.040 | U | 0.041 | U | 0.040 | U | 0.04081 | U |
| TO-15 | Chloroethane | 0.027 | U | 0.028 | U | 0.027 | U | 0.02772 | U |
| TO-15 | Ethanol | 0.064 | U | 0.089 | J | 0.064 | U | 0.103565 | J |
| TO-15 | Trichlorofluoromethane | 0.058 | U | 0.059 | U | 0.058 | U | 0.058905 | U |
| TO-15 | Acetone | **0.593** | | **0.472** | | 0.262 | J | **0.34881** | |
| TO-15 | 2-propanol | 0.064 | U | 0.065 | U | 0.064 | U | 0.065065 | U |
| TO-15 | t-Butanol | 0.022 | U | 0.023 | U | 0.022 | U | 0.0231 | U |
| TO-15 | Methyl iodide | 0.017 | U | 0.018 | U | 0.017 | U | 0.01771 | U |
| TO-15 | 1,1-Dichloroethene | 0.079 | U | 0.081 | U | 0.079 | U | 0.08085 | U |
| TO-15 | Acrylonitrile | 0.025 | U | 0.025 | U | 0.025 | U | 0.02541 | U |
| TO-15 | Freon 113 | 0.077 | U | 0.079 | U | 0.077 | U | 0.078925 | U |
| TO-15 | Allyl chloride | 0.027 | U | 0.028 | U | 0.027 | U | 0.028105 | U |
| TO-15 | Dichloromethane | 0.057 | J | 0.069 | J | 0.063 | J | 0.135135 | J |
| TO-15 | Carbon disulfide | 0.026 | U | 0.027 | U | 0.026 | U | 0.02695 | U |
| TO-15 | trans-1,2-Dichloroethene | 0.026 | U | 0.027 | U | 0.026 | U | 0.026565 | U |
| TO-15 | Methyl tert butyl ether | 0.024 | U | 0.025 | U | 0.024 | U | 0.02464 | U |
| TO-15 | Propionitrile | 0.021 | U | 0.022 | U | 0.021 | U | 0.02156 | U |
| TO-15 | 1,1-Dichloroethane | 0.040 | U | 0.041 | U | 0.040 | U | 0.041195 | U |
| TO-15 | Vinyl acetate | 0.028 | U | 0.029 | U | 0.028 | U | 0.028875 | U |
| TO-15 | 2-Butanone | 0.027 | U | 0.099 | J | 0.084 | J | 0.045815 | J |
| TO-15 | Diisopropyl ether | 0.026 | U | 0.027 | U | 0.026 | U | 0.026565 | U |
| TO-15 | Hexane | 0.023 | U | 0.024 | U | 0.023 | U | 0.024255 | U |
| TO-15 | Methacrylonitrile | 0.026 | U | 0.026 | U | 0.026 | U | 0.02618 | U |
| TO-15 | Ethyl acetate | 0.028 | U | 0.029 | U | 0.028 | U | 0.02926 | U |
| TO-15 | Bromochloromethane | 0.025 | U | 0.026 | U | 0.025 | U | 0.02618 | U |
| TO-15 | Tetrahydrofuran | 0.033 | U | 0.034 | U | 0.033 | U | 0.034265 | U |

Table 3A. Summary of All Round #2 Flux Data for VOCs and Odor (ug/m2,min-1 and D/T per m2,min-1).

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **TO-15** | Isobutyl alcohol | 0.045 | U | 0.047 | U | 0.045 | U | 0.046585 | U |
| **TO-15** | cis-1,2-Dichloroethene | 0.040 | U | 0.041 | U | 0.040 | U | 0.041195 | U |
| **TO-15** | 2,2-Dichloropropane | 0.037 | U | 0.038 | U | 0.037 | U | 0.038115 | U |
| **TO-15** | Chloroform | 0.049 | U | 0.050 | U | 0.049 | U | 0.05005 | U |
| **TO-15** | 1,1,1-Trichloroethane | 0.055 | U | 0.056 | U | 0.055 | U | 0.05621 | U |
| **TO-15** | 1,2-Dichloroethane | 0.041 | U | 0.042 | U | 0.041 | U | 0.041965 | U |
| **TO-15** | 1,1-Dichloropropene | 0.027 | U | 0.028 | U | 0.027 | U | 0.02772 | U |
| **TO-15** | Cyclohexane | 0.024 | U | 0.025 | U | 0.024 | U | 0.02464 | U |
| **TO-15** | Benzene | 0.065 | U | 0.066 | U | 0.066 | J | 0.075075 | J |
| **TO-15** | Carbon tetrachloride | 0.063 | U | 0.065 | U | 0.063 | U | 0.06468 | U |
| **TO-15** | 2,2,4-Trimethylpentane | 0.023 | U | 0.023 | U | 0.023 | J | 0.023485 | U |
| **TO-15** | n-Heptane | 0.023 | U | 0.023 | U | 0.023 | U | 0.0231 | U |
| **TO-15** | 1,2-Dichloropropane | 0.047 | U | 0.048 | U | 0.047 | U | 0.048125 | U |
| **TO-15** | 1,4 Dioxane | 0.067 | U | 0.068 | U | 0.067 | U | 0.068145 | U |
| **TO-15** | Dibromomethane | 0.024 | U | 0.025 | U | 0.024 | U | 0.02464 | U |
| **TO-15** | Trichloroethene | 0.055 | U | 0.056 | U | 0.055 | U | 0.055825 | U |
| **TO-15** | Bromodichloromethane | 0.024 | U | 0.025 | U | 0.024 | U | 0.025025 | U |
| **TO-15** | Methyl methacrylate | 0.025 | U | 0.026 | U | 0.025 | U | 0.025795 | U |
| **TO-15** | 4-Methyl-2-pentanone | 0.028 | U | 0.029 | U | 0.028 | U | 0.028875 | U |
| **TO-15** | cis-1,3-Dichloropropene | 0.047 | U | 0.049 | U | 0.047 | U | 0.04851 | U |
| **TO-15** | Toluene | 0.191 | U | 0.196 | U | 0.191 | U | 0.19558 | U |
| **TO-15** | trans-1,3-Dichloropropene | 0.047 | U | 0.048 | U | 0.047 | U | 0.04774 | U |
| **TO-15** | 1,1,2-Trichloroethane | 0.055 | U | 0.056 | U | 0.055 | U | 0.05621 | U |
| **TO-15** | Ethyl methacrylate | 0.025 | U | 0.026 | U | 0.025 | U | 0.025795 | U |
| **TO-15** | 2-Hexanone | 0.026 | U | 0.027 | U | 0.026 | U | 0.02695 | U |
| **TO-15** | 1,3-Dichloropropane | 0.028 | U | 0.028 | U | 0.028 | U | 0.028105 | U |
| **TO-15** | Octane | 0.023 | U | 0.023 | U | 0.023 | U | 0.023485 | U |
| **TO-15** | Dibromochloromethane | 0.031 | U | 0.032 | U | 0.031 | U | 0.03157 | U |
| **TO-15** | 1,2-Dibromoethane | 0.079 | U | 0.080 | U | 0.079 | U | 0.080465 | U |
| **TO-15** | Tetrachloroethene | 0.068 | U | 0.070 | U | 0.068 | U | 0.069685 | U |
| **TO-15** | Chlorobenzene | 0.046 | U | 0.047 | U | 0.046 | U | 0.047355 | U |
| **TO-15** | 1,1,1,2-Tetrachloroethane | 0.026 | U | 0.026 | U | 0.026 | U | 0.02618 | U |
| **TO-15** | Ethylbenzene | 0.045 | U | 0.045 | U | 0.045 | U | 0.04543 | U |
| **TO-15** | m,p-Xylenes | 0.176 | U | 0.181 | U | 0.176 | U | 0.180565 | U |
| **TO-15** | Nonane | 0.023 | U | 0.023 | U | 0.023 | U | 0.0231 | U |
| **TO-15** | Styrene | 0.043 | U | 0.044 | U | 0.043 | U | 0.044275 | U |
| **TO-15** | Bromoform | 0.025 | U | 0.026 | U | 0.025 | U | 0.025795 | U |

Table 3A. Summary of All Round #2 Flux Data for VOCs and Odor (ug/m2,min-1 and D/T per m2,min-1).

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **TO-15** | o-Xylene | 0.044 | U | 0.045 | U | 0.044 | U | 0.04466 | U |
| **TO-15** | 1,1,2,2-Tetrachloroethane | 0.069 | U | 0.070 | U | 0.069 | U | 0.070455 | U |
| **TO-15** | 1,2,3-Trichloropropane | 0.027 | U | 0.028 | U | 0.027 | U | 0.02772 | U |
| **TO-15** | t-1,4-Dichloro-2-butene | 0.031 | U | 0.032 | U | 0.031 | U | 0.031955 | U |
| **TO-15** | 2-Chlorotoluene | 0.025 | U | 0.025 | U | 0.025 | U | 0.02541 | U |
| **TO-15** | 4-Chlorotoluene | 0.025 | U | 0.025 | U | 0.025 | U | 0.025025 | U |
| **TO-15** | n-Propylbenzene | 0.033 | U | 0.034 | U | 0.033 | U | 0.034265 | U |
| **TO-15** | Isopropylbenzene | 0.034 | U | 0.035 | U | 0.034 | U | 0.03465 | U |
| **TO-15** | 4-Ethyltoluene | 0.027 | U | 0.028 | U | 0.027 | U | 0.028105 | U |
| **TO-15** | 1,3,5-Trimethylbenzene | 0.051 | U | 0.052 | U | 0.051 | U | 0.05236 | U |
| **TO-15** | Decane | 0.054 | U | 0.055 | U | 0.054 | U | 0.05467 | U |
| **TO-15** | tert-butyl benzene | 0.033 | U | 0.034 | U | 0.033 | U | 0.03388 | U |
| **TO-15** | 1,2,4-Trimethylbenzene | 0.049 | U | 0.050 | U | 0.049 | U | 0.050435 | U |
| **TO-15** | i-Butylbenzene | 0.033 | U | 0.034 | U | 0.033 | U | 0.03388 | U |
| **TO-15** | sec-butylbenzene | 0.035 | U | 0.036 | U | 0.035 | U | 0.035805 | U |
| **TO-15** | 1,3-Dichlorobenzene | 0.121 | U | 0.124 | U | 0.121 | U | 0.123585 | U |
| **TO-15** | Isopropyltoluene | 0.035 | U | 0.035 | U | 0.035 | U | 0.03542 | U |
| **TO-15** | Benzyl chloride | 0.060 | U | 0.061 | U | 0.060 | U | 0.061215 | U |
| **TO-15** | 1,4-Dichlorobenzene | 0.121 | U | 0.124 | U | 0.121 | U | 0.123585 | U |
| **TO-15** | n-Butylbenzene | 0.032 | U | 0.033 | U | 0.032 | U | 0.03311 | U |
| **TO-15** | 1,2-Dichlorobenzene | 0.119 | U | 0.121 | U | 0.119 | U | 0.121275 | U |
| **TO-15** | 1,2-Dibromo-3-chloropropane | 0.127 | U | 0.131 | U | 0.127 | U | 0.130515 | U |
| **TO-15** | Tetraethyl lead | 0.062 | U | 0.064 | U | 0.062 | U | 0.06391 | U |
| **TO-15** | 1,2,4-Trichlorobenzene | 0.301 | U | 0.308 | U | 0.301 | U | 0.308 | U |
| **TO-15** | Naphthalene | 0.045 | U | 0.047 | U | 0.045 | U | 0.046585 | U |
| **TO-15** | Hexachlorobutadiene | 0.216 | U | 0.221 | U | 0.216 | U | 0.221375 | U |

**Bold**- levels above reporting limits (RL)
J- level above MDL but below RL
U- level below MDL
R- sample replicate
Yellow highlighted samples indicate one or more samples reported above RL for the data set.
Flux = (ug/m3)(0.005 m3/min)/(0.13 m2) = (ug/m3)(0.0385) ug/m2,min-1
NS- not sampled; sample collection error

Table 3A. Summary of All Round #2 Flux Data for VOCs and Odor (ug/m2,min-1 and D/T per m2,min-1).

| SF-20B-1-C | | SF-20B-2-C | | SF-19A-1-C | | SF-19A-2-C | | SF-17A-1-C | | SF-17A-1-C-R | | SF-17A-2-C | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | |
| Tile Seams | | Tile Seams | | Tile Seams | | Tile Seams | | Tile Seams | | Replicate | | Tile Seams | |
| Location #1 | | Location #2 | | Location #1 | | Location #2 | | Location #1 | | Location #1 | | Location #2 | |
| **0.69** | | **0.62** | | **0.69** | | **0.50** | | **0.42** | | **NA** | | **0.50** | |
| | | | | | | | | | | | | | |
| 0.052 | U | 0.051 | U | 0.052 | U | 0.052 | U | 0.049 | U | 0.050 | U | 0.049 | U |
| 0.021 | U | 0.021 | U | 0.021 | U | 0.021 | U | 0.020 | U | 0.020 | U | 0.020 | U |
| 0.072 | U | 0.072 | U | 0.073 | U | 0.072 | U | 0.068 | U | 0.070 | U | 0.068 | U |
| 0.027 | U | 0.026 | U | 0.027 | U | 0.027 | U | 0.025 | U | 0.026 | U | 0.025 | U |
| 0.023 | U | 0.023 | U | 0.024 | U | 0.023 | U | 0.022 | U | 0.023 | U | 0.022 | U |
| 0.040 | U | 0.040 | U | 0.040 | U | 0.040 | U | 0.038 | U | 0.039 | U | 0.038 | U |
| 0.027 | U | 0.027 | U | 0.027 | U | 0.027 | U | 0.025 | U | 0.027 | U | 0.026 | U |
| 0.064 | U | 0.099 | J | 0.065 | U | 0.064 | U | 0.060 | U | 0.063 | U | 0.061 | U |
| 0.058 | U | 0.058 | U | 0.059 | U | 0.058 | U | 0.054 | U | 0.057 | U | 0.055 | U |
| **0.333** | | 0.177 | J | 0.188 | J | **0.899** | | 0.674 | B | 0.568 | B | **0.499** | |
| 0.064 | U | 0.064 | U | 0.064 | U | 0.064 | U | 0.060 | U | 0.062 | U | 0.060 | U |
| 0.023 | U | 0.022 | U | 0.023 | U | 0.023 | U | 0.021 | U | 0.022 | U | 0.022 | U |
| 0.017 | U | 0.017 | U | 0.018 | U | 0.017 | U | 0.016 | U | 0.017 | U | 0.017 | U |
| 0.079 | U | 0.079 | U | 0.080 | U | 0.079 | U | 0.075 | U | 0.078 | U | 0.075 | U |
| 0.025 | U | 0.025 | U | 0.025 | U | 0.025 | U | 0.023 | U | 0.024 | U | 0.023 | U |
| 0.078 | U | 0.077 | U | 0.078 | U | 0.078 | U | 0.073 | U | 0.076 | U | 0.074 | U |
| 0.027 | U | 0.027 | U | 0.028 | U | 0.027 | U | 0.026 | U | 0.027 | U | 0.026 | U |
| 0.121 | J | 0.038 | J | 0.104 | J | 0.066 | J | **0.099** | | 0.057 | J | 0.044 | J |
| 0.027 | U | 0.026 | U | 0.027 | U | 0.027 | U | 0.025 | U | 0.026 | U | 0.025 | U |
| 0.026 | U | 0.026 | U | 0.026 | U | 0.026 | U | 0.025 | U | 0.025 | U | 0.025 | U |
| 0.024 | U | 0.024 | U | 0.025 | U | 0.024 | U | 0.023 | U | 0.024 | U | 0.023 | U |
| 0.021 | U | 0.021 | U | 0.022 | U | 0.021 | U | 0.020 | U | 0.021 | U | 0.020 | U |
| 0.040 | U | 0.040 | U | 0.041 | U | 0.040 | U | 0.038 | U | 0.040 | U | 0.039 | U |
| 0.028 | U | 0.028 | U | 0.028 | U | 0.028 | U | 0.027 | U | 0.028 | U | 0.027 | U |
| 0.092 | J | 0.027 | U | 0.028 | U | 0.027 | U | **0.086** | | **0.074** | | 0.026 | U |
| 0.026 | U | 0.026 | U | 0.026 | U | 0.026 | U | 0.024 | U | 0.025 | U | 0.025 | U |
| 0.024 | U | 0.023 | U | 0.024 | U | 0.024 | U | 0.022 | U | 0.023 | U | 0.022 | U |
| 0.026 | U | 0.026 | U | 0.026 | U | 0.026 | U | 0.024 | U | 0.025 | U | 0.025 | U |
| 0.029 | U | 0.028 | U | 0.029 | U | 0.029 | U | 0.027 | U | 0.028 | U | 0.027 | U |
| 0.026 | U | 0.025 | U | 0.026 | U | 0.026 | U | 0.024 | U | 0.025 | U | 0.024 | U |
| 0.033 | U | 0.033 | U | 0.034 | U | 0.033 | U | 0.032 | U | 0.033 | U | 0.032 | U |

Table 3A.  Summary of All Round #2 Flux Data for VOCs and Odor (ug/m2,min-1 and D/T per m2,min-1).

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.046 | U | 0.045 | U | 0.046 | U | 0.046 | U | 0.043 | U | 0.045 | U | 0.043 | U |
| 0.040 | U | 0.040 | U | 0.041 | U | 0.040 | U | 0.038 | U | 0.040 | U | 0.039 | U |
| 0.038 | U | 0.037 | U | 0.038 | U | 0.038 | U | 0.035 | U | 0.037 | U | 0.035 | U |
| 0.049 | U | 0.049 | U | 0.050 | U | 0.049 | U | 0.046 | U | 0.048 | U | 0.047 | U |
| 0.055 | U | 0.055 | U | 0.056 | U | 0.055 | U | 0.052 | U | 0.054 | U | 0.052 | U |
| 0.042 | U | 0.041 | U | 0.042 | U | 0.042 | U | 0.039 | U | 0.040 | U | 0.039 | U |
| 0.027 | U | 0.027 | U | 0.027 | U | 0.027 | U | 0.026 | U | 0.027 | U | 0.026 | U |
| 0.024 | U | 0.024 | U | 0.024 | U | 0.024 | U | 0.023 | U | 0.023 | U | 0.023 | U |
| 0.065 | U | 0.065 | U | 0.087 | J | 0.084 | J | 0.061 | U | 0.064 | U | 0.062 | U |
| 0.064 | U | 0.063 | U | 0.064 | U | 0.064 | U | 0.060 | U | 0.062 | U | 0.060 | U |
| 0.029 | J | 0.024 | J | 0.027 | J | 0.035 | J | 0.022 | U | 0.023 | U | 0.022 | U |
| 0.023 | U | 0.023 | U | 0.023 | U | 0.023 | U | 0.021 | U | 0.022 | U | 0.022 | U |
| 0.047 | U | 0.047 | U | 0.048 | U | 0.047 | U | 0.044 | U | 0.046 | U | 0.045 | U |
| 0.067 | U | 0.067 | U | 0.068 | U | 0.067 | U | 0.063 | U | 0.066 | U | 0.064 | U |
| 0.024 | U | 0.024 | U | 0.025 | U | 0.024 | U | 0.023 | U | 0.024 | U | 0.023 | U |
| 0.055 | U | 0.055 | U | 0.055 | U | 0.055 | U | 0.052 | U | 0.054 | U | 0.052 | U |
| 0.025 | U | 0.024 | U | 0.025 | U | 0.025 | U | 0.023 | U | 0.024 | U | 0.023 | U |
| 0.025 | U | 0.025 | U | 0.025 | U | 0.025 | U | 0.024 | U | 0.025 | U | 0.024 | U |
| 0.028 | U | 0.028 | U | 0.028 | U | 0.028 | U | 0.027 | U | 0.028 | U | 0.027 | U |
| 0.048 | U | 0.047 | U | 0.048 | U | 0.048 | U | 0.045 | U | 0.047 | U | 0.045 | U |
| 0.193 | U | 0.191 | U | 0.194 | U | 0.193 | U | 0.072 | U | 0.075 | U | 0.182 | U |
| 0.047 | U | 0.047 | U | 0.047 | U | 0.047 | U | 0.044 | U | 0.046 | U | 0.044 | U |
| 0.055 | U | 0.055 | U | 0.056 | U | 0.055 | U | 0.052 | U | 0.054 | U | 0.052 | U |
| 0.025 | U | 0.025 | U | 0.026 | U | 0.025 | U | 0.024 | U | 0.025 | U | 0.024 | U |
| 0.027 | U | 0.026 | U | 0.027 | U | 0.027 | U | 0.025 | U | 0.026 | U | 0.025 | U |
| 0.028 | U | 0.028 | U | 0.028 | U | 0.028 | U | 0.026 | U | 0.027 | U | 0.026 | U |
| 0.023 | U | 0.023 | U | 0.023 | U | 0.023 | U | 0.022 | U | 0.023 | U | 0.022 | U |
| 0.031 | U | 0.031 | U | 0.031 | U | 0.031 | U | 0.029 | U | 0.030 | U | 0.029 | U |
| 0.079 | U | 0.079 | U | 0.080 | U | 0.079 | U | 0.074 | U | 0.077 | U | 0.075 | U |
| 0.069 | U | 0.068 | U | 0.069 | U | 0.069 | U | 0.064 | U | 0.067 | U | 0.065 | U |
| 0.047 | U | 0.046 | U | 0.047 | U | 0.047 | U | 0.044 | U | 0.045 | U | 0.044 | U |
| 0.026 | U | 0.026 | U | 0.026 | U | 0.026 | U | 0.024 | U | 0.025 | U | 0.025 | U |
| 0.045 | U | 0.045 | U | 0.045 | U | 0.045 | U | 0.042 | U | 0.044 | U | 0.042 | U |
| 0.177 | U | 0.176 | U | 0.179 | U | 0.177 | U | 0.083 | U | 0.087 | U | 0.168 | U |
| 0.023 | U | 0.023 | U | 0.023 | U | 0.023 | U | 0.022 | U | 0.022 | U | 0.022 | U |
| 0.044 | U | 0.043 | U | 0.044 | U | 0.044 | U | 0.041 | U | 0.043 | U | 0.041 | U |
| 0.025 | U | 0.025 | U | 0.025 | U | 0.025 | U | 0.024 | U | 0.025 | U | 0.024 | U |

Table 3A.  Summary of All Round #2 Flux Data for VOCs and Odor (ug/m2,min-1 and D/T per m2,min-1).

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.044 | U | 0.044 | U | 0.044 | U | 0.044 | U | 0.041 | U | 0.043 | U | 0.042 | U |
| 0.070 | U | 0.069 | U | 0.070 | U | 0.070 | U | 0.065 | U | 0.068 | U | 0.066 | U |
| 0.027 | U | 0.027 | U | 0.027 | U | 0.027 | U | 0.025 | U | 0.027 | U | 0.026 | U |
| 0.032 | U | 0.031 | U | 0.032 | U | 0.032 | U | 0.030 | U | 0.031 | U | 0.030 | U |
| 0.025 | U | 0.025 | U | 0.025 | U | 0.025 | U | 0.023 | U | 0.025 | U | 0.024 | U |
| 0.025 | U | 0.025 | U | 0.025 | U | 0.025 | U | 0.023 | U | 0.024 | U | 0.023 | U |
| 0.033 | U | 0.033 | U | 0.034 | U | 0.033 | U | 0.032 | U | 0.033 | U | 0.032 | U |
| 0.034 | U | 0.034 | U | 0.034 | U | 0.034 | U | 0.032 | U | 0.033 | U | 0.032 | U |
| 0.028 | U | 0.027 | U | 0.028 | U | 0.028 | U | 0.026 | U | 0.027 | U | 0.026 | U |
| 0.052 | U | 0.051 | U | 0.052 | U | 0.052 | U | 0.049 | U | 0.050 | U | 0.049 | U |
| 0.054 | U | 0.054 | U | 0.054 | U | 0.054 | U | 0.025 | U | 0.026 | U | 0.051 | U |
| 0.033 | U | 0.033 | U | 0.033 | U | 0.033 | U | 0.031 | U | 0.032 | U | 0.032 | U |
| 0.050 | U | 0.049 | U | 0.050 | U | 0.050 | U | 0.047 | U | 0.049 | U | 0.047 | U |
| 0.033 | U | 0.033 | U | 0.033 | U | 0.033 | U | 0.031 | U | 0.032 | U | 0.032 | U |
| 0.035 | U | 0.035 | U | 0.036 | U | 0.035 | U | 0.033 | U | 0.035 | U | 0.033 | U |
| 0.122 | U | 0.121 | U | 0.123 | U | 0.122 | U | 0.114 | U | 0.119 | U | 0.115 | U |
| 0.035 | U | 0.035 | U | 0.035 | U | 0.035 | U | 0.033 | U | 0.034 | U | 0.033 | U |
| 0.060 | U | 0.060 | U | 0.061 | U | 0.060 | U | 0.057 | U | 0.059 | U | 0.057 | U |
| 0.122 | U | 0.121 | U | 0.123 | U | 0.122 | U | 0.114 | U | 0.119 | U | 0.115 | U |
| 0.033 | U | 0.032 | U | 0.033 | U | 0.033 | U | 0.031 | U | 0.032 | U | 0.031 | U |
| 0.119 | U | 0.119 | U | 0.120 | U | 0.119 | U | 0.112 | U | 0.117 | U | 0.113 | U |
| 0.129 | U | 0.127 | U | 0.130 | U | 0.129 | U | 0.121 | U | 0.126 | U | 0.122 | U |
| 0.063 | U | 0.062 | U | 0.064 | U | 0.063 | U | 0.059 | U | 0.062 | U | 0.060 | U |
| 0.303 | U | 0.301 | U | 0.306 | U | 0.303 | U | 0.285 | U | 0.296 | U | 0.287 | U |
| 0.046 | U | 0.045 | U | 0.046 | U | 0.046 | U | 0.043 | U | 0.045 | U | 0.044 | U |
| 0.218 | U | 0.216 | U | 0.220 | U | 0.218 | U | 0.204 | U | 0.213 | U | 0.206 | U |

Table 3A. Summary of All Round #2 Flux Data for VOCs and Odor (ug/m2,min-1 and D/T per m2,min-1).

| SF-17A-2-O-R | | SF-14B-1-C | | SF-14B-2-C | | SF-7B-1-C | | SF-7B-2-C | | SF-4B-1-C | | SF-4B-2-C | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | |
| Replicate | | Tile Seams | | Tile Seams | | Tile Seams | | Tile Seams | | Tile Seams | | Tile Seams | |
| Location #2 | | Location #1 | | Location #2 | | Location #1 | | Location #2 | | Location #1 | | Location #2 | |
| 0.50 | | 0.58 | | 0.62 | | 0.46 | | 0.50 | | 0.50 | | 0.42 | |
| | | | | | | | | | | | | | |
| NA | | 0.050 | U | 0.051 | U | 0.052 | U | 0.049665 | U | 0.050 | U | 0.050 | U |
| NA | | 0.020 | U | 0.020 | U | 0.021 | U | 0.02002 | U | 0.020 | U | 0.020 | U |
| NA | | 0.070 | U | 0.071 | U | 0.073 | U | 0.0693 | U | 0.069 | U | 0.070 | U |
| NA | | 0.026 | U | 0.026 | U | 0.027 | U | 0.02541 | U | 0.025 | U | 0.026 | U |
| NA | | 0.023 | U | 0.023 | U | 0.024 | U | 0.022715 | U | 0.023 | U | 0.023 | U |
| NA | | 0.039 | U | 0.039 | U | 0.040 | U | 0.0385 | U | 0.039 | U | 0.039 | U |
| NA | | 0.027 | U | 0.027 | U | 0.027 | U | 0.02618 | U | 0.026 | U | 0.027 | U |
| NA | | 0.063 | U | 0.064 | U | 0.065 | U | 0.0847 | J | 0.062 | U | 0.063 | U |
| NA | | 0.057 | U | 0.057 | U | 0.059 | U | 0.055825 | U | 0.056 | U | 0.057 | U |
| NA | | **0.525** | | **0.959** | | **0.359** | | 0.23023 | J | **0.459** | | **0.532** | |
| NA | | 0.062 | U | 0.063 | U | 0.064 | U | 0.0616 | U | 0.062 | U | 0.062 | U |
| NA | | 0.022 | U | 0.022 | U | 0.023 | U | 0.021945 | U | 0.022 | U | 0.022 | U |
| NA | | 0.017 | U | 0.017 | U | 0.018 | U | 0.016555 | U | 0.017 | U | 0.017 | U |
| NA | | 0.078 | U | 0.078 | U | 0.080 | U | 0.07623 | U | 0.076 | U | 0.078 | U |
| NA | | 0.024 | U | 0.025 | U | 0.025 | U | 0.02387 | U | 0.024 | U | 0.024 | U |
| NA | | 0.076 | U | 0.076 | U | 0.078 | U | 0.07469 | U | 0.075 | U | 0.076 | U |
| NA | | 0.027 | U | 0.027 | U | 0.028 | U | 0.026565 | U | 0.027 | U | 0.027 | U |
| NA | | 0.064 | J | 0.055 | J | 0.119 | J | 0.089705 | J | 0.099 | J | **0.219** | |
| NA | | 0.026 | U | 0.026 | U | 0.027 | U | 0.02541 | U | 0.025 | U | 0.026 | U |
| NA | | 0.025 | U | 0.026 | U | 0.026 | U | 0.025025 | U | 0.025 | U | 0.025 | U |
| NA | | 0.024 | U | 0.024 | U | 0.025 | U | 0.023485 | U | 0.023 | U | 0.024 | U |
| NA | | 0.021 | U | 0.021 | U | 0.022 | U | 0.020405 | U | 0.020 | U | 0.021 | U |
| NA | | 0.040 | U | 0.040 | U | 0.041 | U | 0.038885 | U | 0.039 | U | 0.040 | U |
| NA | | 0.028 | U | 0.028 | U | 0.028 | U | 0.027335 | U | 0.027 | U | 0.028 | U |
| NA | | 0.027 | U | **0.153** | | 0.080 | J | 0.02618 | U | 0.129 | J | 0.065 | J |
| NA | | 0.025 | U | 0.026 | U | 0.026 | U | 0.025025 | U | 0.025 | U | 0.025 | U |
| NA | | 0.023 | U | 0.023 | U | 0.024 | U | 0.022715 | U | 0.023 | U | 0.023 | U |
| NA | | 0.025 | U | 0.025 | U | 0.026 | U | 0.025025 | U | 0.025 | U | 0.025 | U |
| NA | | 0.028 | U | 0.028 | U | 0.029 | U | 0.02772 | U | 0.028 | U | 0.028 | U |
| NA | | 0.025 | U | 0.025 | U | 0.026 | U | 0.02464 | U | 0.025 | U | 0.025 | U |
| NA | | 0.033 | U | 0.033 | U | 0.034 | U | 0.03234 | U | 0.032 | U | 0.033 | U |

Table 3A.  Summary of All Round #2 Flux Data for VOCs and Odor (ug/m2,min-1 and D/T per m2,min-1).

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NA | | 0.045 | U | 0.045 | U | 0.046 | U | 0.04389 | U | 0.044 | U | 0.045 | U |
| NA | | 0.040 | U | 0.040 | U | 0.041 | U | 0.038885 | U | 0.039 | U | 0.040 | U |
| NA | | 0.037 | U | 0.037 | U | 0.038 | U | 0.03619 | U | 0.036 | U | 0.037 | U |
| NA | | 0.048 | U | 0.049 | U | 0.050 | U | 0.047355 | U | 0.047 | U | 0.048 | U |
| NA | | 0.054 | U | 0.054 | U | 0.056 | U | 0.05313 | U | 0.053 | U | 0.054 | U |
| NA | | 0.040 | U | 0.041 | U | 0.042 | U | 0.039655 | U | 0.040 | U | 0.040 | U |
| NA | | 0.027 | U | 0.027 | U | 0.027 | U | 0.02618 | U | 0.026 | U | 0.027 | U |
| NA | | 0.023 | U | 0.024 | U | 0.024 | U | 0.0231 | U | 0.023 | U | 0.023 | U |
| NA | | 0.064 | U | 0.064 | U | 0.066 | U | 0.062755 | U | 0.074 | J | 0.120 | J |
| NA | | 0.062 | U | 0.063 | U | 0.064 | U | 0.061215 | U | 0.061 | U | 0.062 | U |
| NA | | 0.023 | U | 0.023 | U | 0.027 | J | 0.0231 | J | 0.022 | U | 0.023 | U |
| NA | | 0.022 | U | 0.022 | U | 0.023 | U | 0.021945 | U | 0.022 | U | 0.022 | U |
| NA | | 0.046 | U | 0.047 | U | 0.048 | U | 0.04543 | U | 0.045 | U | 0.046 | U |
| NA | | 0.066 | U | 0.066 | U | 0.068 | U | 0.06468 | U | 0.065 | U | 0.066 | U |
| NA | | 0.024 | U | 0.024 | U | 0.025 | U | 0.023485 | U | 0.023 | U | 0.024 | U |
| NA | | 0.054 | U | 0.054 | U | 0.055 | U | 0.052745 | U | 0.053 | U | 0.054 | U |
| NA | | 0.024 | U | 0.024 | U | 0.025 | U | 0.023485 | U | 0.023 | U | 0.024 | U |
| NA | | 0.025 | U | 0.025 | U | 0.025 | U | 0.024255 | U | 0.024 | U | 0.025 | U |
| NA | | 0.028 | U | 0.028 | U | 0.028 | U | 0.027335 | U | 0.027 | U | 0.028 | U |
| NA | | 0.047 | U | 0.047 | U | 0.048 | U | 0.045815 | U | 0.046 | U | 0.047 | U |
| NA | | 0.188 | U | 0.189 | U | 0.194 | U | 0.185185 | U | 0.185 | U | 0.188 | U |
| NA | | 0.046 | U | 0.046 | U | 0.047 | U | 0.045045 | U | 0.045 | U | 0.046 | U |
| NA | | 0.054 | U | 0.054 | U | 0.056 | U | 0.05313 | U | 0.053 | U | 0.054 | U |
| NA | | 0.025 | U | 0.025 | U | 0.026 | U | 0.02464 | U | 0.025 | U | 0.025 | U |
| NA | | 0.026 | U | 0.026 | U | 0.027 | U | 0.02541 | U | 0.025 | U | 0.026 | U |
| NA | | 0.027 | U | 0.027 | U | 0.028 | U | 0.026565 | U | 0.027 | U | 0.027 | U |
| NA | | 0.023 | U | 0.023 | U | 0.023 | U | 0.02233 | U | 0.022 | U | 0.023 | U |
| NA | | 0.030 | U | 0.030 | U | 0.031 | U | 0.03003 | U | 0.030 | U | 0.030 | U |
| NA | | 0.077 | U | 0.078 | U | 0.080 | U | 0.07623 | U | 0.076 | U | 0.077 | U |
| NA | | 0.067 | U | 0.068 | U | 0.069 | U | 0.065835 | U | 0.066 | U | 0.067 | U |
| NA | | 0.045 | U | 0.046 | U | 0.047 | U | 0.04466 | U | 0.045 | U | 0.045 | U |
| NA | | 0.025 | U | 0.025 | U | 0.026 | U | 0.025025 | U | 0.025 | U | 0.025 | U |
| NA | | 0.044 | U | 0.044 | U | 0.045 | U | 0.04312 | U | 0.043 | U | 0.044 | U |
| NA | | 0.174 | U | 0.175 | U | 0.179 | U | 0.17094 | U | 0.171 | U | 0.174 | U |
| NA | | 0.022 | U | 0.022 | U | 0.023 | U | 0.021945 | U | 0.022 | U | 0.022 | U |
| NA | | 0.043 | U | 0.043 | U | 0.044 | U | 0.041965 | U | 0.042 | U | 0.043 | U |
| NA | | 0.025 | U | 0.025 | U | 0.025 | U | 0.024255 | U | 0.024 | U | 0.025 | U |

Table 3A.  Summary of All Round #2 Flux Data for VOCs and Odor (ug/m2,min-1 and D/T per m2,min-1).

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NA | | 0.043 | U | 0.043 | U | 0.044 | U | 0.04235 | U | 0.042 | U | 0.043 | U |
| NA | | 0.068 | U | 0.069 | U | 0.070 | U | 0.06699 | U | 0.067 | U | 0.068 | U |
| NA | | 0.027 | U | 0.027 | U | 0.027 | U | 0.02618 | U | 0.026 | U | 0.027 | U |
| NA | | 0.031 | U | 0.031 | U | 0.032 | U | 0.030415 | U | 0.030 | U | 0.031 | U |
| NA | | 0.025 | U | 0.025 | U | 0.025 | U | 0.024255 | U | 0.024 | U | 0.025 | U |
| NA | | 0.024 | U | 0.024 | U | 0.025 | U | 0.02387 | U | 0.024 | U | 0.024 | U |
| NA | | 0.033 | U | 0.033 | U | 0.034 | U | 0.03234 | U | 0.032 | U | 0.033 | U |
| NA | | 0.033 | U | 0.033 | U | 0.034 | U | 0.032725 | U | 0.033 | U | 0.033 | U |
| NA | | 0.027 | U | 0.027 | U | 0.028 | U | 0.026565 | U | 0.027 | U | 0.027 | U |
| NA | | 0.050 | U | 0.051 | U | 0.052 | U | 0.049665 | U | 0.050 | U | 0.050 | U |
| NA | | 0.053 | U | 0.053 | U | 0.054 | U | 0.05159 | U | 0.052 | U | 0.053 | U |
| NA | | 0.032 | U | 0.033 | U | 0.033 | U | 0.031955 | U | 0.032 | U | 0.032 | U |
| NA | | 0.049 | U | 0.049 | U | 0.050 | U | 0.04774 | U | 0.048 | U | 0.049 | U |
| NA | | 0.032 | U | 0.033 | U | 0.033 | U | 0.031955 | U | 0.032 | U | 0.032 | U |
| NA | | 0.035 | U | 0.035 | U | 0.036 | U | 0.03388 | U | 0.034 | U | 0.035 | U |
| NA | | 0.119 | U | 0.120 | U | 0.123 | U | 0.11704 | U | 0.117 | U | 0.119 | U |
| NA | | 0.034 | U | 0.034 | U | 0.035 | U | 0.033495 | U | 0.033 | U | 0.034 | U |
| NA | | 0.059 | U | 0.060 | U | 0.061 | U | 0.058135 | U | 0.058 | U | 0.059 | U |
| NA | | 0.119 | U | 0.120 | U | 0.123 | U | 0.11704 | U | 0.117 | U | 0.119 | U |
| NA | | 0.032 | U | 0.032 | U | 0.033 | U | 0.03157 | U | 0.032 | U | 0.032 | U |
| NA | | 0.117 | U | 0.117 | U | 0.120 | U | 0.11473 | U | 0.115 | U | 0.117 | U |
| NA | | 0.126 | U | 0.127 | U | 0.130 | U | 0.123585 | U | 0.124 | U | 0.126 | U |
| NA | | 0.062 | U | 0.062 | U | 0.064 | U | 0.060445 | U | 0.060 | U | 0.062 | U |
| NA | | 0.296 | U | 0.299 | U | 0.306 | U | 0.29183 | U | 0.292 | U | 0.296 | U |
| NA | | 0.045 | U | 0.045 | U | 0.046 | U | 0.04389 | U | 0.044 | U | 0.045 | U |
| NA | | 0.213 | U | 0.215 | U | 0.220 | U | 0.209825 | U | 0.210 | U | 0.213 | U |

Table 3A. Summary of All Round #2 Flux Data for VOCs and Odor (ug/m2,min-1 and D/T per m2,min-1).

| SF-MB-1-C | | COMPOUND |
|---|---|---|
| ug/m2,min-1 | | |
| MEDIA | | |
| BLANK | | |
| 0.42 | | Odor (D/T)/m2,min-1 |
| | | |
| 0.040 | U | Dichlorodifluoromethane |
| 0.016 | U | Chloromethane |
| 0.056 | U | Freon 114 |
| 0.020 | U | Vinyl chloride |
| 0.018 | U | 1,3-Butadiene |
| 0.031 | U | Bromomethane |
| 0.021 | U | Chloroethane |
| 0.050 | U | Ethanol |
| 0.045 | U | Trichlorofluoromethane |
| **0.253** | | Acetone |
| 0.050 | U | 2-propanol |
| 0.018 | U | t-Butanol |
| 0.013 | U | Methyl iodide |
| 0.062 | U | 1,1-Dichloroethene |
| 0.019 | U | Acrylonitrile |
| 0.060 | U | Freon 113 |
| 0.021 | U | Allyl chloride |
| 0.053 | J | Dichloromethane |
| 0.020 | U | Carbon disulfide |
| 0.020 | U | trans-1,2-Dichloroethene |
| 0.019 | U | Methyl tert butyl ether |
| 0.017 | U | Propionitrile |
| 0.032 | U | 1,1-Dichloroethane |
| 0.022 | U | Vinyl acetate |
| 0.022 | J | 2-Butanone |
| 0.020 | U | Diisopropyl ether |
| 0.027 | J | Hexane |
| 0.020 | U | Methacrylonitrile |
| 0.022 | U | Ethyl acetate |
| 0.020 | U | Bromochloromethane |
| 0.026 | U | Tetrahydrofuran |

Table 3A.  Summary of All Round #2 Flux Data for VOCs and Odor (ug/m2,min-1 and D/T per m2,min-1).

| | | |
|---|---|---|
| 0.035 | U | Isobutyl alcohol |
| 0.032 | U | cis-1,2-Dichloroethene |
| 0.029 | U | 2,2-Dichloropropane |
| 0.039 | U | Chloroform |
| 0.043 | U | 1,1,1-Trichloroethane |
| 0.032 | U | 1,2-Dichloroethane |
| 0.021 | U | 1,1-Dichloropropene |
| 0.019 | U | Cyclohexane |
| 0.051 | U | Benzene |
| 0.049 | U | Carbon tetrachloride |
| 0.018 | U | 2,2,4-Trimethylpentane |
| 0.018 | U | n-Heptane |
| 0.037 | U | 1,2-Dichloropropane |
| 0.052 | U | 1,4 Dioxane |
| 0.019 | U | Dibromomethane |
| 0.043 | U | Trichloroethene |
| 0.019 | U | Bromodichloromethane |
| 0.020 | U | Methyl methacrylate |
| 0.022 | U | 4-Methyl-2-pentanone |
| 0.037 | U | cis-1,3-Dichloropropene |
| 0.149 | U | Toluene |
| 0.036 | U | trans-1,3-Dichloropropene |
| 0.043 | U | 1,1,2-Trichloroethane |
| 0.020 | U | Ethyl methacrylate |
| 0.020 | U | 2-Hexanone |
| 0.022 | U | 1,3-Dichloropropane |
| 0.018 | U | Octane |
| 0.024 | U | Dibromochloromethane |
| 0.062 | U | 1,2-Dibromoethane |
| 0.053 | U | Tetrachloroethene |
| 0.036 | U | Chlorobenzene |
| 0.020 | U | 1,1,1,2-Tetrachloroethane |
| 0.035 | U | Ethylbenzene |
| 0.138 | U | m,p-Xylenes |
| 0.018 | U | Nonane |
| 0.034 | U | Styrene |
| 0.020 | U | Bromoform |

Table 3A.  Summary of All Round #2 Flux Data for VOCs and Odor (ug/m2,min-1 and D/T per m2,min-1).

| | | |
|---|---|---|
| 0.034 | U | o-Xylene |
| 0.054 | U | 1,1,2,2-Tetrachloroethane |
| 0.021 | U | 1,2,3-Trichloropropane |
| 0.024 | U | t-1,4-Dichloro-2-butene |
| 0.020 | U | 2-Chlorotoluene |
| 0.019 | U | 4-Chlorotoluene |
| 0.026 | U | n-Propylbenzene |
| 0.027 | U | Isopropylbenzene |
| 0.022 | U | 4-Ethyltoluene |
| 0.040 | U | 1,3,5-Trimethylbenzene |
| 0.042 | U | Decane |
| 0.026 | U | tert-butyl benzene |
| 0.039 | U | 1,2,4-Trimethylbenzene |
| 0.026 | U | i-Butylbenzene |
| 0.027 | U | sec-butylbenzene |
| 0.094 | U | 1,3-Dichlorobenzene |
| 0.027 | U | Isopropyltoluene |
| 0.047 | U | Benzyl chloride |
| 0.094 | U | 1,4-Dichlorobenzene |
| 0.025 | U | n-Butylbenzene |
| 0.092 | U | 1,2-Dichlorobenzene |
| 0.100 | U | 1,2-Dibromo-3-chloropropane |
| 0.049 | U | Tetraethyl lead |
| 0.235 | U | 1,2,4-Trichlorobenzene |
| 0.035 | U | Naphthalene |
| 0.169 | U | Hexachlorobutadiene |

Table 3B. Summary of All Round #2 VOC and Odor Flux Data Above Reporting Limits (ug/m2,min-1, D/T per m2,min-1).

| METHOD | COMPOUND | SF-23C-1-C | | SF-23C-2-C | | SF-22E-1-C | | SF-22E-2-C | |
|---|---|---|---|---|---|---|---|---|---|
| | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | |
| | | Tile Seams | | Tile Seams | | Tile Seams | | Tile Seams | |
| | Round #2 Flux Testing | Location #1 | | Location #2 | | Location #1 | | Location #2 | |
| Odor Panel | Odor (D/T)/m2,min-1 | 0.58 | | 0.65 | | 0.50 | | 0.58 | |
| | | | | | | | | | |
| TO-15 | Acetone | **0.59** | | **0.47** | | 0.26 | J | **0.35** | |
| TO-15 | Dichloromethane | 0.057 | J | 0.069 | J | 0.063 | J | 0.14 | J |
| TO-15 | 2-Butanone | 0.027 | U | 0.099 | J | 0.084 | J | 0.046 | J |

**Bold**- levels above reporting limits (RL)
J- level above MDL but below RL
U- level below MDL
R- sample replicate
Yellow highlighted samples indicate one or more samples reported above RL for the data set.
Flux = (ug/m3)(0.005 m3/min)/(0.13 m2) = (ug/m3)(0.0385) ug/m2,min-1
NS- not sampled; sample collection error

Table 3B. Summary of All Round #2 VOC and Odor Flux Data Above Reporting Limits (ug/m2,min-1, D/T per m2,min-1).

| SF-20B-1-C | | SF-20B-2-C | | SF-19A-1-C | | SF-19A-2-C | | SF-17A-1-C | | SF-17A-1-C-R | | SF-17A-2-C | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | |
| Tile Seams | | Tile Seams | | Tile Seams | | Tile Seams | | Tile Seams | | Replicate | | Tile Seams | |
| Location #1 | | Location #2 | | Location #1 | | Location #2 | | Location #1 | | Location #1 | | Location #2 | |
| **0.69** | | **0.62** | | **0.69** | | **0.50** | | **0.42** | | **NA** | | **0.50** | |
| | | | | | | | | | | | | | |
| **0.33** | | 0.18 | J | 0.19 | J | **0.90** | | 0.67 | B | 0.57 | B | **0.50** | |
| 0.12 | J | 0.038 | J | 0.10 | J | 0.066 | J | **0.099** | | 0.057 | J | 0.044 | J |
| 0.092 | J | 0.027 | U | 0.028 | U | 0.027 | U | **0.086** | | **0.074** | | 0.026 | U |

Table 3B. Summary of All Round #2 VOC and Odor Flux Data Above Reporting Limits (ug/m2,min-1, D/T per m2,min-1).

| SF-17A-2-O-R | | SF-14B-1-C | | SF-14B-2-C | | SF-7B-1-C | | SF-7B-2-C | | SF-4B-1-C | | SF-4B-2-C | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | |
| Replicate | | Tile Seams | | Tile Seams | | Tile Seams | | Tile Seams | | Tile Seams | | Tile Seams | |
| Location #2 | | Location #1 | | Location #2 | | Location #1 | | Location #2 | | Location #1 | | Location #2 | |
| **0.50** | | **0.58** | | **0.62** | | **0.46** | | **0.50** | | **0.50** | | **0.42** | |
| | | | | | | | | | | | | | |
| NA | | **0.52** | | **0.96** | | **0.36** | | 0.23 | J | **0.46** | | **0.53** | |
| NA | | 0.064 | J | 0.055 | J | 0.12 | J | 0.090 | J | 0.099 | J | **0.22** | |
| NA | | 0.027 | U | **0.15** | | 0.080 | J | 0.026 | U | 0.13 | J | 0.065 | J |

Table 3B. Summary of All Round #2 VOC and Odor Flux Data Above Reporting Limits (ug/m2,min-1, D/T per m2,min-1).

| SF-MB-1-C | | COMPOUND | MAXIMUM | |
|---|---|---|---|---|
| ug/m2,min-1 | | | FLUX | |
| MEDIA | | | ug/m2,min-1 | |
| BLANK | | | | |
| 0.42 | | Odor (D/T)/m2,min-1 | 0.69 | |
| | | | | |
| 0.25 | | Acetone | 0.96 | |
| 0.053 | J | Dichloromethane | 0.22 | |
| 0.022 | J | 2-Butanone | 0.15 | |

| COMPOUND | MAXIMUM | |
|---|---|---|
| | FLUX | |
| | ug/m2,min-1 | |
| | | |
| Odor (D/T)/m2,min-1 | 0.69 | |
| | | |
| Acetone | 0.96 | |
| Dichloromethane | 0.22 | |
| 2-Butanone | 0.15 | |

Table 3C. Summary of Tentatively Identified Compounds by TO-15 Full Scan; Estimated Concentrations (ppbv).

| METHOD | COMPOUND | SF-23C-1-C | | SF-23C-2-C | | SF-22E-1-C | | SF-22E-2-C | |
|---|---|---|---|---|---|---|---|---|---|
| | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | |
| | | Tile Seams | | Tile Seams | | Tile Seams | | Tile Seams | |
| | | Location #1 | | Location #2 | | Location #1 | | Location #2 | |
| **Odor Panel** | **Odor (D/T)/m2,min-1** | **0.58** | | **0.65** | | **0.50** | | **0.58** | |
| | | | | | | | | | |
| **TO-15 SIM** | Dichloromethane | 0.019 | | 0.028 | | 0.018 | | 0.068 | |
| **TO-15 SIM** | Benzene | 0.012 | | 0.014 | | 0.025 | | 0.026 | |
| **TO-15 SIM** | Toluene | 0.0038 | U | 0.0039 | U | 0.0038 | U | 0.0039 | U |
| **TO-15 SIM** | tert-butyl benzene | 0.0033 | U | 0.0034 | U | 0.0033 | U | 0.0034 | U |

**Bold**- levels above reporting limits (RL)
J- level above MDL but below RL
U- level below MDL
B- compound found in lab blank
R- sample replicate
Yellow highlighted samples indicate one or more samples reported above RL for the data set.

Table 3C. Summary of Tentatively Identified Compounds by TO-15 Full Scan; Estimated Concentrations (ppbv).

| SF-20B-1-C | | SF-20B-2-C | | SF-19A-1-C | | SF-19A-2-C | | SF-17A-1-C | | SF-17A-1-C-R | | SF-17A-2-C | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | |
| Tile Seams | | Tile Seams | | Tile Seams | | Tile Seams | | Tile Seams | | Replicate | | Tile Seams | |
| Location #1 | | Location #2 | | Location #1 | | Location #2 | | Location #1 | | Location #1 | | Location #2 | |
| 0.69 | | 0.62 | | 0.69 | | 0.50 | | 0.42 | | NA | | 0.50 | |
| | | | | | | | | | | | | | |
| 0.046 | | 0.028 | | 0.046 | | 0.035 | | 0.042 | | 0.029 | | 0.020 | |
| 0.015 | | 0.014 | | 0.044 | | 0.043 | | 0.0070 | J | 0.0055 | J | 0.016 | |
| 0.0039 | U | 0.0038 | U | 0.0039 | U | 0.0039 | U | 0.0067 | J | 0.0049 | J | 0.0040 | J |
| 0.0033 | U | 0.0033 | U | 0.0033 | U | 0.0033 | U | 0.0031 | U | 0.0032 | U | 0.0032 | U |

Table 3C. Summary of Tentatively Identified Compounds by TO-15 Full Scan; Estimated Concentrations (ppbv).

| SF-17A-2-O-R | | SF-14B-1-C | | SF-14B-2-C | | SF-7B-1-C | | SF-7B-2-C | | SF-4B-1-C | | SF-4B-2-C | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | |
| Replicate | | Tile Seams | | Tile Seams | | Tile Seams | | Tile Seams | | Tile Seams | | Tile Seams | |
| Location #2 | | Location #1 | | Location #2 | | Location #1 | | Location #2 | | Location #1 | | Location #2 | |
| 0.50 | | 0.58 | | 0.62 | | 0.46 | | 0.50 | | 0.50 | | 0.42 | |
| | | | | | | | | | | | | | |
| 0.029 | | 0.040 | | 0.020 | | 0.060 | | 0.053 | | 0.066 | | 0.078 | |
| 0.0055 | J | 0.0056 | J | 0.014 | | 0.019 | | 0.011 | | 0.039 | | 0.045 | |
| 0.0049 | J | 0.0054 | J | 0.0059 | J | 0.0077 | J | 0.0071 | J | 0.0037 | U | 0.0038 | U |
| 0.0032 | U | 0.0032 | U | 0.0033 | U | 0.0033 | U | 0.0032 | U | 0.0032 | U | 0.0032 | U |

Table 3C. Summary of Tentatively Identified Compounds by TO-15 Full Scan; Estimated Concentrations (ppbv).

| SF-MB-1-C | | COMPOUND | MAXIMUM | |
|---|---|---|---|---|
| ug/m2,min-1 | | | DETECTED | |
| MEDIA | | | ug/m2,min-1 | |
| BLANK | | | | |
| 0.42 | | Odor (D/T)/m2,min-1 | 0.69 | |
| | | | | |
| 0.029 | | Dichloromethane | 0.078 | |
| 0.0025 | U | Benzene | 0.045 | |
| 0.0030 | U | Toluene | 0.0077 | J |
| 0.0026 | U | tert-butyl benzene | 0.0034 | U |

| COMPOUND | MAXIMUM | |
|---|---|---|
| | DETECTED | |
| | ug/m2,min-1 | |
| | | |
| Dichloromethane | 0.078 | |
| Benzene | 0.045 | |

Table 3D. Comparison of Round #2 Flux Data Above Reporting Limits to Round #1 Flux Data Above Reporting Limits. Note- only SF-22B-01 and SF 22b-02 are Directly Comparable to Round #2 Flux Testing on Tile (undisturbed).

| METHOD | COMPOUND | SF-23C-1-C | | SF-23C-2-C | | SF-22E-1-C | | SF-22E-2-C | |
|---|---|---|---|---|---|---|---|---|---|
| | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | |
| | | Tile Seams | | Tile Seams | | Tile Seams | | Tile Seams | |
| | Round #2 Flux Testing | Location #1 | | Location #2 | | Location #1 | | Location #2 | |
| Odor Panel | Odor (D/T)/m2,min-1 | 0.58 | | 0.65 | | 0.50 | | 0.58 | |
| | | | | | | | | | |
| TO-15 | Acetone | **0.593** | | **0.472** | | 0.262 | J | **0.34881** | |
| TO-15 | Dichloromethane | 0.057 | J | 0.069 | J | 0.063 | J | 0.135135 | J |
| TO-15 | 2-Butanone | 0.027 | U | 0.099 | J | 0.084 | J | 0.045815 | J |

| METHOD | COMPOUND | SF-21B-01-C | | SF-21B-02-C | | SF-19B-01-C | | SF-19B-02-C | |
|---|---|---|---|---|---|---|---|---|---|
| | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | |
| | | Scraped Floor | | Scraped Floor | | Adhesive | | Adhesive | |
| | Round #1 Flux Testing | Location #1 | | Location #2 | | Location #1 | | Location #2 | |
| Odor Panel | Odor (D/T)/m2,min-1 | 0.65 | | 0.62 | | 3.7 | | 3.7 | |
| | | | | | | | | | |
| TO-15 | Acetone | **0.167** | | **0.122** | | **0.723** | | NS | |
| TO-15 | Carbon disulfide | 0.024 | U | 0.024 | U | 0.024 | U | NS | |
| TO-15 | 2-Butanone | 0.025 | U | 0.025 | U | **0.405** | | NS | |
| TO-15 | Benzene | 0.030 | U | 0.030 | U | **1.447** | | NS | |

**Bold**- levels above reporting limits (RL)
J- level above MDL but below RL
U- level below MDL
B- compound found in lab blank
R- sample replicate
Yellow highlighted samples indicate one or more samples reported above RL for the data set.
Flux = (ug/m3)(0.005 m3/min)/(0.13 m2) = (ug/m3)(0.0385) ug/m2,min-1
NS- not sampled; sample collection error

Table 3D. Comparison of Round #2 Flux Data Above Reporting Limits to Round #1 Flux Data Above Reporting Limits. Note- only SF-22B-01 and SF 22b-02 are Directly Comparable to Round #2 Flux Testing on Tile (undisturbed).

| SF-20B-1-C | | SF-20B-2-C | | SF-19A-1-C | | SF-19A-2-C | | SF-17A-1-C | | SF-17A-1-C-R | | SF-17A-2-C | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | |
| Tile Seams | | Tile Seams | | Tile Seams | | Tile Seams | | Tile Seams | | Replicate | | Tile Seams | |
| Location #1 | | Location #2 | | Location #1 | | Location #2 | | Location #1 | | Location #1 | | Location #2 | |
| 0.69 | | 0.62 | | 0.69 | | 0.50 | | 0.42 | | NA | | 0.50 | |
| | | | | | | | | | | | | | |
| 0.333 | | 0.177 | J | 0.188 | J | 0.899 | | 0.674 | B | 0.568 | B | 0.499 | |
| 0.121 | J | 0.038 | J | 0.104 | J | 0.066 | J | 0.099 | | 0.057 | J | 0.044 | J |
| 0.092 | J | 0.027 | U | 0.028 | U | 0.027 | U | 0.086 | | 0.074 | | 0.026 | U |

| SF-22B-01-C | | SF-22B-02-C | | SF-22B-03-C | | SF-22B-03R-C | | SF-22B-04-C | | SF-BLK-01-C | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | | ug/m2,min-1 | |
| Tile | | Tile | | Adhesive | | Adhesive | | Adhesive | | Method | |
| Location #1 | | Location #2 | | Location #1 | | Repl Sample | | Location #2 | | Blank | |
| 0.46 | | 0.42 | | 1.2 | | 0.81 | | 0.89 | | 0.39 | |
| | | | | | | | | | | | |
| 0.607 | | 0.124 | | 0.819 | | 0.486 | | 0.050 | U | 0.051 | J |
| 0.072 | | 0.025 | U | 0.024 | U | 0.024 | U | 0.025 | U | 0.021 | U |
| 0.121 | | 0.026 | U | 0.369 | | 0.229 | | 0.026 | U | 0.022 | U |
| 0.060 | J | 0.055 | J | 2.124 | | 1.480 | | 0.042 | J | 0.026 | U |

Table 3D. Comparison of Round #2 Flux Data Above Reporting Limits to Round #1 Flux Data Above Reporting Limits. Note- only SF-22B-01 and SF 22b-02 are Directly Comparable to Round #2 Flux Testing on Tile (undisturbed).

| **SF-17A-2-O-R** | | **SF-14B-1-C** | | **SF-14B-2-C** | | **SF-7B-1-C** | | **SF-7B-2-C** | | **SF-4B-1-C** | | **SF-4B-2-C** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **ug/m2,min-1** | | **ug/m2,min-1** | | **ug/m2,min-1** | | **ug/m2,min-1** | | **ug/m2,min-1** | | **ug/m2,min-1** | | **ug/m2,min-1** | |
| **Replicate** | | **Tile Seams** | | **Tile Seams** | | **Tile Seams** | | **Tile Seams** | | **Tile Seams** | | **Tile Seams** | |
| **Location #2** | | **Location #1** | | **Location #2** | | **Location #1** | | **Location #2** | | **Location #1** | | **Location #2** | |
| **0.50** | | **0.58** | | **0.62** | | **0.46** | | **0.50** | | **0.50** | | **0.42** | |
| | | | | | | | | | | | | | |
| NA | | **0.525** | | **0.959** | | **0.359** | | 0.23023 | J | **0.459** | | **0.532** | |
| NA | | 0.064 | J | 0.055 | J | 0.119 | J | 0.089705 | J | 0.099 | J | **0.219** | |
| NA | | 0.027 | U | **0.153** | | 0.080 | J | 0.02618 | U | 0.129 | J | 0.065 | J |

Table 3D. Comparison of Round #2 Flux Data Above Reporting Limits to Round #1 Flux Data Above Reporting Limits. Note- only SF-22B-01 and SF 22b-02 are Directly Comparable to Round #2 Flux Testing on Tile (undisturbed).

| SF-MB-1-C | | COMPOUND |
|---|---|---|
| ug/m2,min-1 | | |
| MEDIA | | |
| BLANK | | |
| 0.42 | | Odor (D/T)/m2,min-1 |
| | | |
| 0.253 | | Acetone |
| 0.053 | J | Dichloromethane |
| 0.022 | J | 2-Butanone |