

Results of Indoor Air Testing in Two Homes Experiencing Copper Corrosion Associated with Corrosive Imported Drywall

Performed for the Florida Department of Health (DOH)

By

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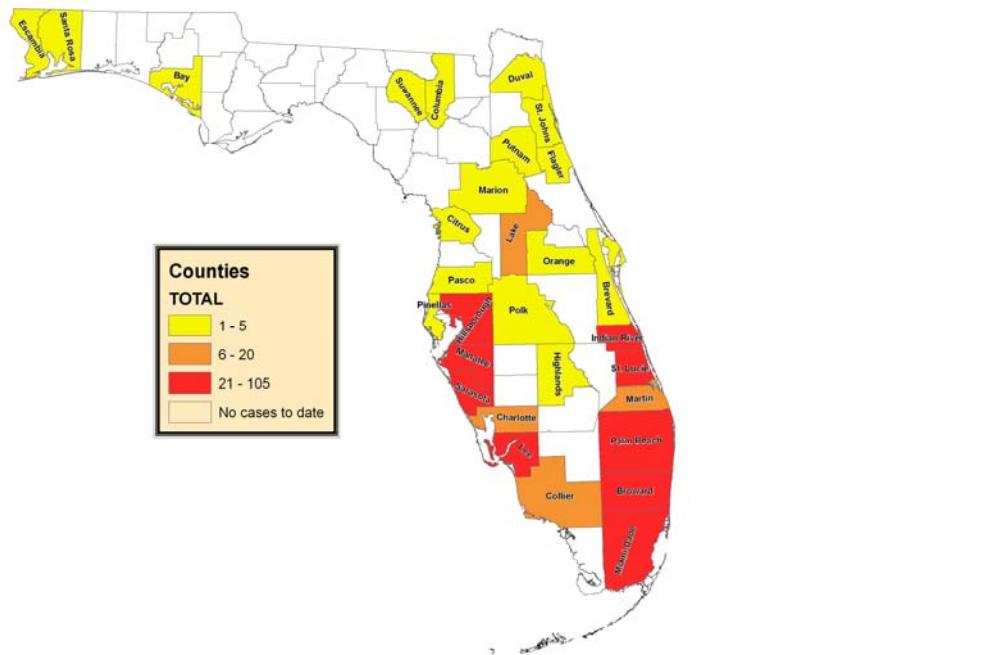


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1.0 EXECUTIVE SUMMARY

Reports of rapid, recurring copper corrosion in relatively new homes, associated with the use of imported drywall, prompted concerns of potential health hazards by occupants and public health officials. In order to assess possible health hazards in homes the Florida Department of Health measured chemical concentrations present in the indoor air of two homes meeting the case definition. The main purpose of this study was to evaluate potential occupant exposures to chemicals present in affected homes, compared to unaffected homes. Samples were taken throughout the daily cycle from different areas of the homes to evaluate daily and spatial variability. Simultaneous outdoor air measurements were taken in order to evaluate the influence of outdoor chemical sources on indoor air concentrations. Neighboring Control homes that were not exhibiting signs of copper corrosion and did not meet the case definition were also tested, enabling investigators to evaluate the possible influence of building characteristics and common pollutant sources on chemical concentrations in both Control and Test homes. Sampling and analysis methods capable of detecting a wide range of compounds at very low levels (parts per billion volume – ppbv) were selected. A study was designed to evaluate the reliability of available test methods; identify differences in building construction and ventilation rates; measure in-home concentrations of gasses possibly emitted from corrosive drywall; measure the indoor air concentrations of other volatile organic compounds (VOC) present in the home; and to evaluate changes in gas concentrations associated with diurnal cycles.

The Test and Control homes selected for testing were constructed in 2006 and 2007 respectively. The air change rates for homes ranged from 0.12 to 0.22 air changes per hour. All homes effectively controlled temperature and relative humidity conditions, in part to very low leakage rates and tight building envelopes. An estimate of the reliability and repeatability of the ASTM D 5504 test method could not be accomplished due to the infrequency of detecting reduced sulfur gasses (Hydrogen Sulfide, Carbonyl Sulfide, and Carbon Disulfide) in the Test homes. With few exceptions, simultaneously collected samples were below the detection limit of the method (5 ppbv). Variability in reported sample results which included estimates of the standard deviation and percent relative standard deviation was calculated for eighty nine (89) VOCs measured during Phase I testing. Only one measurement of Hydrogen Sulfide in one Test Home was quantified at 5.72 ppbv. This was the only sample above the 5 ppbv Method Reporting Limit (MRL) out of the twelve samples collected throughout the 24 hours. A single sample was reported to contain 4.14 ppbv of Carbonyl Sulfide, an estimate with some uncertainty because it was below the laboratory's MRL. All other samples for sulfur-containing gases were below detection limits in Test and Control Homes. In the early morning hours on June 9, 2009, Hydrogen Sulfide was detected in two outdoor samples. Due to the small number of data points above the detection limit, identifying a trend would be unfounded.

Further analysis and interpretation of indoor air concentrations as they relate to potential hazardous exposures will occur as part of a joint assessment by state and federal technical experts. Comprehensive lists of chemicals identified in all homes are available in Appendices C, D, E & F.

2.0 INTRODUCTION & BACKGROUND

Increasing reports of copper corrosion in recently built homes (2001-2007) associated with the use of imported drywall prompted a preliminary investigation by the Florida Department of Health. An ad hoc survey instrument was developed to document the complaint demographics and to enable DOH staff to identify possible trends in self reported complaints. Homes were selected for a preliminary site visit in late January 2009 by Mr. Tim Wallace and Dr. David Krause. In total twelve (12) homes in six (6) south Florida counties were visited to observe the reported effects of copper corrosion and to collect a limited number of bulk material samples believed to represent the conditions found in affected homes.

Some of the (bulk) materials collected during the preliminary site visits were sent to Unified Engineering Inc, a private consulting firm, and to the US EPA Environmental Response Team (ERT) for content and headspace emissions analysis. Results from these early tests were compared to reported findings from private consultants provided to the Florida DOH by builders, drywall manufacturers, and homeowners. In addition to documenting the types of health complaints reported by people living in affected homes, DOH continued to gather additional information regarding the number and locations of affected homes in Florida and in other states.

One outcome of these initial efforts was the development of a “case definition” for homes experiencing premature copper corrosion, possibly associated with the presence of imported drywall from China. The case definition served several purposes, the most important of which was to define the sentinel indicators of homes experiencing the same or similar problems. Using a series of five (5) observations, a homeowner or technical inspector could determine if the home met the case definition. To aid the public, a list of these observations was described using words and images on the Florida DOH website. For homes constructed after January 1, 2004 two or more positive responses met the case definition. Homes constructed prior to January 1, 2004 required three or more positive responses to meet the case definition. A summary of the case definition is given below.

- 1) Does the home contain sulfur-like or other unusual odors? Rule out sulfur-like odors emanating from seldom-used hot water heaters, well water, or sewer lines.
- 2) Repeated failures of A/C evaporator coils. Freon leaking from black corrosion on copper coil components is the most distinctive feature of this item.
- 3) Exposed copper lines and pipes exhibit a black or charcoal corrosion. Other chrome plated or silver surfaces in the home may exhibit excessive corrosion, pitting or tarnishing.
- 4) Observed printed labels on the back side of drywall in the home indicating it was manufactured in China. This typically requires cutting holes in finished walls and it may be difficult to find printed labels.
- 5) Using a professional inspector to confirm the presence of black corrosion on electrical wiring or on A/C coils.

Despite the extensive amount of materials analysis and test results received from private consultants; a number of data gaps prevented Florida DOH from conducting an assessment of potential health hazards for occupants of affected homes. These data gaps included:

- Understanding the reliability and repeatability of sample results using the available sample collection and analysis methods.
- Identifying the primary corrosive gasses emitted from imported drywall.
- Variations in air concentrations of emitted gasses due to diurnal cycles and changing environmental conditions.
- Concentrations of chemicals present in homes that met the case definition.
- Identifying possible secondary chemical by-products due to corrosive emissions from drywall reacting with other materials, coatings, adhesives, or chemicals in the indoor environment.

Reports received from private consultants concluded that certain brands of gypsum drywall imported from China emitted several sulfur containing compounds under laboratory conditions. Efforts to measure some of the reduced sulfur compounds (Hydrogen sulfide, Carbonyl Sulfide, and Carbon Disulfide) met with limited success in homes exhibiting signs of copper corrosion. Due to the reactivity of the sulfur compounds and limited number of laboratories with the necessary equipment to perform the analysis, collection of a large number of samples throughout the daily cycle was impractical. Some consultants reported that certain brands of Tedlar Sampling Bags were unsuitable for collecting samples due to a trace amount of sulfur-contamination in the bags that caused false positive results.

Because of the numerous uncertainties and our limited experience with the sampling method for sulfur containing compounds (ASTM Method 5504) it was necessary to perform some preliminary work before in-home testing could be initiated on a large scale. DOH worked with an in-state private laboratory to establish the necessary analytical equipment and test methods for sulfur compounds in ambient air. With a centrally located laboratory, samples could then be couriered by automobile for analysis within the 24 hour hold time prescribed in the test method.

Understanding the accuracy and precision of test methods used to measure sulfur containing compound and volatile organic compounds (VOCs) is critical to interpreting test results. Each step in the process of sample collection, handling, storage, shipping, and analysis can introduce some amount of error. Florida DOH worked with laboratories to ensure adequate internal quality control procedures were in place to monitor analysis accuracy, and conducted a limited study to evaluate if potential errors in the sampling process affected analysis precision.

Identifying potential test homes was the next major effort. Seven (7) factors were considered when choosing a potential test home from those that were volunteered.

1. Test homes had to meet the Case Definition.
2. Homes exhibiting some of the most severe odors, copper corrosion, frequency of A/C coil replacement, and occupant symptoms were chosen.
3. No cigarette or other tobacco smoking in the home prior to testing.
4. Occupants had to agree to vacate the premises for several days during testing.
5. A neighboring “Control” home that was constructed in the same time period, but without corrosive drywall (i.e. did not meet the Case Definition) had to be made available.

6. Occupants of the “Control” home had to agree to vacate the premises for several days during testing.
7. Access to the home by investigators around the clock to collect air samples and measure environmental parameters was needed.

The Florida Department of Health contracted Salazar Consulting Group (SCG) to perform much of the preparation and on-site testing of homes in Florida. Dr. Rene Salazar, CIH oversaw and performed much of the equipment and materials preparation, sample collection, documentation, and laboratory coordination. Staff from the Florida DOH, consisting of Mr. Clark Eldredge and Dr., David Krause, worked cooperatively with SCG staff to accomplish the testing performed in Units 90 & 91.

3.0 STUDY DESIGN & OBJECTIVES

This in-home air sampling study constitutes the first two phases of a three phase effort. The first two parts included a scoping study to evaluate measurement methods (Phase I) and an in-depth study of a few homes to examine the indoor air levels for a wide variety of chemicals (Phase II). The information gained from the first two phases can be used to refine testing protocols for the third phase of evaluation in a larger set of homes. The third phase of such an effort has been initiated by the US Consumer Product Safety Commission, and is currently underway.

A core set of evaluations were identified for in-home testing in Phase I and Phase II. These included:

- 1) Building characterization to include measuring air change rates (ACH).
- 2) Monitoring environmental parameters indoors and outdoors.
- 3) Measuring Sulfur-containing gasses.
- 4) Measuring Volatile Organic Compounds (VOCs).

Testing was performed in a manner to achieve the following objectives. These included:

- Determine if building characteristics for affected homes differed from unaffected homes. (Phases I & II)
- Evaluate the reliability and repeatability of available sample collection and analysis methods. (Phase I)
- Measure the in-home concentrations of corrosive gasses emitted from defective drywall. (Phases I & II)
- Estimate changes in concentrations of corrosive gasses and VOCs due to diurnal cycles. (Phases I & II)
- Evaluate the influence that chemicals in the outside air and environmental conditions had on the indoor air chemical concentrations.
- Evaluate the presence, and in-home concentrations, of secondary by-products that may be attributable to corrosive emissions from drywall reacting with other materials, coatings, adhesives, or chemicals in the indoor environment. (Phases I & II)

3.1 Study Design for Phase I (Units 80 & 81)

Phase I of the in-home air sampling study comprised of a single Test Home (Unit 80) and a pool side guest house (Unit 81) that served as a Control Home. The primary purpose of the Phase I testing was to evaluate the sample collection and analysis methods. Secondarily the results were evaluated for indicators of a diurnal cycle effect, and for the indoor air concentrations of specific sulfur containing gasses and other VOCs. This scoping study also enabled investigators to refine the study design by identifying other factors that should be considered.

3.2 Study Design for Phase II (Units 90 & 91)

Phase II of the in-home air sampling study was a collaborative effort between the Florida Department of Health and the US EPA-ERT. Florida DOH's Contractor SCG performed preliminary site assessments of five (5) homes. Three homes were Test homes that exhibited signs of copper corrosion associated with imported drywall. Two homes were identified as Control homes that did not appear to be experiencing corrosion typically found in affected homes. Prior to commencing in-home testing, SCG performed a site visit, confirming the presence or absence of corrosion; confirming the absence of cigarette smoking indicators; measuring the square footage and volume of each home; preparing a diagram of each home; and measuring the air change rate of the homes using a tracer gas (Carbon Dioxide) decay method. The protocol used for the preliminary site assessment and air change rate determination is provided in Appendix A.

The US EPA-ERT performed testing on homes identified as Unit 100 (Test), Unit 101 (Control), and Unit 102 (Test). The Florida DOH, along with its Contractor SCG, performed testing on homes identified as Unit 90 (Subject) and Unit 91 (Control). This report will only describe testing and discuss results from DOH efforts. Results of EPA-ERT efforts will be reported in a separate document.

3.3 Scope of Study & Limitations

The scope of this study was to evaluate chemical concentrations present in the indoor air of homes meeting the case definition. The main purpose of this study was to evaluate potential occupant exposures to chemicals present in affected homes, compared to unaffected homes. Sampling events were performed throughout the daily cycle and were located in different areas of the home to evaluate cyclical and spatial variability. Outdoor air measurements were taken in order to evaluate the influence of outdoor chemical sources on indoor air concentrations. Neighboring Control homes that were not exhibiting signs of copper corrosion and did not meet the case definition were also tested. This enabled investigators to evaluate the possible influence of different building characteristics and comparison of chemical concentrations in a Control versus a Test home. Sampling and analysis methods capable of detecting a wide range of compounds at very low levels (parts per billion volume – ppbv) were selected. Based upon the results of limited materials testing available to DOH at the time, special attention was placed on test methods capable of detecting sulfur-containing gasses. Due to its sensitivity and wide range of sulfur-containing chemicals it could detect, ASTM Method D 5504 was selected to measure sulfur-containing gasses. A significant limitation of this method was a short sample hold-time of 24 hours. Some samples collected during Phase I testing, before a Florida

laboratory was found to analyze samples, were shipped to a California laboratory. Therefore, some samples exceeded the recommended hold time. A reduced confidence in these results was noted.

Many research questions relevant to this issue were beyond the scope of this study. Some of the recognized research questions that were **not** within the scope of this study include but are not limited to...

- 1) Emission rate of corrosive or irritant chemicals from drywall.
- 2) Determination of how long the drywall emissions could potentially impact the indoor environment.
- 3) The potential for corrosive, irritant, or odorous gasses to become absorbed by neighboring materials within the home and be re-emitted.
- 4) Evaluation of remediation efforts that include source removal, filtration, increased ventilation, or treatment of emitters by reactive chemical or coating.
- 5) Biological uptake of chemicals by occupants.
- 6) Evaluation of electrical hazards possibly associated with the recognized corrosion on copper wiring in affected homes.
- 7) Evaluation of radiological hazards present within the homes.
- 8) Clinical evaluation of any occupant's or investigator's signs or symptoms possibly attributable to time spent in an affected home.

3.4 Data Evaluation

Evaluation of data was focused on addressing the primary objectives set forth at the beginning of this study. All measurement results were subjected to a data evaluation process to ensure they accurately reflected the measurement that was collected. Data collected by SCG and data reported by each analytical laboratory was verified for completeness and correctness, to the extent possible, by SCG. Quality assurance measures included confirming the data type, significant digits, units, and ranges using methods selected specifically for each data set. The following describes the various data verification processes applied to the generated data sets:

- Environmental parameter measurements (temperature, relative humidity, and carbon dioxide) were verified at the time of recording. Individual data points were confirmed to be generally reasonable and within expected ranges. Data used to generate graphs were verified by random selection of individual data points at a given time interval for matching to its graphical representation.
- Floor plan drawings, interior residence dimensions, and calculated room volumes were verified by cross-checking hand-generated drawings and recorded measurements with computerized versions. The accuracy of calculated room volumes was verified by duplicate calculations.
- Data used to calculate air change rates of homes were verified on-site at the time of collection and then again prior to their use in computations. Calculations were double-checked for reasonableness and accuracy prior to reporting.

- Volatile organic compound and Sulfur-containing gas air sample analytical data were evaluated using a multi-step process. Assigned sample identification information, sampling flow rates, and sample volumes, etc., were verified during collection, post-collection, and prior to submitting samples to the respective laboratories. Chain of custody forms and laboratory sample identifiers were reviewed and verified upon receipt of laboratory results. Analytical data generated and reported by individual laboratories were verified by the respective laboratory using in-house procedures prior to reporting. Descriptions of in-house lab procedures are provided with the summary reports prepared by the individual laboratory located in appendices of this report.

Phase I VOC sample results were evaluated for variability, and when appropriate, the standard deviation was calculated. Each sampling event consisted of five (5) simultaneous samples. When all five results were reported above the quantifiable limit of $0.8 \mu\text{g}/\text{m}^3$, a standard deviation (SD), percent relative standard deviation (%RSD), and range were determined. These descriptive statistics can be used in further evaluation of sampling results.

3.5 Interpretation

The data generated by the DOH team will be evaluated together with data generated by the US EPA-ERT team to assess possible health hazards to occupants of affected homes. Within this report, interpretation of data collected during this study will be limited to addressing the objectives set forth at the beginning of this study. These were:

- Determine if building characteristics for affected homes differed from unaffected homes. (Phases I & II)
- Evaluate the reliability and repeatability of available sample collection and analysis methods. (Phase I)
- Measure the in-home concentrations of corrosive gasses emitted from defective drywall. (Phases I & II)
- Estimate changes in concentrations of corrosive gasses and VOCs due to diurnal cycles. (Phases I & II)
- Evaluate the influence that chemicals in the outside air and environmental conditions had on the indoor air chemical concentrations.
- Evaluate the presence, and in-home concentrations, of secondary by-products that may be attributable to corrosive emissions from drywall reacting with other materials, coatings, adhesives, or chemicals in the indoor environment. (Phases I & II)

4.0 AIR MONITORING AND SAMPLING BY FLORIDA DOH

4.1 Observations and Activities

Building characterizations

The year each home was constructed was determined from interviews with homeowners and verified by examining local tax assessor records. The construction style was determined by walkthrough inspection and interviews with either the homeowner or builder.

Unit 80 was constructed in 2006. This two-story home was approximately 3,240 square feet, with an attached garage. Construction style was slab on fill with stem-wall, concrete masonry unit perimeter walls and stucco/brick/stone veneer. This home was unique in that its attic was not vented and was insulated at the roof deck using a closed-cell expanding foam.

Unit 81 was constructed in 2007 as a pool-side guest house for Unit 80. This one-story structure was separate from Unit 80, and measured approximately 287 square feet. Construction style was slab on fill with stem-wall, concrete masonry unit perimeter walls and brick veneer. The attic was not accessed during the testing and so its insulation type was not ascertained.

Unit 90 was constructed in 2006. This two-story home was approximately 3,810 square feet, with an attached garage. Construction style was slab on fill with stem-wall, concrete masonry unit perimeter walls and stucco veneer. The attic was not accessed during the testing and so its insulation type was not ascertained.

Unit 91 was constructed in 2007. This two-story home was approximately 5,704 square feet, with two attached garages. Construction style was slab on fill with stem-wall, concrete masonry unit perimeter walls and stucco/brick/stone veneer. The attic was not accessed during the testing and so its insulation type was not ascertained.

Air Change Rates

Either before or after sampling for sulfur containing gasses and VOCs, an assessment of the leakage rate, or air change rate was made for each home. A tracer gas decay method was used to estimate the rate at which the air in the home is exchanged with the outdoors. By estimating the air change rate of these Test and Control homes they can be compared to other homes in Florida. Characterizing the air change rate of the homes also provides some insight as to the source strength necessary to cause measured concentrations of chemicals in the homes and their possible sources.

To determine the air change rate for each home the following protocol was used (adopted from the *Manual for Ventilation Assessment in Mechanically Ventilated Commercial Buildings*, NISTIR 5329, National Institute of Standards and Technology, Jan 1994). The complete protocol is provided in Appendix A.

- a. Readings of carbon dioxide measurement devices were compared prior to use to ensure inter-device measurement variability of five percent (5.0%) or less; field calibrations of measurement devices were performed on-site immediately preceding data collection.
- b. Carbon dioxide levels were measured within the living room (Location 1) and master bedroom (Location 2), if applicable, in each residence and at an outdoor location prior to test initiation.
- c. Thermostats for all ventilation systems were set to 73 degrees Fahrenheit ($^{\circ}\text{F}$).

- d. Fans of each ventilation system were set to the “ON” position prior to, during, and for thirty (30) minutes following carbon dioxide release; ventilation system fan settings were switched to the “AUTO” position immediately following the thirty (30) minute carbon dioxide release period.
- e. Carbon dioxide was released at ventilation system return air registers for up to thirty (30) minutes, or until carbon dioxide concentrations at each of the indoor monitoring locations [living room (Location 1) and master bedroom (Location 2)] reached 2500 parts per million (ppm). Carbon dioxide gas introduction was stopped when the desired concentration was achieved at either of the indoor monitoring locations.
- f. Carbon dioxide concentrations were measured in the living room (Location 1), master bedroom (Location 2), and outdoors (Location 3) at thirty (30) minutes after the carbon dioxide release was stopped. Measured levels were used to represent ‘indoor air concentration at starting time; $C_i(t_1)$ ’ and ‘outdoor air concentration at starting time; $C_o(t_1)$ ’, respectively.
- g. Carbon dioxide concentrations were allowed to decay for approximately four (4) to five (5) hours, during which residence entry/exits were avoided or minimized.
- h. Carbon dioxide concentrations were measured within the living room (Location 1), master bedroom (Location 2), and outdoors (Location 3) upon test termination. Measured levels were used to represent ‘indoor air concentration at ending time; $C_i(t_2)$ ’ and ‘outdoor air concentration at ending time; $C_o(t_2)$ ’, respectively.
- i. The Air Change Rate (ACR) for the living room (Location 1) and master bedroom (Location 2) of each residence were calculated by applying recorded concentrations to the following equation:

$$ACR = \frac{\ln[C_i(t_1) - C_o(t_1)] - \ln[C_i(t_2) - C_o(t_2)]}{t_2 - t_1}$$

$C_i(t_1)$	=	indoor air concentration at starting time (ppm)
$C_o(t_1)$	=	outdoor air concentration at starting time (ppm)
$C_i(t_2)$	=	indoor air concentration at ending time (ppm)
$C_o(t_2)$	=	outdoor air concentration at ending time (ppm)
$t_2 - t_1$	=	duration of monitoring (hours)
ACR	=	average air change rate (air changes per hour)

- j. The arithmetic mean of ACRs (average ACR) for living room (Location 1) and master bedroom (Location 2) locations combined were calculated for each residence and identified as the “whole house” ACR and reported as Air Changes per Hour (ACH).

Table 1 shows the square footage, volumes, and air change rates for each of the homes evaluated by FDOH. Diagrams depicting the floor plans of each home are provided in Appendix B.

Table 1 – Area, Volume and Air Change Rates for Test and Control Homes

	sq ft (m²)	cu ft (m³)	Air Change Rate
Unit 80 (Test)	1 st Floor 2,343 (218) 2 nd Floor 897 (83) Total 3,240 (301)	1 st Floor 30,127 (853) 2 nd Floor 8,271 (234) Total 38,398 (1,087)	0.22 ACH
Unit 81 (Control)	1 st Floor 287 (27) 2 nd Floor NA Total 287 (27)	1 st Floor 2,547 (72) 2 nd Floor NA Total 2,547 (72)	0.17 ACH
Unit 90 (Test)	1 st Floor 2,520 (234) 2 nd Floor 1,290 (120) Total 3,810 (354)	1 st Floor 33,132 (938) 2 nd Floor 12,555 (356) Total 45,687 (1,294)	0.12 ACH
Unit 91 (Control)	1 st Floor 3,281 (305) 2 nd Floor 2,423 (225) Total 5,704 (530)	1 st Floor 44,118 (1,249) 2 nd Floor 25,355 (718) Total 69,473 (1,967)	0.16 ACH

Equipment & Materials

Equipment, materials, supplies, software, and laboratories used to measure or sample the environment are listed below.

A. Air Flow Calibration Equipment

- i. Bios International Dry-Cal
Base: Model DC-1-B/SN 3307
Medium Flow Cell: Model DC-MC-1/SN S3362

B. Data Collection Equipment

- i. Telaire Carbon Dioxide and Temperature Monitor
Model 7001
Serial Nos. 1039468/1039469/1059669/1059670/1062679/1073985
- ii. Onset HOBO Datalogger
Model HOB-007-02
SN 487103/487104
Model U12-012
Serial No. 2318478/2322608/2322609/2322614
Boxcar Version 3.7 Software
HOBOWare Lite Version 2.7
- iii. Metrosonics AQ 5001Pro Air Quality Monitor (Serial No. 1710)
Temperature, Relative Humidity, Carbon Dioxide, and Carbon Monoxide
- iv. Davis Weather Monitor II (Serial No. MCO1130A35) Weatherlink Software
Temperature, Dew Point Temperature, Relative Humidity, Wind Speed, Wind Direction, Rain Amounts, and Barometric Pressure.
- v. Energy Conservatory Digital Pressure Gauge: Model DG-2 (Serial No. 9019)

- vi. Jerome 631-X Hydrogen Sulfide Analyzer (Serial No. 631-2469 Rev H)
- vii. Personal Air Sampling Pumps
Pumps received from Air Quality Sciences, Inc. (Marietta, Georgia) pre-calibrated at 0.2 liters per minute flow rate.
- viii. Zefon International Tedlar Bags
1.0 Liter/Polypropylene Fittings (Model EG-PP-1)
- ix. CarboPack B Sorbent Media
Air Quality Sciences, Inc.

C. Specialty Gases

- i. Carbon Dioxide Gas
Air Liquide Product Code 0104105
Tri-Tech Product Code 1300900
- ii. Compressed Nitrogen
Air Liquide Product Code 0104102
Tri-Tech Product Code 1300600

*Gas Sources: Air Liquide America Specialty Gases, LLC for Location No. 1;
Tri-Tech Manufacturing for all other sites*

- D. Distance Measurement Meter: Leica DistoLite Laser Distance Meter
(Model: D-E9/SN 731663 US)
- E. Floor Plan Drawing Software: HGTV Home Design & Remodeling Suite
(Product No. DJWT 20481)

F. Analytical Laboratories

- i. Sulfur-Containing Compounds (ASTM D 5504)
 - a. Columbia Analytical Services, Inc.
2655 Park Center Drive
Suite A
Simi Valley, California 93065
Contact: Ms. Sue Anderson
Telephone: (805) 526-7161
Facsimile: (805) 526-7270
Website: www.caslab.com
 - b. Lakeland Laboratories, LLC
1910 Harden Boulevard

Suite 101
Lakeland, Florida 33803-1829
Contact: Mr. Mark Alessandroni
Telephone: (863) 686-2471
Facsimile: (863) 686-4389
Website: www.lakelandlabs.com

ii. Volatile Organic Compounds (VOCs)

a. Air Quality Sciences, Inc.
2211 Newmarket Parkway, #106
Marietta, Georgia 30067
Contact: Mr. Scott Steady
Telephone: (770) 933-0638
Facsimile: (770) 933-0641
Website: www.aqs.com

4.2 Air Monitoring Methodologies

Indoor Environmental Conditions

Continuous measurements of indoor and outdoor environmental parameters were made using direct reading instruments. Measurement of temperature, relative humidity, and carbon dioxide provides useful information on how environmental conditions may impact indoor air concentrations of chemicals. Simultaneous measurement of indoor and outdoor conditions also makes it possible to evaluate the building's communication with the outside and its ability to control indoor humidity. Environmental parameters, to include temperature, relative humidity, and carbon dioxide levels, were recorded every two (2) minutes within the living/family room and master bedroom of each residence throughout the twenty-four (24) hour sampling period using Telaire and Onset data logging equipment; data logging of the same environmental parameters were collected at the outdoor monitoring location of Unit 90.

Instantaneous measurements of pressure differentials were recorded within each the test and control residences, as compared to outdoors, throughout the twenty-four (24) hour sample collection period.

Outdoor Ambient Environmental Conditions

Outdoor environmental conditions were monitored using the Metrosonics AQ 5001Pro air quality monitor (Serial #1710). The monitor uses a resistance temperature detection sensor for temperature measurement with a range of +32° to + 140°F and an accuracy of +/- 0.9°F with a resolution of 0.1°F. The air quality monitor uses a capacitive sensor to measure relative humidity. The accuracy is +/- 3% at 25°C and the resolution is 0.1%. A non-dispersive infrared (NDIR) sensor is used to measure carbon dioxide concentrations. The range is 0 to 5,000 parts per million (ppm), accuracy is +/- 3% and resolution is 1 part per million (ppm). The CO₂ sensor was calibrated prior to use with

nitrogen for zero adjustment and 1,000 ppm carbon dioxide for span adjustment. Carbon monoxide (CO) was measured using an integrated electrochemical sensor calibrated with nitrogen and 35 ppm CO. See Attached Calibration Certificate. Quest Suite Professional Software was used to download, review, and analyze data collected by the AQ5001Pro.

General weather conditions were monitored using the Davis Weather Monitor II uses a solar panel (No. 7707) and a 9-volt backup battery as a power source. All components of the Weather Station were purchased in 2001 with factory calibration. The Anemometer (DS7911) was replaced in May 2009 and came with factory calibration. The weather station was tested in Tallahassee (May 22-29, 2009) prior to use and the results were comparable with simultaneous measurements from other weather stations reporting at the time.

Sensor Type

Wind speed – polycarbonate wind cups and magnetic switch

Wind direction – wind vane and potentiometer (UV-resistant)

Cable type – 4 conductor, 26 AWG

Table 2 – Davis Weather Monitor II Specifications

Parameters	Accuracy	Range	Update Interval
Temperature	$\pm 1^{\circ}\text{F}$	32-140 $^{\circ}\text{F}$	2 Seconds
Wind chill	$\pm 4^{\circ}\text{F}$	-134-98 $^{\circ}\text{F}$	2 Seconds
Wind speed	$\pm 2 \text{ mph}$	2-175 mph	2.25 Seconds
Wind direction	$\pm 7^{\circ}$	0-360 $^{\circ}$	2.25 Seconds
Rainfall	$\pm 4\%$	0-99.99"	Every trip
Humidity	$\pm 5\%$	10-90%	2 Seconds
Dew Point	$\pm 4^{\circ}\text{F}$	-99-140 $^{\circ}\text{F}$	2 Seconds
Barometric Pressure	$\pm 0.05^{\prime\prime} \text{ Hg}$	26-32" Hg	2 Seconds

Weatherlink Software was used to download, review, and analyze data collected by the Davis Weather Monitor II.

4.3 Air Sampling Methodologies

During Phase I (Applicable to Units 80 and 81 only):

- a. Samples were collected at 9:00am and 3:00pm from the living rooms (Location 1) of each the test and control residences, and outdoors (Location 2).
- b. Five (5) air samples were collected into Tedlar bags from the test home, the control home, and outdoors. The Zefon International Tedlar Bags used by SCG were not the type that has been described of having problems with pre-existing contamination. Samples were collected by insertion of individual Tedlar bags into individual sampling suitcases. Personal air sampling pumps were used to create a vacuum within the sampling suitcase, resulting in air flow and therefore sample collection directly into the sample bags while avoiding passage through the sampling pump (this method prevented cross-contamination possibilities).

Three (3) blank (unexposed) Tedlar bags were prepared by filling each with nitrogen.

- c. Five (5) air samples were simultaneously collected onto Carbopack B sorbent media tubes from the living rooms (Location 1) of the test and control homes, and outdoors (Location 2); four (4) blank (unexposed) sample tubes were also prepared. Samples were collected with use of personal sampling pumps received pre-calibrated from Air Quality Sciences, Inc. at a flow rate of 0.2 lpm for 4 hours.
- d. Tedlar bag air samples were shipped by overnight courier to Columbia Analytical Services, Inc. (Simi Valley, California); samples were analyzed for twenty (20) individual sulfur-containing compounds, to include hydrogen sulfide, carbon disulfide, and carbonyl sulfide, as per ASTM D 5504-01.
- e. Carbopack B sorbent media tubes were shipped by overnight courier to Air Quality Sciences, Inc. (Marietta, Georgia); samples were comprehensively assayed for detection of VOCs.
- f. Environmental parameters, to include temperature, relative humidity, and carbon dioxide levels were measured using data logging devices at each sample collection site within the test and control homes, and outdoors; data logging initiated upon arrival at the site and continued through completion of assessment activities.
- g. Hydrogen sulfide levels were measured instantaneously within the test home to verify absence of available sources using the Jerome 631-X Hydrogen Sulfide Analyzer.
- h. Differential pressures were measured periodically within the test and control homes using an Energy Conservatory Digital Pressure Gauge.

During Phase II (Applicable to Units 90 and 91 only):

- a. Air samples were collected into Tedlar bags every two (2) hours over a twenty-four (24) hour period, alternating between the living room (Location 1) and master bedroom (Location 2) of each residence resulting in collection of six (6) samples from each location (living room) (master bedroom) of each residence. Samples were collected by insertion of individual Tedlar bags into individual sampling suitcases as described for samples collected during Phase I. Two [2] field blanks [Tedlar bags purged with only pure nitrogen] per residence were also prepared and submitted to the laboratory for analysis, as per ASTM D 5504-08.
- b. Air samples were collected into Tedlar bags every two (2) hours over a twenty-four (24) hour period from an outdoor location (Location 3) at the Unit 90

residence; two (2) field blanks (Tedlar bags purged with only pure nitrogen) were also prepared and submitted to the laboratory for analysis).

- c. VOC samples were collected continuously over a twenty-four (24) hour period from within the family/living room (Location 1) and master bedroom (Location 2) of each residence at a target flow rate of 0.2 liters per minute; sampling media at each sampling location were replaced every four (4) hours, and two (2) unexposed media tubes (per residence) were prepared and submitted to the analytical laboratory as field blanks.
- d. VOC samples were collected continuously over a twenty-four (24) hour period from one (1) outdoor location (Location 3) at Unit 90. The target flow rate was 0.2 liters per minute and sampling media was replaced every four (4) hours, with one (1) unexposed media tube prepared and submitted as a field blank.
- e. Tedlar bag samples were prepared for pick up by laboratory courier service as coordinated by Lakeland Laboratories, LLC (Lakeland, Florida). Samples were collected twice during the twenty-four (24)-hour sampling period to allow completion of analyses before expiration of the specified sample hold time.
- f. Air samples for VOC analyses were collected over the twenty-four (24) hour sampling period using personal sampling pumps calibrated at approximately 0.2 liters per minute. Exposed sample tubes were kept refrigerated before and after sample collection and then shipped, in total, by overnight courier to Air Quality Sciences, Inc. (Atlanta, Georgia) for receipt the following morning.

Analytical-Laboratory Methods

i. Columbia Analytical Services, Inc.

Tedlar bag samples were analyzed by Columbia Analytical Services, Inc., for twenty (20) individual sulfur-containing compounds, to include hydrogen sulfide, carbon disulfide, and carbonyl sulfide, as per ASTM D 5504-01. Analyses were performed as soon as possible upon receipt by the laboratory to minimize holding time excursions. Samples were analyzed using a gas chromatograph equipped with a sulfur chemiluminescence detector (SCD). All compounds, with the exception of carbonyl sulfide and hydrogen sulfide, were quantitated against an initial calibration curve for methyl mercaptan.

ii. Lakeland Laboratories, LLC

Tedlar bag samples were analyzed by Lakeland Laboratories, LLC, for twenty (20) individual sulfur-containing compounds, to include hydrogen sulfide, carbon disulfide, and carbonyl sulfide, as per ASTM D 5504-08. Each sample was obtained from the one (1) L Tedlar collection bag via a side arm of the valve through a one-fourth inch ($\frac{1}{4}$ "') outer diameter (OD) Teflon tube. Samples were subsequently introduced into an Agilent Model No. 7890 Gas Chromatograph (GC) equipped with

a volatiles interface inlet and two milliliter (2.0 ml) sample loop. The valve on the Tedlar bag was opened, and the exterior of the bag manually pressurized for approximately thirty (30) seconds to fill the sample loop with the air sample to be analyzed. The valve was then closed and the chromatograph run initiated. At the start of the run, a valve was actuated and the sample swept from the sample loop onto the analytical column (DB-1, 60-m, 0.32-mm ID, 0.5- μ m film thickness). The GC was fitted with an Agilent Model No. 355 Dual-Plasma Sulfur Chemilluminescence Detector (SCD). The analytes of interest were separated by the column, entered the combustion chamber, and catalyzed into sulfur monoxide (SO). A vacuum pump pulled the combustion products into a reaction cell at low pressure, where excess ozone was added. The ozone reacted with the SO to form sulfur dioxide (SO₂), oxygen (O₂), and light. The light produced from the reaction was optically filtered and detected with a blue-light-sensitive photomultiplier tube. The signal was then amplified for display or output through a data system. Chromatographic peaks falling within the statistically-defined absolute retention time window for a given compound are assigned to the target analyte for the respective retention time. The response of the peak was compared to the calibration curve for that specific target analyte, the final concentration calculated, and the response factor reported.

iii. Air Quality Sciences, Inc.

Carbopack B sorbent media tubes were analyzed for comprehensive detection of individual VOCs by Air Quality Sciences, Inc. Sorbent tube collection, separation, and detection methodologies were adapted from techniques presented by the United States Environmental Protection Agency (USEPA) and others. Sorbent media received by the laboratory were thermally desorbed into a gas chromatograph with mass spectrometric detection (GC/MS), a technique which is generally applicable to organic chemicals with boiling points ranging from 35 degrees Centigrade (°C) to 250°C. Individual VOCs were quantified relative to a toluene standard and identified by comparison to a specialized indoor air mass spectral database created by AQS. Compounds not included in the internal database were identified with decreased certainty using a general mass spectral library available from the National Institute of Standards and Technology (NIST). The reliable quantification level for analyses were 0.8 microgram of analyte per cubic meter air ($\mu\text{g}/\text{m}^3$) based on the targeted collection volume of 48.0 liters. Values below 0.8 $\mu\text{g}/\text{m}^3$ are below the laboratory's quantifiable limit and were provided only for informational purposes.

4.4 Real-Time Air Monitoring Events

Hydrogen sulfide levels were measured approximately every 2 hours in the test and control homes. The Jerome® 631-X Hydrogen Sulfide Analyzer was used to take periodic direct readings of Hydrogen Sulfide concentrations in Units 90 & 91. The Jerome® 631-X reports an analysis range of 0.003-50 ppm. The Jerome® 631-X utilizes a patented gold film sensor. The instrument's selectivity to hydrogen sulfide reportedly eliminates interferences from sulfur dioxide, carbon dioxide, carbon monoxide, and water vapors. When the sample button is pressed, an internal pump draws air into the instrument. Any hydrogen sulfide in the sample is absorbed by the sensor which registers a proportional change in electrical resistance. The instrument's

resolution is reported to be 1 ppb, its accuracy is +/- 3 ppb at 50 ppb, and its precision is 5% Relative Standard Deviation. Results are provided in section 4.6.

4.5 Air Sampling Events

Phase I (Units 80 & 81) was a scoping study to generate data on the variability and reliability of available test methods to measure concentrations of sulfur-containing gasses and volatile organic compounds (VOCs). As a secondary goal, this phase of testing was anticipated to generate data on the types of chemical compounds found in affected and unaffected homes and their respective concentrations. Two sampling events were conducted to evaluate possible diurnal effects on indoor air concentrations. The study protocol for Phase II activities would be evaluated and refined based on observations and experiences in Phase I.

Five simultaneous samples for sulfur-containing gasses were collected from the Test home (Unit 80), the Control home (Unit 81), and Outside during two sampling events. The first sampling event began at 10:00 AM on May 4, 2009. The second event began at 3:45 PM on May 4, 2009. Samples were packaged and shipped via overnight courier (Fed Ex) to Columbia Analytical Services (Simi Valley, California) for analysis using ASTM Method D 5504-01. Because of shipping schedules and the rate at which the laboratory could analyze samples it was recognized that some of the samples would exceed the 24 hour hold time recommended in the analysis method. Samples were prioritized and the laboratory attempted to analyze samples using this priority. This limitation could not be avoided, but was remedied in Phase II by utilizing a laboratory located in Florida that could receive and analyze all samples within the 24 hour hold time prescribed in the ASTM D 5504-01 method.

Volatile Organic Compounds (VOCs) were collected during two sampling periods, a morning period of 4 hours and an afternoon period of 4 hours. Five simultaneous samples were collected from the Test home (Unit 80), the Control home (Unit 81), and Outside during each of the two sampling events. The first sampling event began at 9:00 AM on May 4, 2009. The second event began at 3:45 PM on May 4, 2009. Samples were packaged and shipped via overnight courier (Fed Ex) to Air Quality Sciences (Marietta, Georgia) for analysis using thermal desorption into a gas chromatograph with mass spectrometric detection (GC/MS).

Phase II (Units 90 & 91) examined the indoor air levels of sulfur-containing gasses and volatile organic compounds (VOCs) throughout a 24-hour cycle. Samples and measurements were taken in two locations within each home in addition to outdoors. Twelve (12) sampling events were performed to evaluate possible diurnal effects on indoor air concentrations of sulfur-containing gasses. Six (6) sampling events were performed to evaluate possible diurnal effects on indoor air concentrations of VOCs, consisting of two samples of 4 hour duration collected during each sampling event.

Air samples for sulfur-containing gasses were collected into Tedlar bags every two (2) hours over a twenty-four (24) hour period, alternating between the Living room (Location 1) and master bedroom (Location 2) of each home, resulting in the collection of six (6) samples from each location (living room & master bedroom) of each residence. The first sampling event began at 11:35 AM in Unit 90, and at 12:30 PM in Unit 91 on June 8, 2009 and continued for 24 hours.

Samples were packaged and taken by laboratory courier to Lakeland Laboratories, LLC (Lakeland, Florida) for analysis using ASTM Method D 5504-08.

Volatile Organic Compounds (VOCs) were continuously collected during six sampling periods in Units 90, 91, and Outdoors. Two simultaneous samples were collected from each home (Locations 1 & 2), and Outside throughout the 24-hour period. The first sampling event began at 11:35 AM in Unit 90, and at 12:20 PM in Unit 91 on June 8, 2009 and continued for 24 hours. After all samples were collected they were packaged and shipped via overnight courier (Fed Ex) to Air Quality Sciences (Marietta, Georgia) for analysis using thermal desorption into a gas chromatograph with mass spectrometric detection (GC/MS).

4.6 Real-Time Monitoring Results

Hydrogen Sulfide measurements taken with the Jerome 631-X did not detect concentrations above the device's detection limit of 3 ppb in either Unit 90 (Test Home) or 91 (Control Home). Data are presented in Tables 3 & 4.

Elevated Carbon Monoxide (CO) measurements were recorded outdoors (Unit 90; Location 3) from 7:25 PM on June 8 to 4:25 AM on June 9. The peak concentration of 19 ppm CO occurred at 9:18 PM, however the time weighted average during this 9 hour period was 3 ppm of Carbon Monoxide (CO). Carbon Dioxide (CO₂) measurements also spiked during an overlapping time period, beginning at 5:35 PM on June 8 and continuing until 7:35 AM on June 9. The peak concentration of 1,988 ppm CO₂ occurred at 6:55 PM on June 8, however the time weighted average during this 14 hour period was 841 ppm of Carbon Dioxide (CO₂). Because these measurements were recorded during and soon after a significant rain event, as indicated by relative humidity readings of >95% at ~70 °F, and rain measurements from the weather station of 0.75 inch in one hour, these high CO and CO₂ measurements in outdoor air may be a false reading. Excessive humidity is known as a possible cause of false readings by non-dispersive infrared (NDIR) and electrochemical sensors, as were used by the device that recorded these measurements.

Table 3 –Environmental Parameter Data- Instantaneous Measurements Unit 90
 (06/08/2009-06/09/2009)

Time	AQS5001				Telaire				H ₂ S (ppb)	Press (Pa.)
	CO (ppm)	CO ₂ (ppm)	RH %	TEMP Deg F	TEMP Deg F		CO ₂ (ppm)			
	Loc 3 (Outdoors)				Loc 2 (MBR)	Loc 1 (LR)	Loc 2 (MBR)	Loc 1 (LR)		
3:45PM	0.0	454	60.5	86.2	74.9	73.5	749	630	<3	1.6
5:40PM	0.0	1035	96.7	69.5	74.2	73.7	629	622	<3	0.8
7:30PM	1.0	1242	90.8	72.3	75.1	72.5	624	560	<3	1.4
9:45PM	5.0	638	89.8	72.8	74.9	72.5	582	526	<3	-0.4
11:50PM	3.0	632	83.6	73.7	74.8	73.0	567	509	<3	-0.2
1:35AM	2.0	634	90.7	72.6	74.5	73.2	540	500	<3	-0.3
3:50AM	1.0	661	92.2	72.7	74.8	72.8	545	493	<3	-0.2
5:30AM	0.0	760	90.4	72.5	74.5	72.8	536	495	<3	0.00
7:35AM	1.0	690	87.4	75.5	74.3	74.9	538	499	<3	0.00
9:35AM	0.0	481	73.6	80.2	73.6	74.3	551	512	<3	-1.4
11:45AM	0.0	469	57.5	83.7	76.8	73.1	486	526	<3	-1.5

CO = Carbon Monoxide

CO₂ = Carbon Dioxide

RH = Relative Humidity

TEMP = Temperature in degrees Fahrenheit

H₂S = Hydrogen Sulfide

Press (Pa) = Differential pressure (Pascals) I/O

Loc 2 (MBR) = Master bedroom (1st Floor)

Loc 1 (LR) = Living room (2nd Floor)

Table 4 –Environmental Parameter Data- Instantaneous Measurements Unit 91
 (06/08/2009-06/09/2009)

Time	Telaire				H ₂ S (ppb)	Press. (Pa)
	TEMP Deg F		CO ₂ (ppm)			
	Loc 2	Loc 1	Loc 2	Loc 1		
2:40PM	73.5	75.0	710	754	<3	2.2
4:50PM	74.2	74.7	654	715	<3	0.9
6:50PM	73.8	74.3	670	670	<3	0.00
9:20PM	73.5	74.6	622	627	<3	-0.2
10:45PM	73.2	75.1	635	626	NM	NM
2:45AM	73.4	75.2	612	603	<3	-0.3
4:30AM	73.1	74.8	634	625	<3	0.0
6:30AM	73.1	74.6	629	666	<3	-0.003
8:37AM	74.6	75.3	625	662	<3	-1.0
10:45AM	74.3	76.3	622	674	<3	-1.2
1:20PM	74.2	75.9	610	614	NM	NM

TEMP=Temperature in degrees Fahrenheit

CO₂=Carbon Dioxide

H₂S=Hydrogen Sulfide

NM= Not Measured

Press (Pa) = Differential pressure (Pascals) I/O

4.7 Air Sampling Analysis Results

Sulfur-containing Gases

Results of sulfur-containing gas samples in Units 80 & 81 (Phase I) are summarized below with complete laboratory reports provided in Appendix C. With a single exception for Carbon Disulfide, no concentrations above the laboratory's detection limits were reported for Hydrogen Sulfide, Carbonyl Sulfide, or any of the other sulfur-containing compounds. Carbon Disulfide was detected at a concentration of 2.5 ppbv in one out of five samples taken in Unit 80 at 3:45 PM on May 4, 2009. Because only one sample detected the CS₂ a standard deviation could not be estimated for the result and confidence that this result reflects actual room concentrations is low. Outdoor air sample results did not indicate the presence of sulfur-containing gasses above detectable limits during either sampling event. One of the four blank samples was reported to have a concentration of 6.1 ppbv of Carbonyl Sulfide. The other three blanks were reported as non-detect for all analytes. One Tedlar bag (Sample 090504-RS-57) from the Unit 80 Test House, 2nd Sampling Event (3:45 PM) Location 1D arrived at the laboratory deflated and was not analyzed.

Samples collected during Phase I were submitted to Columbia Analytical Services (CAS) for analysis. Samples for Phase II were submitted to Lakeland Laboratories for analysis. Reporting limits for each laboratory are provided in Table 5.

Table 5 – Reporting Limits for Laboratories Analyzing Sulfur containing Gases

Chemical Name	CAS	Lakeland Lab	
	MRL (ppbv)	PQL (ppbv)	MDL (ppbv)
Hydrogen Sulfide	5.0	5.00	3.35
Carbonyl Sulfide	5.0	5.00	3.96
Methyl Mercaptan	5.0	5.00	4.65
Ethyl Mercaptan	5.0	5.00	4.59
Dimethyl Sulfide	5.0	5.00	3.41
Carbon Disulfide	2.5	5.00	1.29
Isopropyl Mercaptan	5.0	7.00	5.00
tert-Butyl Mercaptan	5.0	7.00	5.64
n-Propyl Mercaptan	5.0	5.00	4.36
Ethyl Methyl Sulfide	5.0	5.00	3.36
Thiophene	5.0	5.00	3.50
Isobutyl Mercaptan	5.0	5.00	4.00
n-Butyl Mercaptan	5.0	5.00	3.39
Diethyl Sulfide	5.0	5.00	4.29
3-Methyl Thiophene	5.0	5.00	2.70
Tetrahydrothiophene	5.0	5.00	2.07
Dimethyl Disulfide	2.5	5.00	3.25
2-Ethyl Thiophene	5.0	5.00	1.97
Diethyl Disulfide	2.5	5.00	1.26
2,5-Dimethyl Thiophene	5.0	5.00	3.62

CAS = Columbia Analytical Services

MRL = Method Reporting Limit (MRL & PQL are equivalent terms)

PQL = Practical Quantitation Limit MDL = Method Detection Limit

Results of sulfur-containing gas samples in Units 90 & 91 (Phase II) are summarized below with complete laboratory reports provided in Appendix D. All samples taken in Unit 91 (Control Home) were reported as non-detect for all sulfur-containing compounds. In Unit 90 one sample detected Hydrogen Sulfide at a concentration of 5.72 ppbv at 9:35 AM on June 9, 2009. Also in Unit 90 one samples detected Carbonyl Sulfide at a concentration of 4.14 ppbv at 9:45 pm on June 8, 2009 (note this value is below the quantitation limit reported by Lakeland Laboratories). All other samples for sulfur-containing gases were below detection limits in Unit 90 (Test Home). Outdoor air sample results detected Hydrogen Sulfide during two sampling events; 7.14 ppbv (4:00 AM on June 9); and 6.09 ppbv (7:35 AM on June 9). One of the four blank samples was reported to have a concentration of 160 ppbv of Carbonyl Sulfide and 4.9 ppbv of Isopropyl Mercaptan. The other three blanks were reported as non-detect for all analytes. One Tedlar bag (Sample 090608-RS-23) collected Outside during the 4th Sampling Event (5:40 PM) Location 3 arrived at the laboratory deflated and was not analyzed.

In order to gain some understanding about the reliability and repeatability of sample results obtained with available sample collection and analysis methods, samples were collected during Phase I so that a Standard Deviation (SD) and Percent Relative Standard Deviation (%RSD) could be calculated. Estimates of standard deviation could not be made for sulfur-containing compounds analyzed using the ASTM D 5504 method because most analytes were below the detectability of the method. Eighty nine of the volatile organic compounds measured in samples taken from Units 80, 81, and Outdoors met the criteria to estimate a Standard Deviation and Percent Relative Standard Deviation. They are provided in Table 6.

Table 6 – Standard Deviation, %RSD, and Range for VOC data from Phase I

CAS #	Chemical Name	STD DEV	%RSD	Min (µg/m³)	Max (µg/m³)
100-41-4	Benzene, ethyl	0.56	8.98	5.5	7
100-42-5	Styrene	0.29	4.93	5.5	6.3
100-52-7	Benzaldehyde	1.57	16.69	8.4	12.2
101-39-3	Methylcinnamic aldehyde (2-Propenal, 2-methyl-3-phenyl-)	0.49	23.04	1.6	2.8
104-55-2	Cinnamic aldehyde (2-Propenal, 3-phenyl-)	0.49	20.85	2	3.2
10473-13-9	3-Buten-2-ol, 2,3-dimethyl-	0.21	12.49	1.5	2
104-76-7	1-Hexanol, 2-ethyl	0.67	5.67	11.1	12.5
106-42-3	Xylene (para and/or meta)	0.98	5.15	17.6	20.3
107-87-9	2-Pentanone	0.10	10.00	0.9	1.1
107-92-6	Butanoic acid	0.04	4.86	0.9	1
108-88-3	Toluene (Methylbenzene)	0.78	5.39	13.3	15.4
110-19-0	Acetic acid, 2-methylpropyl ester (Isobutyl acetate)	0.05	5.71	0.9	1
110-43-0	2-Heptanone	0.18	4.99	3.4	3.9
110-62-3	Pentanal	1.53	12.72	10.5	14.6
111-27-3	1-Hexanol (N-Hexyl alcohol)	0.58	14.84	3.3	4.7
111-70-6	1-Heptanol	0.64	12.26	4.7	6.2
111-71-7	Heptanal (Heptaldehyde)	0.52	6.64	7.3	8.6
111-84-2	Nonane	0.09	5.81	1.4	1.6
1120-21-4	Undecane	0.86	9.34	8.1	10.5
112-31-2	Decanal	1.16	43.82	1.3	4
112-41-4	1-Dodecene	0.48	14.98	2.8	4
1196-01-6	Bicyclo[3.1.1]hept-3-en-2-one, 4,6,6-trimethyl-, (1S)-	0.40	23.04	1.4	2.2
123-35-3	1,6-Octadiene,7-methyl-3-methylene (Myrcene)	0.34	15.71	1.8	2.5
124-13-0	Octanal	0.95	9.94	9.1	11.3
124-19-6	Nonyl aldehyde (Nonanal)	1.78	12.04	13.4	16.8
127-00-4	2-Propanol, 1-chloro	0.45	8.96	4.6	5.8
127-91-3	Pinene, α (6,6-Dimethyl-2-methylene-bicyclo[3.1.1]heptane)	2.17	18.79	9	13.7
13151-34-3	Decane, 3-methyl	0.59	7.63	7.2	8.7
13466-78-9	3-Carene	1.38	29.37	3.7	7.1
13475-82-6	Heptane, 2,2,4,6,6-pentamethyl	0.81	5.87	12.8	15
138-86-3	Limonene (Dipentene; 1-Methyl-4-(1-methylethyl)cyclohexene)	0.95	10.53	7.9	10.2
140-67-0	Estragole (4-Allylanisole)	0.68	15.41	3.8	5.6
14411-56-4	Benzene, 1-(1,1-dimethylethyl)-3-ethyl	0.15	17.63	0.7	1.1
1632-73-1	Bicyclo[2.2.1]heptan-2-ol, 1,3,3-trimethyl	0.35	21.38	1.3	2.2
17302-32-8	Nonane, 3,7-dimethyl	1.52	8.51	16.1	19.6
17302-37-3	Decane, 2,2-dimethyl	0.29	5.38	5.2	5.9
17312-53-7	Decane, 3,6-dimethyl	2.06	18.07	10	14.9
1809-10-5	Pentane, 3-bromo-	0.31	23.71	0.9	1.7
18491-15-1	2,2-Dimethyl-1-isopropyl-1,3-propanediol monoisobutyrate	1.03	68.80	0.8	3.3
18794-77-9	Thiophene, 2-hexyl	1.23	49.42	1.2	3.7
2051-30-1	Octane, 2,6-dimethyl	1.00	42.69	0.6	3
2497-25-8	2-Decenal, (Z)-	0.21	17.88	1	1.5

CAS #	Chemical Name	STD DEV	%RSD	Min ($\mu\text{g}/\text{m}^3$)	Max ($\mu\text{g}/\text{m}^3$)
2548-87-0	2-Octenal, (E)	1.09	46.28	1.4	3.6
29066-34-0	Methyl acetate	0.29	5.11	5.2	6
32210-23-4	4-tert-Butylcyclohexyl acetate (Vertenex)	1.56	41.96	1.1	5.3
464-48-2	Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimethyl-, (1S)	0.15	9.14	1.5	1.9
464-49-3	Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimethyl-, (1R)	0.30	24.20	0.9	1.6
470-40-6	Thujopsene	0.26	17.86	1.2	1.8
5131-66-8	2-Propanol, 1-butoxy	0.15	5.34	2.6	3
541-02-6	Cyclopentasiloxane, decamethyl	6.53	35.03	14.8	30.2
555-10-2	α -Phellandrene	0.56	9.60	5.3	6.6
556-67-2	Cyclotetrasiloxane, octamethyl	1.61	15.99	7.2	11
56539-66-3	3-Methoxy-3-methylbutanol	0.29	4.53	6	6.7
565-80-0	3-Pentanone, 2,4-dimethyl	0.76	8.72	7.5	9.4
589-34-4	Hexane, 3-methyl	4.94	82.68	1.7	14
591-76-4	Hexane, 2-methyl	2.95	62.07	2	9.6
591-78-6	2-Hexanone	0.37	20.19	1.2	2.1
617-94-7	Benzenemethanol, α,α -dimethyl-	0.34	17.85	1.5	2.3
62016-14-2	Octane, 2,5,6-trimethyl	0.61	4.00	14.8	16.3
62016-37-9	Octane, 2,4,6-trimethyl	8.98	51.59	1.5	22.7
62108-31-0	Heptane, 4-ethyl-2,2,6,6-tetramethyl	1.88	25.25	4.5	9.4
62183-55-5	Octane, 3-ethyl-2,7-dimethyl	1.04	10.27	8.7	11.5
62199-06-8	Heptane, 5-ethyl-2,2,3-trimethyl-	1.30	4.46	28	31
622-96-8	Benzene, 1-ethyl-4-methyl (4-Ethyltoluene)	0.18	4.17	4.1	4.6
64-19-7	Acetic acid	6.75	58.08	3.5	21.6
66-25-1	Hexanal	4.02	10.29	34.7	45.6
67-64-1	Acetone	0.09	4.86	1.7	1.9
693-54-9	2-Decanone	1.10	33.78	2.2	4.5
71-36-3	1-Butanol (N-Butyl alcohol)	0.30	21.43	1	1.7
71-41-0	1-Pentanol (N-Pentyl alcohol)	0.36	4.79	7.1	8.1
77-68-9	2,2,4-Trimethyl-1,3-pentanediol monoisobutyrate	7.87	108.69	0.9	16
77-73-6	4,7-Methano-1H-indene, 3a,4,7,7a-tetrahydro	0.13	11.77	0.9	1.2
78-79-5	1,3-Butadiene, 2-methyl	0.60	53.35	0.1	1.6
78-84-2	Propanal, 2-methyl (Isobutanal)	0.52	21.03	1.9	3.3
78-89-7	1-Propanol, 2-chloro-	0.23	20.19	0.8	1.3
79-31-2	Propanoic acid, 2-methyl	0.62	36.50	1.2	2.6
79-33-4	(S)-2-Hydroxypropanoic acid	3.01	94.69	0.8	7.3
80-56-8	Pinene, α (2,6,6-Trimethyl-bicyclo[3.1.1]hept-2-ene)	8.51	23.83	25.2	42.1
821-95-4	1-Undecene	0.11	8.56	1.1	1.4
89-48-5	Methyl acetate	0.29	5.11	5.2	6
91-20-3	Naphthalene	0.44	16.73	2.1	3.2
95-16-9	Benzothiazole	0.25	18.73	1.1	1.7
95-47-6	Xylene, ortho	0.40	5.23	7	8.1
95-93-2	Benzene, 1,2,4,5-tetramethyl	0.52	31.19	1	2.1
96-48-0	2(3H)-Furanone,dihydro (Butyrolactone)	0.11	7.21	1.4	1.7
98-01-1	Furfural (2-Furaldehyde)	0.19	9.46	1.9	2.4
98-56-6	Benzene, 1-chloro-4-(trifluoromethyl)-	0.67	4.67	13.2	15
98-83-9	α -Methylstyrene (iso-Propenylbenzene; (1-Methylethenyl)benzene)	0.15	13.30	0.9	1.3
98-86-2	Acetophenone (Ethanone, 1-phenyl)	0.40	10.95	3.3	4.3

Volatile Organic Compounds

Results of air samples for VOCs revealed the presence of hundreds of chemicals typically found in homes. Several sulfur-containing compounds were detected using the GC/MS method for VOCs, these included 2-hexyl Thiophene, 2-butyl Thiophene, and Benzothiazole, at concentrations below the detection limit of the ASTM D 5504 method that was used to detect sulfur-containing gasses. Outdoor air concentrations of VOCs were typically below the quantifiable limit of 0.8 µg/m³ with the exception of 3-methyl Hexane, 2-methyl Hexane, and Acetone. One sampling event during Phase II identified elevated concentrations of Methyl methacrylate in Units 90 & 91 that was due to an elevated outdoor air concentration during the time period of 7:45 AM-12:45 PM on June 9, 2009. Aside from these unique compounds and events, significant contribution to indoor concentrations of VOC was not observed.

One metric often used to evaluate the relative strength of VOC sources in a building is Total VOC concentrations (TVOC). Average, maximum, and minimum TVOC measurements are listed in Table 7.

Table 7 – Summary of TVOC Measurements

	TVOC Average (µg/m³)	TVOC Max (µg/m³)	TVOC Min (µg/m³)
Unit 80 (Test)	622	722	538
Unit 81 (Control)	296	324	254
Unit 90 (Test)	379	421	330
Unit 91 (Control)	510	559	466

A complete report of all VOCs detected and quantified is provided in Appendices E & F.

Environmental Conditions & Parameters

Detailed measurements of the environmental conditions within each home and outdoors during each sampling event are provided in Appendix G. In general the weather conditions were typical of early May and Early June in south Florida. Hot, humid, with occasional heavy thunder storms. The low air change rates of the homes in this study are reflected by their ability to effectively control indoor temperature and relative humidity. Pressure differential measurements confirmed the well-sealed and insulated construction of each Test and Control home. During one heavy downpour (0.75 inches in 1 hour) the relative humidity did not rise above 55% in Unit 90 or 44% in Unit 91, demonstrating the tight building envelopes of homes in this study.

5.0 CONCLUSIONS

Were building characteristics for affected homes different from unaffected homes?

Construction styles, materials, with the exception of imported drywall, and the ages of Test and Control homes were comparable. Air change rates for Test homes were 0.12 and 0.22 ACH, while for Control homes were 0.16 and 0.17 ACH. All homes effectively controlled temperature and relative humidity, suggesting that uncontrolled environmental conditions within Test homes were not contributing factors to drywall emissions or copper corrosion.

What is the reliability and repeatability of available sample collection and analysis methods?

An estimate of the reliability and repeatability of the ASTM D 5504 test method could not be accomplished due to the infrequency of detecting or measuring any of the reduced sulfur gasses (Hydrogen Sulfide, Carbonyl Sulfide, and Carbon Disulfide) in the Test homes. With few exceptions, simultaneously collected samples were below the detection limit of the method. Some additional assessment of conditions or possible interferences that may cause false positive readings using this sampling and analysis method may explain the sporadic findings of Carbonyl Sulfide in blank samples.

An assessment of variability in reported sample results which included estimates of the standard deviation and percent relative standard deviation was accomplished for eighty nine (89) VOCs measured during Phase I testing. These measures of variability may be used when evaluating the samples collected from Units 90 & 91.

What were the in-home concentrations of corrosive gasses emitted from defective drywall?

A single measurement of Hydrogen Sulfide in Unit 90 (Test Home) was quantified as 5.72 ppbv. This was the only sample above the 5 ppbv Method Reporting Limit out of the twelve samples collected in Unit 90. Similarly a single sample was reported to contain 4.14 ppbv of Carbonyl Sulfide (an estimate with some uncertainty because it was below the laboratory's MRL/PQL). All other samples for sulfur-containing gases were below detection limits in Units 80 and 90 (Test Home).

Were there changes in concentrations of corrosive gasses and VOCs due to diurnal cycles?

Since corrosive sulfur-containing gasses were rarely detected in Test homes, an assessment of diurnal cycle impacts is somewhat limited. Trends or indications of periods when corrosive gas emissions were elevated were not identified. In two instances during the early morning hours at 04:00 AM and 07:35 AM on June 9, 2009, Hydrogen Sulfide was detected outdoors. Due to the small number of data points, declaring this a trend is premature.

Was there an influence from chemicals in the outside air and/or environmental conditions on the indoor air chemical concentrations?

In one case, an elevated level of Methyl methacrylate was detected inside Units 90 & 91 and simultaneously observed in the outdoor air sample. The origin of this ambient source was undetermined, but demonstrated the ability of VOCs to enter the homes from the outside over a 4 hour sampling period. Aside from this instance, the influence of outdoor weather conditions and contaminant sources were not apparent. The integrity of the building envelope and the efficiency

of the building to regulate temperature/humidity levels were assumed to sufficiently control indoor conditions.

What were the in-home concentrations of secondary by-products that may be linked to corrosive emissions from drywall reacting with other materials, coatings, adhesives, or chemicals in the indoor environment?

Further examination of the data is necessary to ascertain if any of the compounds detected in the Test homes were present due to chemical reactions between corrosive emissions from drywall and other materials, coatings, adhesives, or chemicals in the indoor environment. Comprehensive lists of chemicals identified in all homes are available in Appendices C, D, E & F.

Appendix A

Preliminary Site Assessment Protocol

Salazar Consulting Group, Inc.

*A professional team of engineers, industrial hygienists,
safety experts, physicians, and health scientists.*

Indoor Environmental Quality Evaluations
Environmental and Medical Monitoring
EPA/OSHA Compliance
Expert Testimony

Hazardous Waste Control
Hazard Communication
Safety Evaluations
Training

June 4, 2009

David Krause, Ph.D., MSPH, CIH
State Toxicologist
Bureau of Environmental Public Health Medicine
Division of Environmental Health
Florida Department of Health
4052 Bald Cypress Way Bin A08
Tallahassee, Florida 32399-1712

RE: Air Change Rate Measurement Protocol
Chinese Wallboard Project
SCG File No.:1406.01

Dear Dr. Krause:

Please accept the following as the Air Change Rate Measurement Protocol to be implemented as part of the home pre-characterizations with regard to the Chinese Wallboard project:

Preparatory Tasks

1. All measurement protocol tasks are to be completed between the hours of 9:00am and 5:00pm.
2. Secure sufficient carbon dioxide gas (carbon dioxide gas used for soft drink carbonation will suffice) to achieve target concentration within select residence.
3. Select residence is to remain unoccupied by individuals except for those completing measurement tasks.
4. Request removal of all automobiles and lawnmowers from within attached garage(s) for a minimum of forty-eight (48) hours prior to measurement initiation.
5. Conduct a preliminary walk-through inspection to verify the following:
 - a. Absence of indicators of tobacco smoking within the residence.
 - b. Identification and removal (isolation) of all aromatic candles, plug-in fragrances, incense, deodorizers (automatic or passive), and aerosol dispensers.
 - c. Identification and removal (isolation) of all sources of paint, gasoline, solvents, thinner, or other volatile organic compounds (VOCs).
 - d. Closure of all windows and doors (to include garage door[s], if available); all windows and doors must remain closed during completion of monitoring tasks.

Specific Test Methods

1. Select carbon dioxide measurement device and, if multiple devices are utilized, ensure inter-device measurement variability of five percent (5.0%) or less; ensure field calibration of test device(s) within prior seven (7) days.
2. Measure carbon dioxide levels within each the living room and master bedroom areas of the residence and outdoors prior to test initiation (used only for information purposes and not air change rate calculation.)
3. Set each ventilation system thermostat to 73.0 degrees Fahrenheit (°F).
4. Set each ventilation system fan to the “ON” position prior to, during, and for thirty (30) minutes following carbon dioxide release; the ventilation system fan setting is switched to the “AUTO” position immediately following the thirty (30) minute carbon dioxide release period.
5. Introduce carbon dioxide at the ventilation system return air register for up to thirty (30) minutes, or until carbon dioxide concentrations at the two (2) indoor monitoring locations (living room and master bedroom) reach 2500 parts per million (ppm); terminate carbon dioxide gas introduction when the desired concentration is achieved at either indoor monitoring location.
6. Measure carbon dioxide concentrations within each the living room and master bedrooms, and outdoors, thirty (30) minutes following termination of carbon dioxide introduction; measured levels represent ‘indoor air concentration at starting time; $C_i(t_1)$ ’ and ‘outdoor air concentration at starting time; $C_o(t_1)$ ’, respectively.
7. Allow carbon dioxide concentrations to decay over a minimum of four (4) and maximum of five (5) hours, during which residence entry/exits should be avoided or at least minimized.
8. Measure carbon dioxide concentrations within each the living room and master bedrooms, and outdoors, a minimum of four (4) and maximum of five (5) hours following test initiation; measured levels represent ‘indoor air concentration at ending time; $C_i(t_2)$ ’ and ‘outdoor air concentration at ending time; $C_o(t_2)$ ’, respectively.
9. Calculate the Air Change Rate by inserting recorded concentrations into the equation which follows.

Air Change Rate Calculations

1. Use the following equation to calculate the average air change rate (ACR: air changes per hour):

$$ACR = \frac{\ln[C_i(t_1) - C_o(t_1)] - \ln[C_i(t_2) - C_o(t_2)]}{t_2 - t_1}$$

$C_i(t_1)$	=	indoor air concentration at starting time (ppm)
$C_o(t_1)$	=	outdoor air concentration at starting time (ppm)
$C_i(t_2)$	=	indoor air concentration at ending time (ppm)
$C_o(t_2)$	=	outdoor air concentration at ending time (ppm)
$t_2 - t_1$	=	duration of monitoring (hours)
ACR	=	average air change rate (air changes per hour)

David Krause, Ph.D., MSPH, CIH

June 4, 2009

Page 3

2. Calculate ACR for the living room and master bedroom monitoring locations.
3. Calculate the arithmetic mean of the ACRs (average ACR) for the living room and master bedroom monitoring locations as representative of the “whole house” ACR.

Again, please allow the preceding methods to describe those to be implemented as part of the pre-characterization assessments. Additional details may become necessary during project progression and will be provided accordingly.

SCG appreciates the opportunity to be of assistance in this regard. Please do not hesitate to contact us should you have any questions, comments, or need additional information.

Sincerely,

SALAZAR CONSULTING GROUP, INC.

By:

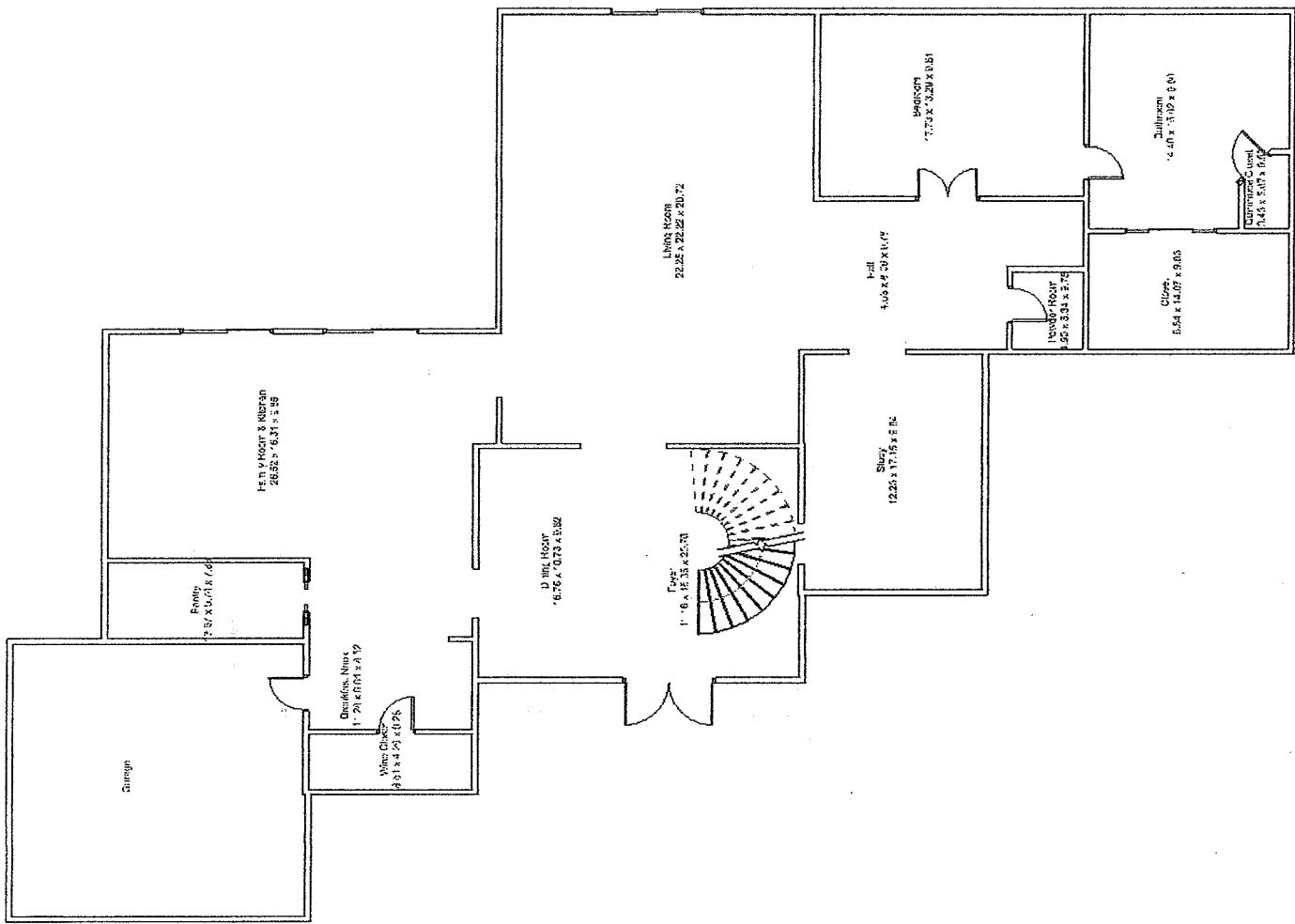
Rene' R. Salazar, Ph.D.
Certified Industrial Hygienist

Appendix B

Floor Plan Diagrams of Homes

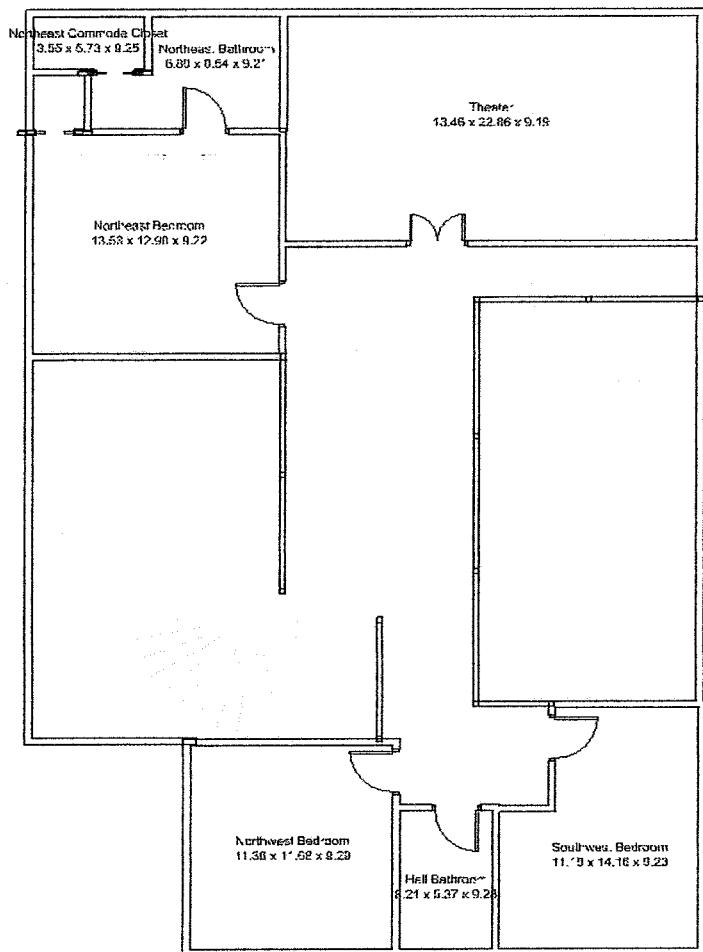
Unit 80

Ground Floor

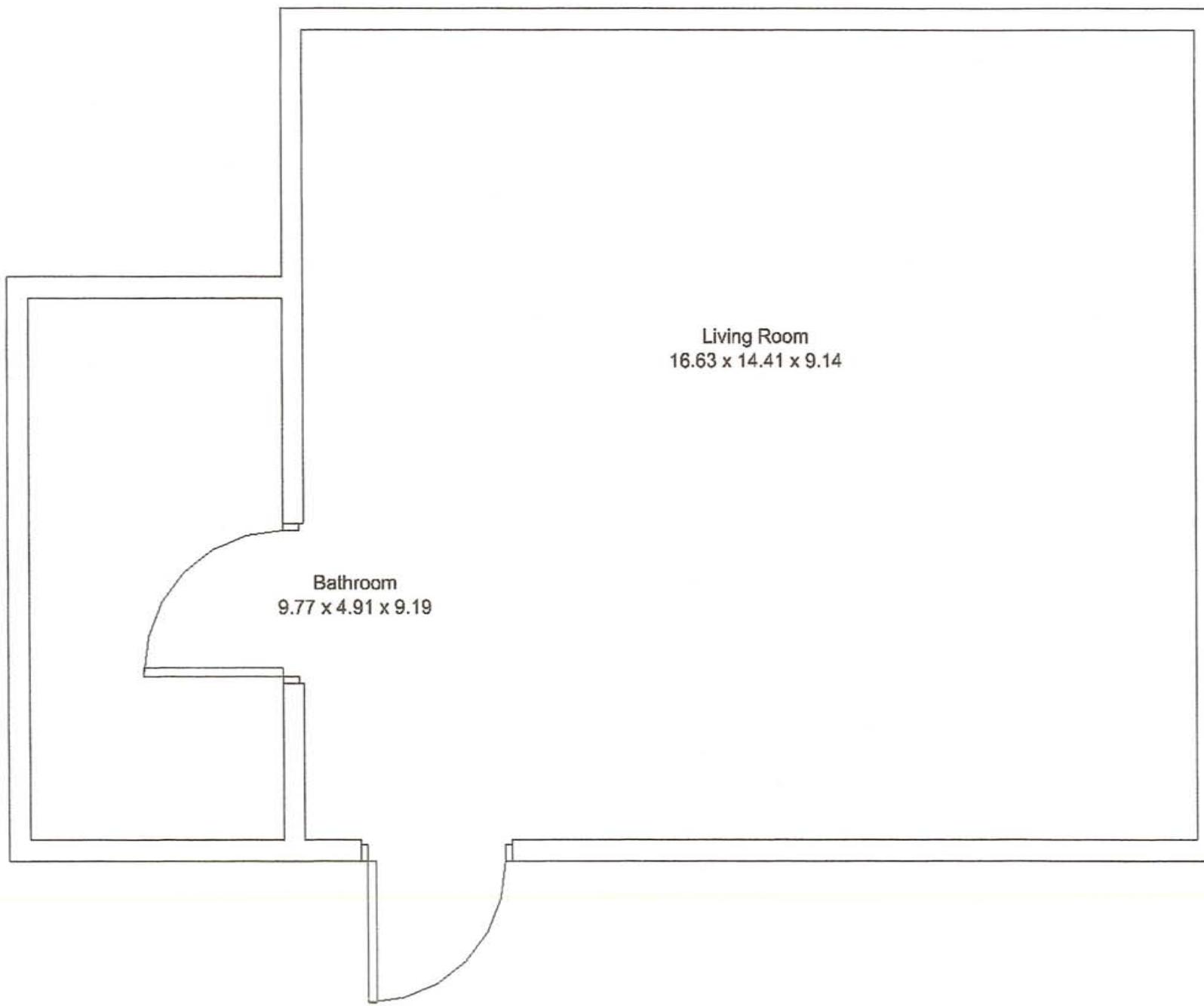


Unit 80

- Second Floor

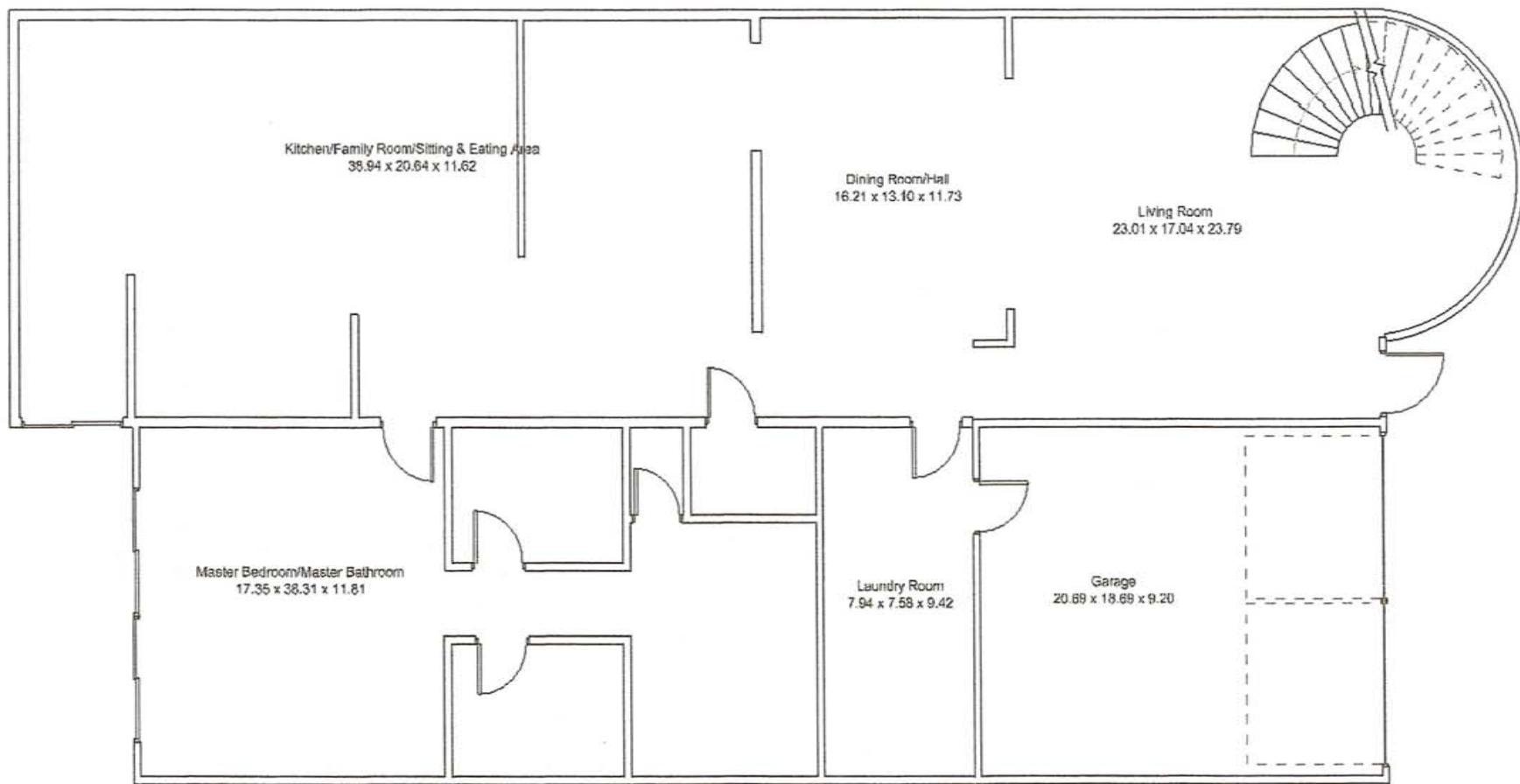


Unit 81



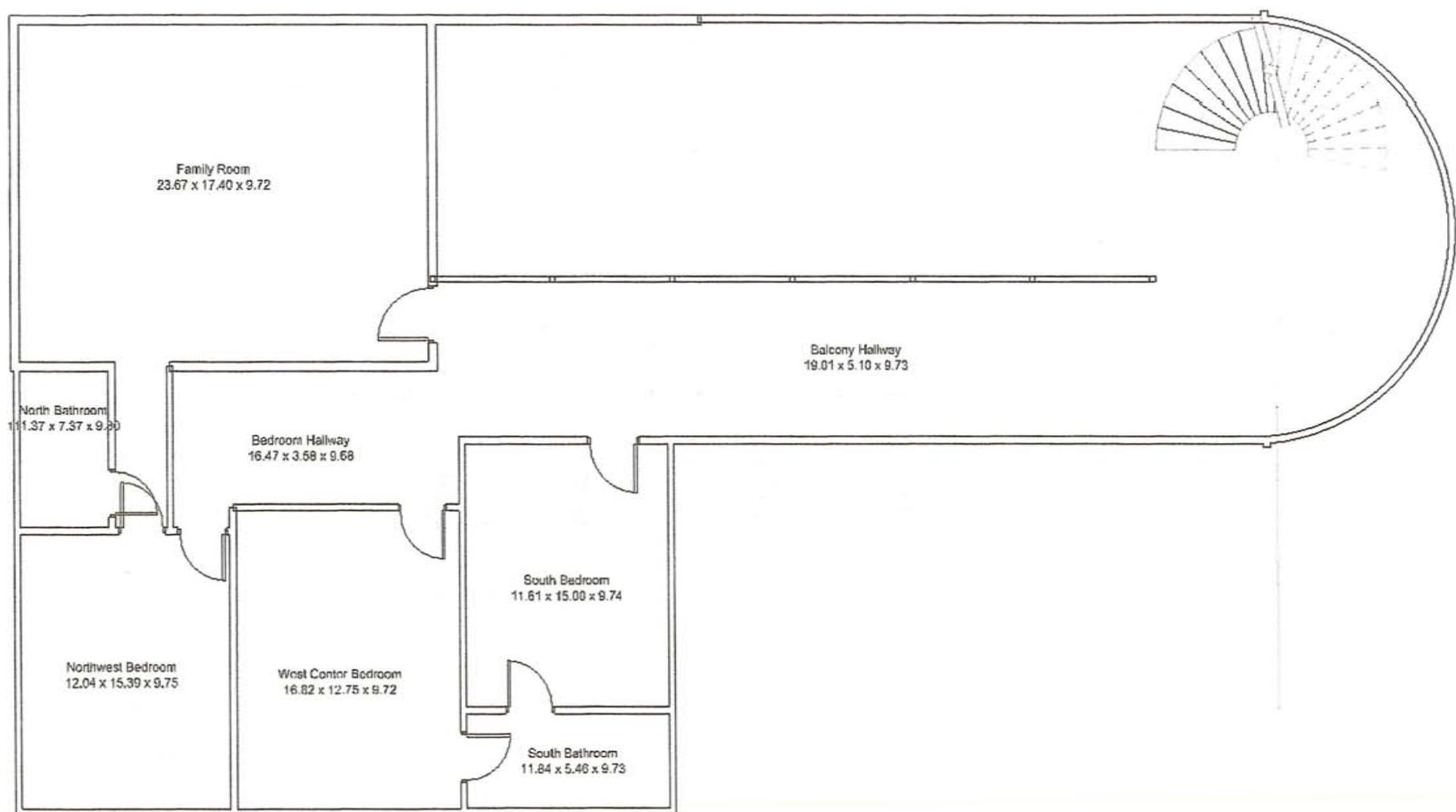
Unit 90

- Ground Floor



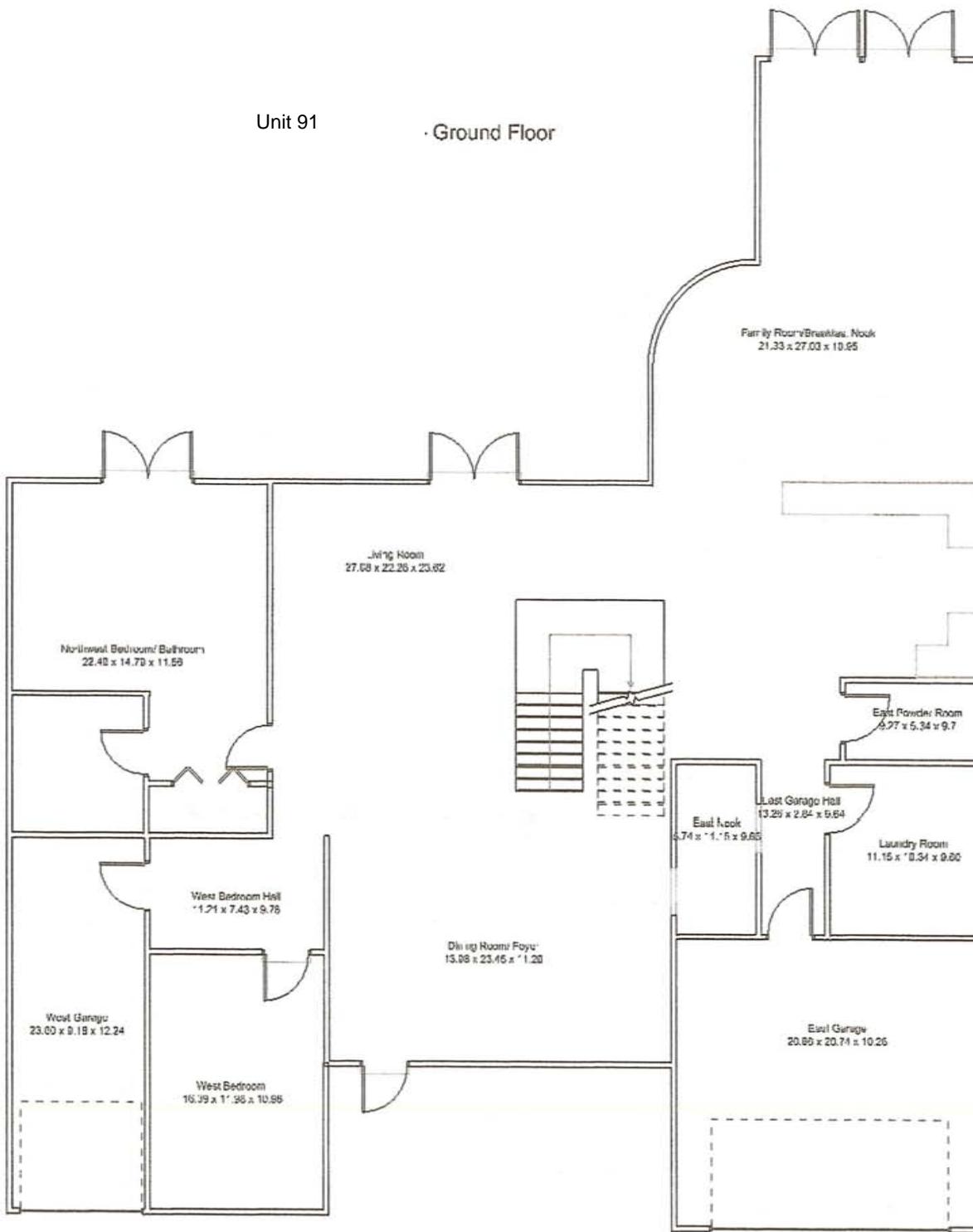
Unit 90

- Second Floor



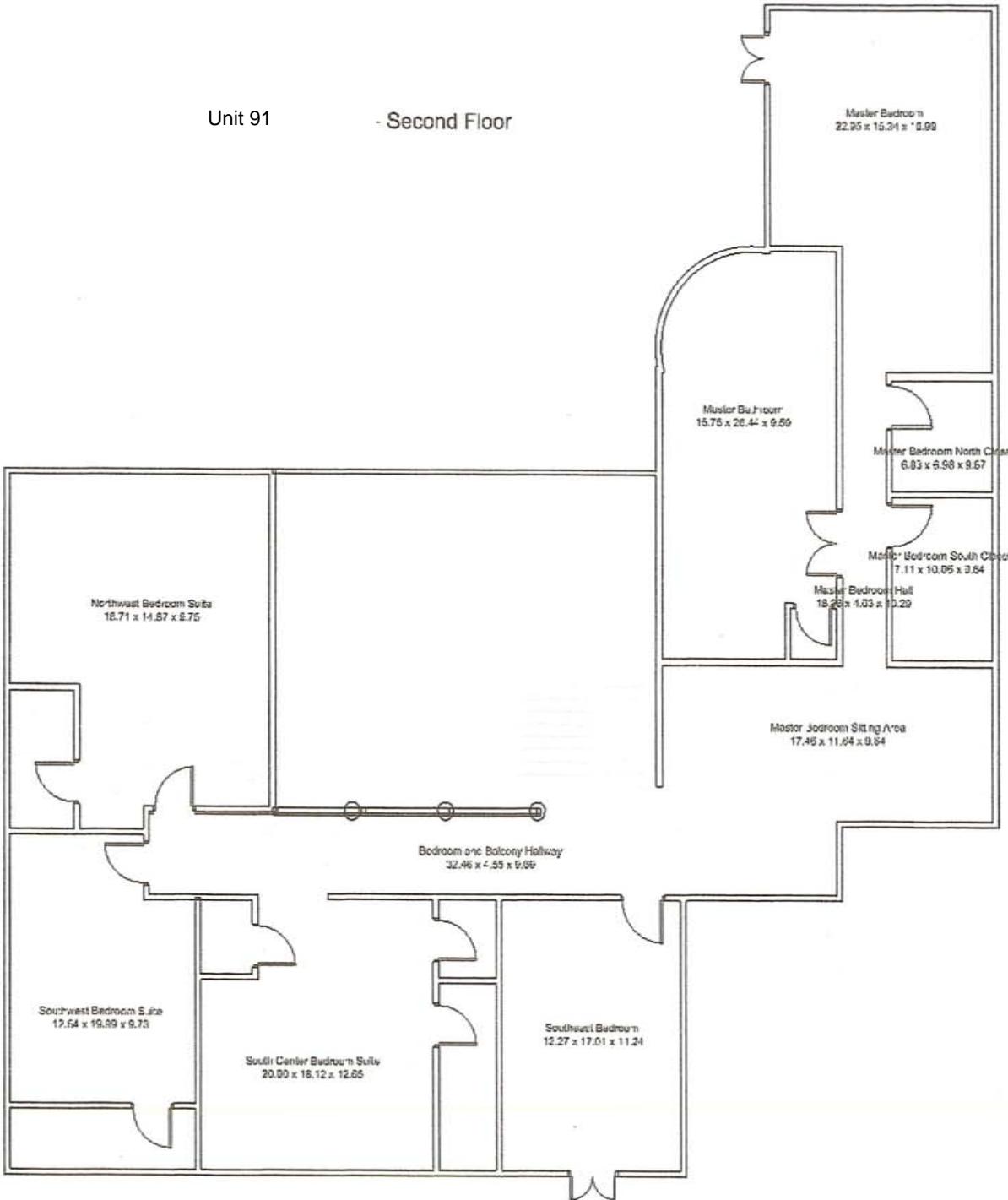
Unit 91

Ground Floor



Unit 91

- Second Floor



Appendix C

Units 80 & 81 Sulfur Containing Gas Results

Unit 80 Sulfur Data

Unit 81 Sulfur Data

	A	B	M	N	O	P	Q	R	S	T	U	V
1												
2												
3												
4												
5												
6												
7			090504-RS-42	090504-RS-43	090504-RS-44	090504-RS-45	090504-RS-46	090504-RS-59	090504-RS-60	090504-RS-61	090504-RS-62	090504-RS-63
8			P0901512-006	P0901512-007	P0901512-008	P0901512-009	P0901512-010	P0901512-023	P0901512-024	P0901512-025	P0901512-026	P0901512-027
9												
10												
11		Home Identification	Unit 81									
12		Sample Location	Loc 1A	Loc 1B	Loc 1C	Loc 1D	Loc 1E	Loc 1A	Loc 1B	Loc 1C	Loc 1D	Loc 1E
13		Location Description	1st FL LR									
14		Sampling Date & Time	5/4/09 10:15	5/4/09 10:15	5/4/09 10:15	5/4/09 10:15	5/4/09 10:15	5/4/09 15:55	5/4/09 15:55	5/4/09 15:55	5/4/09 15:55	5/4/09 15:55
15		Hydrogen Sulfide	<i>U</i>									
16		Carbonyl Sulfide	<i>U</i>									
17		Methyl Mercaptan	<i>U</i>									
18		Ethyl Mercaptan	<i>U</i>									
19		Dimethyl Sulfide	<i>U</i>									
20		Carbon Disulfide	<i>U</i>									
21		Isopropyl Mercaptan	<i>U</i>									
22		tert-Butyl Mercaptan	<i>U</i>									
23		n-Propyl Mercaptan	<i>U</i>									
24		Ethyl Methyl Sulfide	<i>U</i>									
25		Thiophene	<i>U</i>									
26		Isobutyl Mercaptan	<i>U</i>									
27		n-Butyl Mercaptan	<i>U</i>									
28		Diethyl Sulfide	<i>U</i>									
29		3-Methyl Thiophene	<i>U</i>									
30		Tetrahydrothiophene	<i>U</i>									
31		Dimethyl Disulfide	<i>U</i>									
32		2-Ethyl Thiophene	<i>U</i>									
33		Diethyl Disulfide	<i>U</i>									
34		2,5-Dimethyl Thiophene	<i>U</i>									
35												
36												
37												
38												
39		"U" Indicates that the compound was analyzed for but not detected. This symbol shall be used to indicate that the specified component was not detected. The value associated with the qualifier shall be the laboratory method detection limit.										
40												
41												
42												
43		" <i>U</i> " (Bold-Italicized) indicates samples arrived at laboratory with insufficient hold time remaining to complete the analysis within the recommended limit. The analysis was performed as soon as possible after receipt by the laboratory and the data flagged to indicate the holding time exceedances.										
44												
45												
46												
47		* Not analyzed due to interference. Bag was deflated upon arrival at lab										

TABLE 1

SUMMARY OF AIR ANALYTICAL RESULTS Columbia Analytical Services

Method: Sulfur Compounds in Air By ASTM D5504-08 Matrix: AIR

Project Name: FDOH - Chinese Wallboard

Project No: P0901512

Site Location: Unit 80 & 81- North Fort Myers, FL

Control Home

Outside & Blanks

LABORATORY REPORT

May 19, 2009

Rene' Salazar, Ph.D., CIH
Salazar Consulting Group, Inc.
6607 Heatherton Court
Tampa, FL 33617

RE: FDOH / Chinese Wallboard / 1406.01 / Units 80 & 81

Dear Rene':

Enclosed are the results of the samples submitted to our laboratory on May 5, 2009. For your reference, these analyses have been assigned our service request number P0901512.

All analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.caslab.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein. Your report contains 45 pages.

Columbia Analytical Services, Inc. is certified by the California Department of Health Services, NELAP Laboratory Certificate No. 02115CA; Arizona Department of Health Services, Certificate No. AZ0694; Florida Department of Health, NELAP Certification E871020; New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID #CA009; New York State Department of Health, NELAP NY Lab ID No: 11221; Oregon Environmental Laboratory Accreditation Program, NELAP ID: CA20007; The American Industrial Hygiene Association, Laboratory #101661; Department of the Navy (NFESC); Pennsylvania Registration No. 68-03307; TX Commission of Environmental Quality, NELAP ID T104704413-08-TX. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact me for information corresponding to a particular certification.

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

Respectfully submitted,

Columbia Analytical Services, Inc.



Sue Anderson
Project Manager

Page
1 of 45

Client: Salazar Consulting Group, Inc. CAS Project No: P0901512
Project: FDOH / Chinese Wallboard / 1406.01 / Location No. 1

CASE NARRATIVE

The samples were received intact under chain of custody on May 5, 2009 and were stored in accordance with the analytical method requirements. Sample 090504-RS-57(PM) (P0901512-021) was received flat and could not be analyzed. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Sulfur Analysis

Samples P0901512-005 thru P0901512-017 were received with insufficient hold time remaining to complete the analysis within the recommended limit. The analysis was performed as soon as possible after receipt by the laboratory and the data flagged to indicate the holding time exceedances.

The samples were analyzed for twenty sulfur compounds per ASTM D 5504-01 using a gas chromatograph equipped with a sulfur chemiluminescence detector (SCD). All compounds with the exception of hydrogen sulfide and carbonyl sulfide are quantitated against the initial calibration curve for methyl mercaptan.

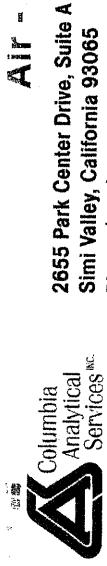
The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for utilization of less than the complete report.

Client: Salazar Consulting Group, Inc.
Project: FDOH / Chinese Wallboard/1406.01 / Unit 80 & 81

Service Request: P0901512

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
P0901512-001	090504-RS-37(AM)	5/4/09	10:00
P0901512-002	090504-RS-38(AM)	5/4/09	10:00
P0901512-003	090504-RS-39(AM)	5/4/09	10:00
P0901512-004	090504-RS-40(AM)	5/4/09	10:00
P0901512-005	090504-RS-41(AM)	5/4/09	10:00
P0901512-006	090504-RS-42(AM)	5/4/09	10:15
P0901512-007	090504-RS-43(AM)	5/4/09	10:15
P0901512-008	090504-RS-44(AM)	5/4/09	10:15
P0901512-009	090504-RS-45(AM)	5/4/09	10:15
P0901512-010	090504-RS-46(AM)	5/4/09	10:15
P0901512-011	090504-RS-47(AM)	5/4/09	10:30
P0901512-012	090504-RS-48(AM)	5/4/09	10:30
P0901512-013	090504-RS-49(AM)	5/4/09	10:30
P0901512-014	090504-RS-50(AM)	5/4/09	10:30
P0901512-015	090504-RS-51(AM)	5/4/09	10:30
P0901512-016	090504-RS-52(AM)	5/4/09	10:45
P0901512-017	090504-RS-53(AM)	5/4/09	10:45
P0901512-018	090504-RS-54(PM)	5/4/09	15:45
P0901512-019	090504-RS-55(PM)	5/4/09	15:45
P0901512-020	090504-RS-56(PM)	5/4/09	15:45
P0901512-021	090504-RS-57(PM)	5/4/09	15:45
P0901512-022	090504-RS-58(PM)	5/4/09	15:45
P0901512-023	090504-RS-59(PM)	5/4/09	15:55
P0901512-024	090504-RS-60(PM)	5/4/09	15:55
P0901512-025	090504-RS-61(PM)	5/4/09	15:55
P0901512-026	090504-RS-62(PM)	5/4/09	15:55
P0901512-027	090504-RS-63(PM)	5/4/09	15:55
P0901512-028	090504-RS-64(PM)	5/4/09	16:05
P0901512-029	090504-RS-65(PM)	5/4/09	16:05
P0901512-030	090504-RS-66(PM)	5/4/09	16:05
P0901512-031	090504-RS-67(PM)	5/4/09	16:05
P0901512-032	090504-RS-68(PM)	5/4/09	16:05
P0901512-033	090504-RS-69(PM)	5/4/09	16:15
P0901512-034	090504-RS-70(PM)	5/4/09	16:15



Air - Chain of Custody Record & Analytical Service Request

Page 3 of 3

Air - Chain of Custody Record & Analytical Service Request
2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

An Employee - Owned Company

Company Name & Address (Reporting Information)		Project Name		Requested Turnaround Time in Business Days (Surcharges) Please Circle		CAS Project No.	
Solarize Consulting, Inc. 1602 Heatherton Court Tampa, FL 33617		F004/Chinese Wallboard		1 Day (100%)	2 Day (75%)	3 Day (50%)	4 Day (35%)

1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day - Standard

CAS Project No. 900101512

Comments
e.g. Actual Preservative
or specific instructions

Analysis Method and/or Analytes

CAS Contact

P.O. # / Billing Information

Sampler (Print & Sign)

R. Saker (R. Saker)

Client Sample ID

Laboratory ID Number

Date Collected

Time Collected

Sample Type (Air/tube/
Solid)

Canister ID (Bar Code #,
AC, SC, etc.)

Flow Controller
(Bar Code -
FC #)

Sample Volume

090504-RS-67(31) 31 5/4/04 PM

090504-RS-68(32) 32

090504-RS-69(33) 33

090504-RS-70(34) 34

090504-RS-71(35) 35

090504-RS-72(36) 36

090504-RS-73(37) 37

090504-RS-74(38) 38

090504-RS-75(39) 39

090504-RS-76(40) 40

090504-RS-77(41) 41

090504-RS-78(42) 42

090504-RS-79(43) 43

090504-RS-80(44) 44

090504-RS-81(45) 45

090504-RS-82(46) 46

090504-RS-83(47) 47

090504-RS-84(48) 48

090504-RS-85(49) 49

090504-RS-86(50) 50

090504-RS-87(51) 51

090504-RS-88(52) 52

090504-RS-89(53) 53

090504-RS-90(54) 54

090504-RS-91(55) 55

090504-RS-92(56) 56

090504-RS-93(57) 57

090504-RS-94(58) 58

090504-RS-95(59) 59

090504-RS-96(60) 60

090504-RS-97(61) 61

090504-RS-98(62) 62

090504-RS-99(63) 63

090504-RS-100(64) 64

090504-RS-101(65) 65

090504-RS-102(66) 66

090504-RS-103(67) 67

090504-RS-104(68) 68

090504-RS-105(69) 69

090504-RS-106(70) 70

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090504-RS-113(77) 77

090504-RS-114(78) 78

090504-RS-115(79) 79

090504-RS-116(80) 80

090504-RS-117(81) 81

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090504-RS-173(137) 137

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090504-RS-177(141) 141

090504-RS-178(142) 142

090504-RS-179(143) 143

090504-RS-180(144) 144

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090504-RS-184(148) 148

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090504-RS-187(151) 151

090504-RS-188(152) 152

090504-RS-189(153) 153

090504-RS-190(154) 154

090504-RS-191(155) 155

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090504-RS-196(160) 160

090504-RS-197(161) 161

090504-RS-198(162) 162

090504-RS-199(163) 163

090504-RS-200(164) 164

090504-RS-201(165) 165

090504-RS-202(166) 166

090504-RS-203(167) 167

090504-RS-204(168) 168

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090504-RS-206(170) 170

090504-RS-207(171) 171

090504-RS-208(172) 172

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090504-RS-210(174) 174

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090504-RS-215(179) 179

090504-RS-216(180) 180

090504-RS-217(181) 181

090504-RS-218(182) 182

090504-RS-219(183) 183

090504-RS-220(184) 184

090504-RS-221(185) 185

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090504-RS-248(212) 212

090504-RS-249(213) 213

090504-RS-250(214) 214

090504-RS-251(215) 215

090504-RS-252(216) 216

090504-RS-253(217) 217

Columbia Analytical Services, Inc.
Sample Acceptance Check Form

Client: Salazar Consulting Group, Inc. Work order: P0901512
 Project: FDOH / Chinese Wallboard / 1406.01 / Units 80 & 81
 Sample(s) received on: 05/05/09 Date opened: 05/05/09 by: MZAMORA

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

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

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P0901512-001.01	1 L Zefon Bag					
P0901512-002.01	1 L Zefon Bag					
P0901512-003.01	1 L Zefon Bag					
P0901512-004.01	1 L Zefon Bag					
P0901512-005.01	1 L Zefon Bag					
P0901512-006.01	1 L Zefon Bag					

Explain any discrepancies: (include lab sample ID numbers): _____

Chain of Custody is missing time collected

Per Rene' S. 5/11/09 0733 e-mail sampling times were entered. SMA

*Required pH: Phenols/COD/NH3/TOC/TOX/NO3+NO2/TKN/T.PHOS, H2SO4 (pH<2); Metals, HNO3 (pH<2); CN (NaOH or NaOH/Asc Acid) (pH>12);

Columbia Analytical Services, Inc.
Sample Acceptance Check Form

Client: Salazar Consulting Group, Inc.

Work order: P0901512

Project: FDOH / Chinese Wallboard / 1406.01 / Location No. 1

Sample(s) received on: 05/05/09

Date opened: 05/05/09

by: MZAMORA

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

*Required pH: Phenols/COD/NH₃/TOC/TOX/NO₃+NO₂/TKN/T.PHOS, H₂SO₄ (pH<2); Metals, HNO₃ (pH<2); CN (NaOH or NaOH/Asc Acid) (pH>12);

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 1 of 1

Client: Salazar Consulting Group, Inc.
Client Sample ID: 090504-RS-37(AM)
Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Unit 80

CAS Project ID: P0901512
 CAS Sample ID: P0901512-001

Test Code:	ASTM D 5504-01	Date Collected:	5/4/09
Instrument ID:	Agilent 6890A/GC13/SCD	Time Collected:	10:00
Analyst:	Chris Cornett	Date Received:	5/5/09
Sampling Media:	1.0 L Zefon Bag	Date Analyzed:	5/5/09
Test Notes:		Time Analyzed:	08:57
		Volume(s) Analyzed:	1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

Verified By: Rc Date: 5/19/09 9
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COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 1 of 1

Client: Salazar Consulting Group, Inc.
Client Sample ID: 090504-RS-38(AM)
Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Unit 80

CAS Project ID: P0901512
 CAS Sample ID: P0901512-002

Test Code:	ASTM D 5504-01	Date Collected:	5/4/09
Instrument ID:	Agilent 6890A/GC13/SCD	Time Collected:	10:00
Analyst:	Chris Cornett	Date Received:	5/5/09
Sampling Media:	1.0 L Zefon Bag	Date Analyzed:	5/5/09
Test Notes:		Time Analyzed:	09:16
		Volume(s) Analyzed:	1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

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COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 1 of 1

Client: Salazar Consulting Group, Inc.
Client Sample ID: 090504-RS-39(AM)
Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Unit 80

CAS Project ID: P0901512
 CAS Sample ID: P0901512-003

Test Code: ASTM D 5504-01 Date Collected: 5/4/09
 Instrument ID: Agilent 6890A/GC13/SCD Time Collected: 10:00
 Analyst: Chris Cornett Date Received: 5/5/09
 Sampling Media: 1.0 L Zefon Bag Date Analyzed: 5/5/09
 Test Notes: Time Analyzed: 09:35
 Volume(s) Analyzed: 1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

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COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 1 of 1

Client: Salazar Consulting Group, Inc.
Client Sample ID: 090504-RS-40(AM)
Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Unit 80

CAS Project ID: P0901512
 CAS Sample ID: P0901512-004

Test Code:	ASTM D 5504-01	Date Collected:	5/4/09
Instrument ID:	Agilent 6890A/GC13/SCD	Time Collected:	10:00
Analyst:	Chris Cornett	Date Received:	5/5/09
Sampling Media:	1.0 L Zefon Bag	Date Analyzed:	5/5/09
Test Notes:		Time Analyzed:	09:54
		Volume(s) Analyzed:	1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

Verified By: RCS Date: 5/19/09 12
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COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 1 of 1

Client: Salazar Consulting Group, Inc.
Client Sample ID: 090504-RS-41(AM)
Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Unit 80

CAS Project ID: P0901512
 CAS Sample ID: P0901512-005

Test Code:	ASTM D 5504-01	Date Collected:	5/4/09
Instrument ID:	Agilent 6890A/GC13/SCD	Time Collected:	10:00
Analyst:	Chris Cornett	Date Received:	5/5/09
Sampling Media:	1.0 L Zefon Bag	Date Analyzed:	5/5/09
Test Notes:	H1	Time Analyzed:	10:11
		Volume(s) Analyzed:	1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

H1 = Sample analysis performed past holding time. See case narrative.

Verified By: _____ Date: 5/19/09 13
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 P0901512_ASTMD5504_0905071601_SS.xls - Sample (5)

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 1 of 1

Client: Salazar Consulting Group, Inc.
Client Sample ID: 090504-RS-42(AM)
Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Unit 81

CAS Project ID: P0901512
 CAS Sample ID: P0901512-006

Test Code:	ASTM D 5504-01	Date Collected:	5/4/09
Instrument ID:	Agilent 6890A/GC13/SCD	Time Collected:	10:15
Analyst:	Chris Cornett	Date Received:	5/5/09
Sampling Media:	1.0 L Zefon Bag	Date Analyzed:	5/5/09
Test Notes:	H1	Time Analyzed:	13:18
		Volume(s) Analyzed:	1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
1463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

H1 = Sample analysis performed past holding time. See case narrative.

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COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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Client: Salazar Consulting Group, Inc.
Client Sample ID: 090504-RS-43(AM)
Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Unit 81

CAS Project ID: P0901512
 CAS Sample ID: P0901512-007

Test Code:	ASTM D 5504-01	Date Collected:	5/4/09
Instrument ID:	Agilent 6890A/GC13/SCD	Time Collected:	10:15
Analyst:	Chris Cornett	Date Received:	5/5/09
Sampling Media:	1.0 L Zefon Bag	Date Analyzed:	5/5/09
Test Notes:	H1	Time Analyzed:	13:41
		Volume(s) Analyzed:	1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

H1 = Sample analysis performed past holding time. See case narrative.

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COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 1 of 1

Client: Salazar Consulting Group, Inc.

Client Sample ID: 090504-RS-44(AM)

Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Unit 81

CAS Project ID: P0901512

CAS Sample ID: P0901512-008

Test Code: ASTM D 5504-01

Date Collected: 5/4/09

Instrument ID: Agilent 6890A/GC13/SCD

Time Collected: 10:15

Analyst: Chris Cornett

Date Received: 5/5/09

Sampling Media: 1.0 L Zefon Bag

Date Analyzed: 5/5/09

Test Notes: H1

Time Analyzed: 14:03

Volume(s) Analyzed: 1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

H1 = Sample analysis performed past holding time. See case narrative.

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COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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Client: Salazar Consulting Group, Inc.
Client Sample ID: 090504-RS-45(AM)
Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Unit 81

CAS Project ID: P0901512
 CAS Sample ID: P0901512-009

Test Code:	ASTM D 5504-01	Date Collected:	5/4/09
Instrument ID:	Agilent 6890A/GC13/SCD	Time Collected:	10:15
Analyst:	Chris Cornett	Date Received:	5/5/09
Sampling Media:	1.0 L Zefon Bag	Date Analyzed:	5/5/09
Test Notes:	H1	Time Analyzed:	14:39
		Volume(s) Analyzed:	1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

H1 = Sample analysis performed past holding time. See case narrative.

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COLUMBIA ANALYTICAL SERVICES, INC.

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Client: Salazar Consulting Group, Inc.
Client Sample ID: 090504-RS-46(AM)
Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Unit 81

CAS Project ID: P0901512
 CAS Sample ID: P0901512-010

Test Code:	ASTM D 5504-01	Date Collected:	5/4/09
Instrument ID:	Agilent 6890A/GC13/SCD	Time Collected:	10:15
Analyst:	Chris Cornett	Date Received:	5/5/09
Sampling Media:	1.0 L Zefon Bag	Date Analyzed:	5/5/09
Test Notes:	H1	Time Analyzed:	15:01
		Volume(s) Analyzed:	1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

H1 = Sample analysis performed past holding time. See case narrative.

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 P0901512_ASTM5504_0905071601_SS.xls - Sample (10)

COLUMBIA ANALYTICAL SERVICES, INC.

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Client: Salazar Consulting Group, Inc.

Client Sample ID: 090504-RS-47(AM)

Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Unit 80 Outside

CAS Project ID: P0901512

CAS Sample ID: P0901512-011

Test Code: ASTM D 5504-01

Date Collected: 5/4/09

Instrument ID: Agilent 6890A/GC13/SCD

Time Collected: 10:30

Analyst: Chris Cornett

Date Received: 5/5/09

Sampling Media: 1.0 L Zefon Bag

Date Analyzed: 5/5/09

Test Notes: H1

Time Analyzed: 15:19

Volume(s) Analyzed: 1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

H1 = Sample analysis performed past holding time. See case narrative.

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COLUMBIA ANALYTICAL SERVICES, INC.

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Client: Salazar Consulting Group, Inc.

Client Sample ID: 090504-RS-48(AM)

Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Unit 80 Outside

CAS Project ID: P0901512

CAS Sample ID: P0901512-012

Test Code:	ASTM D 5504-01	Date Collected:	5/4/09
Instrument ID:	Agilent 6890A/GC13/SCD	Time Collected:	10:30
Analyst:	Chris Cornett	Date Received:	5/5/09
Sampling Media:	1.0 L Zefon Bag	Date Analyzed:	5/5/09
Test Notes:	H1	Time Analyzed:	15:41
		Volume(s) Analyzed:	1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

H1 = Sample analysis performed past holding time. See case narrative.

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COLUMBIA ANALYTICAL SERVICES, INC.

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Client: Salazar Consulting Group, Inc.

Client Sample ID: 090504-RS-49(AM)

Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Unit 80 Outside

CAS Project ID: P0901512

CAS Sample ID: P0901512-013

Test Code: ASTM D 5504-01

Date Collected: 5/4/09

Instrument ID: HP5890 II/GC5/SCD

Time Collected: 10:30

Analyst: Chris Cornett

Date Received: 5/5/09

Sampling Media: 1.0 L Zefon Bag

Date Analyzed: 5/5/09

Test Notes: H1

Time Analyzed: 15:19

Volume(s) Analyzed: 1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

H1 = Sample analysis performed past holding time. See case narrative.

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COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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Client: Salazar Consulting Group, Inc.

Client Sample ID: 090504-RS-50(AM)

Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Unit 80 Outside

CAS Project ID: P0901512

CAS Sample ID: P0901512-014

Test Code: ASTM D 5504-01

Date Collected: 5/4/09

Instrument ID: HP5890 II/GC5/SCD

Time Collected: 10:30

Analyst: Chris Cornett

Date Received: 5/5/09

Sampling Media: 1.0 L Zefon Bag

Date Analyzed: 5/5/09

Test Notes: H1

Time Analyzed: 15:01

Volume(s) Analyzed: 1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

H1 = Sample analysis performed past holding time. See case narrative.

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COLUMBIA ANALYTICAL SERVICES, INC.

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Client: Salazar Consulting Group, Inc.

Client Sample ID: 090504-RS-51(AM)

Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Unit 80 Outside

CAS Project ID: P0901512

CAS Sample ID: P0901512-015

Test Code: ASTM D 5504-01

Date Collected: 5/4/09

Instrument ID: HP5890 II/GC5/SCD

Time Collected: 10:30

Analyst: Chris Cornett

Date Received: 5/5/09

Sampling Media: 1.0 L Zefon Bag

Date Analyzed: 5/5/09

Test Notes: H1

Time Analyzed: 14:21

Volume(s) Analyzed: 1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

H1 = Sample analysis performed past holding time. See case narrative.

Verified By: de

Date: 5/12/09

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COLUMBIA ANALYTICAL SERVICES, INC.

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Client: Salazar Consulting Group, Inc.

Client Sample ID: 090504-RS-52(AM)

Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Unit 80 Blank

CAS Project ID: P0901512

CAS Sample ID: P0901512-016

Test Code:	ASTM D 5504-01	Date Collected:	5/4/09
Instrument ID:	HP5890 II/GC5/SCD	Time Collected:	10:45
Analyst:	Chris Cornett	Date Received:	5/5/09
Sampling Media:	1.0 L Zefon Bag	Date Analyzed:	5/5/09
Test Notes:	H1	Time Analyzed:	14:03
		Volume(s) Analyzed:	1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

H1 = Sample analysis performed past holding time. See case narrative.

Verified By: Ro Date: 5/19/09 **24**
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COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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Client: Salazar Consulting Group, Inc.

Client Sample ID: 090504-RS-53(AM)

Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Unit 81 Blank

CAS Project ID: P0901512

CAS Sample ID: P0901512-017

Test Code: ASTM D 5504-01

Date Collected: 5/4/09

Instrument ID: HP5890 II/GC5/SCD

Time Collected: 10:45

Analyst: Chris Cornett

Date Received: 5/5/09

Sampling Media: 1.0 L Zefon Bag

Date Analyzed: 5/5/09

Test Notes: H1

Time Analyzed: 13:41

Volume(s) Analyzed: 1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

H1 = Sample analysis performed past holding time. See case narrative.

Verified By: _____ Date: 5/19/09 **25**
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COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 1 of 1

Client: Salazar Consulting Group, Inc.
Client Sample ID: 090504-RS-54(PM)
Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Unit 80

CAS Project ID: P0901512
 CAS Sample ID: P0901512-018

Test Code:	ASTM D 5504-01	Date Collected:	5/4/09
Instrument ID:	Agilent 6890A/GC13/SCD	Time Collected:	15:45
Analyst:	Chris Cornett	Date Received:	5/5/09
Sampling Media:	1.0 L Zefon Bag	Date Analyzed:	5/5/09
Test Notes:		Time Analyzed:	10:48
		Volume(s) Analyzed:	1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

Verified By: R Date: 5/12/09 **26**
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 P0901512_ASTM5504_0905071601_SS.xls - Sample (18)

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 1 of 1

Client: Salazar Consulting Group, Inc.
Client Sample ID: 090504-RS-55(PM)
Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Unit 80

CAS Project ID: P0901512
 CAS Sample ID: P0901512-019

Test Code:	ASTM D 5504-01	Date Collected:	5/4/09
Instrument ID:	Agilent 6890A/GC13/SCD	Time Collected:	15:45
Analyst:	Chris Cornett	Date Received:	5/5/09
Sampling Media:	1.0 L Zefon Bag	Date Analyzed:	5/5/09
Test Notes:		Time Analyzed:	11:10
		Volume(s) Analyzed:	1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

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COLUMBIA ANALYTICAL SERVICES, INC.

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Client: Salazar Consulting Group, Inc.
Client Sample ID: 090504-RS-56(PM)
Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Unit 80

CAS Project ID: P0901512
 CAS Sample ID: P0901512-020

Test Code:	ASTM D 5504-01	Date Collected:	5/4/09
Instrument ID:	Agilent 6890A/GC13/SCD	Time Collected:	15:45
Analyst:	Chris Cornett	Date Received:	5/5/09
Sampling Media:	1.0 L Zefon Bag	Date Analyzed:	5/5/09
Test Notes:		Time Analyzed:	12:04
		Volume(s) Analyzed:	1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	7.8	7.8	2.5	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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Client: Salazar Consulting Group, Inc.
Client Sample ID: 090504-RS-58(PM)
Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Unit 80

CAS Project ID: P0901512
 CAS Sample ID: P0901512-022

Test Code:	ASTM D 5504-01	Date Collected:	5/4/09
Instrument ID:	Agilent 6890A/GC13/SCD	Time Collected:	15:45
Analyst:	Chris Cornett	Date Received:	5/5/09
Sampling Media:	1.0 L Zefon Bag	Date Analyzed:	5/5/09
Test Notes:		Time Analyzed:	12:25
		Volume(s) Analyzed:	1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

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COLUMBIA ANALYTICAL SERVICES, INC.

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Client: Salazar Consulting Group, Inc.
Client Sample ID: 090504-RS-59(PM)
Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Unit 81

CAS Project ID: P0901512
 CAS Sample ID: P0901512-023

Test Code:	ASTM D 5504-01	Date Collected:	5/4/09
Instrument ID:	Agilent 6890A/GC13/SCD	Time Collected:	15:55
Analyst:	Chris Cornett	Date Received:	5/5/09
Sampling Media:	1.0 L Zefon Bag	Date Analyzed:	5/5/09
Test Notes:		Time Analyzed:	12:43
		Volume(s) Analyzed:	1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

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COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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Client: Salazar Consulting Group, Inc.
Client Sample ID: 090504-RS-60(PM)
Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Unit 81

CAS Project ID: P0901512
 CAS Sample ID: P0901512-024

Test Code:	ASTM D 5504-01	Date Collected:	5/4/09
Instrument ID:	Agilent 6890A/GC13/SCD	Time Collected:	15:55
Analyst:	Chris Cornett	Date Received:	5/5/09
Sampling Media:	1.0 L Zefon Bag	Date Analyzed:	5/5/09
Test Notes:		Time Analyzed:	13:00
		Volume(s) Analyzed:	1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

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 P0901512_ASTMS504_0905071601_SS.xls - Sample (24)

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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Client: Salazar Consulting Group, Inc.
Client Sample ID: 090504-RS-61(PM)
Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Unit 81

CAS Project ID: P0901512
 CAS Sample ID: P0901512-025

Test Code:	ASTM D 5504-01	Date Collected:	5/4/09
Instrument ID:	HP5890 II/GC5/SCD	Time Collected:	15:55
Analyst:	Chris Cornett	Date Received:	5/5/09
Sampling Media:	1.0 L Zefon Bag	Date Analyzed:	5/5/09
Test Notes:		Time Analyzed:	12:43
		Volume(s) Analyzed:	1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

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COLUMBIA ANALYTICAL SERVICES, INC.

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Client: Salazar Consulting Group, Inc.
Client Sample ID: 090504-RS-62(PM)
Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Unit 81

CAS Project ID: P0901512
 CAS Sample ID: P0901512-026

Test Code:	ASTM D 5504-01	Date Collected:	5/4/09
Instrument ID:	HP5890 II/GC5/SCD	Time Collected:	15:55
Analyst:	Chris Cornett	Date Received:	5/5/09
Sampling Media:	1.0 L Zefon Bag	Date Analyzed:	5/5/09
Test Notes:		Time Analyzed:	12:25
		Volume(s) Analyzed:	1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

Verified By: RG Date: 5/4/09 **33**
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COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 1 of 1

Client: Salazar Consulting Group, Inc.
Client Sample ID: 090504-RS-63(PM)
Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Unit 81

CAS Project ID: P0901512
 CAS Sample ID: P0901512-027

Test Code:	ASTM D 5504-01	Date Collected:	5/4/09
Instrument ID:	HP5890 II/GC5/SCD	Time Collected:	15:55
Analyst:	Chris Cornett	Date Received:	5/5/09
Sampling Media:	1.0 L Zefon Bag	Date Analyzed:	5/5/09
Test Notes:		Time Analyzed:	12:03
		Volume(s) Analyzed:	1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

Verified By: Rex Date: 5/19/09 Page No.: 34
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COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 1 of 1

Client: Salazar Consulting Group, Inc.

Client Sample ID: 090504-RS-64(PM)

Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Unit 80 Outside

CAS Project ID: P0901512

CAS Sample ID: P0901512-028

Test Code: ASTM D 5504-01

Date Collected: 5/4/09

Instrument ID: HP5890 II/GC5/SCD

Time Collected: 16:05

Analyst: Chris Cornett

Date Received: 5/5/09

Sampling Media: 1.0 L Zefon Bag

Date Analyzed: 5/5/09

Test Notes:

Time Analyzed: 11:33

Volume(s) Analyzed: 1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

Verified By: _____

Date: 5/19/09

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COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

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Client: Salazar Consulting Group, Inc.

Client Sample ID: 090504-RS-65(PM)

Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Unit 80 Outside

CAS Project ID: P0901512

CAS Sample ID: P0901512-029

Test Code: ASTM D 5504-01

Date Collected: 5/4/09

Instrument ID: HP5890 II/GC5/SCD

Time Collected: 16:05

Analyst: Chris Cornett

Date Received: 5/5/09

Sampling Media: 1.0 L Zefon Bag

Date Analyzed: 5/5/09

Test Notes:

Time Analyzed: 11:11

Volume(s) Analyzed: 1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

Verified By: Ler Date: 5/19/09 36
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COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 1 of 1

Client: Salazar Consulting Group, Inc.

Client Sample ID: 090504-RS-66(PM)

Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Unit 80 Outside

CAS Project ID: P0901512

CAS Sample ID: P0901512-030

Test Code: ASTM D 5504-01

Date Collected: 5/4/09

Instrument ID: HP5890 II/GC5/SCD

Time Collected: 16:05

Analyst: Chris Cornett

Date Received: 5/5/09

Sampling Media: 1.0 L Zefon Bag

Date Analyzed: 5/5/09

Test Notes:

Time Analyzed: 10:11

Volume(s) Analyzed: 1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

Verified By: Re Date: 5/19/09 **37**
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COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 1 of 1

Client: Salazar Consulting Group, Inc.

Client Sample ID: 090504-RS-67(PM)

Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Unit 80 Outside

CAS Project ID: P0901512

CAS Sample ID: P0901512-031

Test Code: ASTM D 5504-01

Date Collected: 5/4/09

Instrument ID: HP5890 II/GC5/SCD

Time Collected: 16:05

Analyst: Chris Cornett

Date Received: 5/5/09

Sampling Media: 1.0 L Zefon Bag

Date Analyzed: 5/5/09

Test Notes:

Time Analyzed: 09:53

Volume(s) Analyzed: 1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

Verified By: _____ Date: 5/19/09
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COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 1 of 1

Client: Salazar Consulting Group, Inc.

Client Sample ID: 090504-RS-68(PM)

Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Unit 80 Outside

CAS Project ID: P0901512

CAS Sample ID: P0901512-032

Test Code: ASTM D 5504-01

Date Collected: 5/4/09

Instrument ID: HP5890 II/GC5/SCD

Time Collected: 16:05

Analyst: Chris Cornett

Date Received: 5/5/09

Sampling Media: 1.0 L Zefon Bag

Date Analyzed: 5/5/09

Test Notes:

Time Analyzed: 09:34

Volume(s) Analyzed: 1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

Verified By: Re

Date: 5/9/09

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COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 1 of 1

Client: Salazar Consulting Group, Inc.

Client Sample ID: 090504-RS-69(PM)

Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Unit 80 Blank

CAS Project ID: P0901512

CAS Sample ID: P0901512-033

Test Code: ASTM D 5504-01

Date Collected: 5/4/09

Instrument ID: Agilent 6890A/GC13/SCD

Time Collected: 16:15

Analyst: Chris Cornett

Date Received: 5/5/09

Sampling Media: 1.0 L Zefon Bag

Date Analyzed: 5/5/09

Test Notes:

Time Analyzed: 11:32

Volume(s) Analyzed: 1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	15	12	6.1	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

Verified By: RW Date: 5/19/09 **40**
 20SULFUR.XLT - Page No.: _____

COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 1 of 1

Client: Salazar Consulting Group, Inc.

Client Sample ID: 090504-RS-70(PM)

Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Unit 81 Blank

CAS Project ID: P0901512

CAS Sample ID: P0901512-034

Test Code: ASTM D 5504-01

Date Collected: 5/4/09

Instrument ID: HP5890 II/GC5/SCD

Time Collected: 16:15

Analyst: Chris Cornett

Date Received: 5/5/09

Sampling Media: 1.0 L Zefon Bag

Date Analyzed: 5/5/09

Test Notes:

Time Analyzed: 08:57

Volume(s) Analyzed: 1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

Verified By: _____ Date: 5/19/09
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COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 1 of 1

Client: Salazar Consulting Group, Inc.

Client Sample ID: Method Blank

Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Units 80 & 81

CAS Project ID: P0901512

CAS Sample ID: P090505-MB

Test Code:	ASTM D 5504-01	Date Collected:	NA
Instrument ID:	HP5890 II/GC5/SCD	Time Collected:	NA
Analyst:	Chris Cornett	Date Received:	NA
Sampling Media:	1.0 L Zefon Bag	Date Analyzed:	5/05/09
Test Notes:		Time Analyzed:	07:56
		Volume(s) Analyzed:	1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

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COLUMBIA ANALYTICAL SERVICES, INC.

RESULTS OF ANALYSIS

Page 1 of 1

Client: Salazar Consulting Group, Inc.

Client Sample ID: Method Blank

Client Project ID: FDOH / Chinese Wallboard / 1406.01 / Units 80 & 81

CAS Project ID: P0901512

CAS Sample ID: P090505-MB

Test Code: ASTM D 5504-01
 Instrument ID: Agilent 6890A/GC13/SCD
 Analyst: Chris Cornett
 Sampling Media: 1.0 L Zefon Bag
 Test Notes:

Date Collected: NA
 Time Collected: NA
 Date Received: NA
 Date Analyzed: 5/05/09
 Time Analyzed: 07:40
 Volume(s) Analyzed: 1.0 ml(s)

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
7783-06-4	Hydrogen Sulfide	ND	7.0	ND	5.0	
463-58-1	Carbonyl Sulfide	ND	12	ND	5.0	
74-93-1	Methyl Mercaptan	ND	9.8	ND	5.0	
75-08-1	Ethyl Mercaptan	ND	13	ND	5.0	
75-18-3	Dimethyl Sulfide	ND	13	ND	5.0	
75-15-0	Carbon Disulfide	ND	7.8	ND	2.5	
75-33-2	Isopropyl Mercaptan	ND	16	ND	5.0	
75-66-1	tert-Butyl Mercaptan	ND	18	ND	5.0	
107-03-9	n-Propyl Mercaptan	ND	16	ND	5.0	
624-89-5	Ethyl Methyl Sulfide	ND	16	ND	5.0	
110-02-1	Thiophene	ND	17	ND	5.0	
513-44-0	Isobutyl Mercaptan	ND	18	ND	5.0	
352-93-2	Diethyl Sulfide	ND	18	ND	5.0	
109-79-5	n-Butyl Mercaptan	ND	18	ND	5.0	
624-92-0	Dimethyl Disulfide	ND	9.6	ND	2.5	
616-44-4	3-Methylthiophene	ND	20	ND	5.0	
110-01-0	Tetrahydrothiophene	ND	18	ND	5.0	
638-02-8	2,5-Dimethylthiophene	ND	23	ND	5.0	
872-55-9	2-Ethylthiophene	ND	23	ND	5.0	
110-81-6	Diethyl Disulfide	ND	12	ND	2.5	

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

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

Verified By: Ru Date: 5/19/09 43
 20SULFUR.XLT - Page No.: 1

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Page 1 of 1

Client: Salazar Consulting Group, Inc.**Client Sample ID:** Lab Control Sample**Client Project ID:** FDOH / Chinese Wallboard / 1406.01 / Units 80 & 81

CAS Project ID: P0901512

CAS Sample ID: P090505-LCS

Test Code: ASTM D 5504-01 Date Collected: NA
Instrument ID: HP5890 II/GC5/SCD Date Received: NA
Analyst: Chris Cornett Date Analyzed: 5/05/09
Sampling Media: 1.0 L Zefon Bag Volume(s) Analyzed: NA ml(s)
Test Notes:

CAS #	Compound	Spike Amount ppbV	Result ppbV	% Recovery	CAS	
					Acceptance Limits	Data Qualifier
7783-06-4	Hydrogen Sulfide	2,020	2,030	100	63-136	
463-58-1	Carbonyl Sulfide	2,020	1,990	99	69-122	
74-93-1	Methyl Mercaptan	2,020	2,310	114	71-137	

COLUMBIA ANALYTICAL SERVICES, INC.

LABORATORY CONTROL SAMPLE SUMMARY

Page 1 of 1

Client: Salazar Consulting Group, Inc.**Client Sample ID:** Lab Control Sample**Client Project ID:** FDOH / Chinese Wallboard / 1406.01 / Units 80 & 81

CAS Project ID: P0901512

CAS Sample ID: P090505-LCS

Test Code: ASTM D 5504-01 Date Collected: NA
Instrument ID: Agilent 6890A/GC13/SCD Date Received: NA
Analyst: Chris Cornett Date Analyzed: 5/05/09
Sampling Media: 1.0 L Zefon Bag Volume(s) Analyzed: NA ml(s)
Test Notes:

CAS #	Compound	Spike Amount ppbV	Result ppbV	% Recovery	CAS Acceptance Limits	Data Qualifier
7783-06-4	Hydrogen Sulfide	2,020	1,870	93	63-136	
463-58-1	Carbonyl Sulfide	2,020	1,980	98	69-122	
74-93-1	Methyl Mercaptan	2,020	2,130	105	71-137	

Appendix D

Units 90 & 91 Sulfur Containing Gas Results

Unit 90 Sulfur Data

Unit 91 Sulfur Data

Outside & Blanks Sulfur Data

Analytical Report #: 19318

for

Salazar Consulting Group, Inc.

Project Manager: Rene R. Salazar, PhD

Project Name: FDOH - Chinese Wallboard

Project ID: 1406.01

Project Location: Units 90 & 91 - Parkland, FL

17-JUN-09



NELAP Certification Number: E84880

1910 Harden Boulevard, Suite 101

Lakeland, Florida 33803-1829

Phone: (863) 686-4271

Fax: (863) 686-4389



17-JUN-09

Rene R. Salazar, PhD
Salazar Consulting Group, Inc.
6607 Heatherton Court
Tampa, FL 33617

Reference: LAKELAND Work Order No: **19318**

FDOH - Chinese Wallboard

Project Location: Units 90 & 91 · Parkland, FL
Project Ref No: 1406.01
Lab Quote No:

Dear Rene R. Salazar, PhD :

The attached Analytical and QC Summaries list the analytical results from the analyses performed on the samples received under the project name referenced above and identified with the Lakeland Laboratories Work Order numbered **19318**.

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies and QA/QC procedures. Lakeland Laboratories is limited in liability to the actual cost of the pertinent analysis done. Your samples will be retained by Lakeland Laboratories for a period of 30 days following receipt of the samples. After that time, they will be properly disposed of without further notice, unless there is a pre-arranged contractual arrangement. We reserve the right to return any unused samples, extracts or related solutions to you, if we consider it necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Lakeland Laboratories. This report will be filed for at least 3 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you.

We thank you for selecting Lakeland Laboratories Incorporated to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Sincerely,

Mark A. Alessandroni, PE
Technical Director

1910 Harden Boulevard, Suite 101
Lakeland, Florida 33803-1829
Phone: (863) 686-4271
Fax: (863) 686-4389



CASE NARRATIVE

Client Name: Salazar Consulting Group, Inc.

Project Name: FDOH - Chinese Wallboard

Project ID: 1406.01
Work Order Number: 19318

Report Date: 17-JUN-09
Date Received: 09-JUN-09

Sample receipt non conformances and Comments:

Samples were retrieved from the field sampling representative by a lab representative at 10:45 AM on June 9, 2009 and transported directly to the laboratory. All samples, with the exception of Client Sample ID 090608-RS-23, were analyzed June 9-10, 2009 within the mandated holding time of 24 hours. The Tedlar bag labeled Sample ID 090608-RS-23 contained insufficient volume for analysis, so no results are reported for this sample. Unless noted elsewhere in the report, no deviations from the laboratory SOP were made.

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-67413	Sulfur Compounds in Air By ASTM D5504-08
------------------	--

Six compounds, namely *n*-propyl mercaptan, thiophene, diethyl sulfide, tetrahydrothiophene, dimethyl disulfide, and diethyl disulfide exhibited low biases (accuracy), slightly outside the acceptance range, in the matrix spike and/or matrix spike duplicate. Diethyl sulfide fell outside acceptance limits for relative percent difference (precision) in the MS-MSD QC pair. With the exception of diethyl sulfide, all compounds were within acceptance limits for precision and accuracy in the BKS-BSD, also known as LCS-LCSD QC pair. This compound fell outside acceptance limits for relative percent difference (precision). A method reporting limit (MRL) standard was run at the end of the analytical sequence and all target analytes were detected, confirming sensitivity of the analytical system. Consequently, impact to the data from these QC precision and accuracy nonconformances is inferred to be negligible.

Batch: LBA-67414	Sulfur Compounds in Air By ASTM D5504-08
------------------	--

Three compounds, namely ethyl mercaptan, tetrahydrothiophene, and diethyl disulfide exhibited low biases (accuracy), slightly outside the acceptance range, in the matrix spike. Ethyl mercaptan also fell outside acceptance limits for relative percent difference (precision) in the MS-MSD QC pair. All compounds were within acceptance limits for precision and accuracy in the BKS-BSD, also known as LCS-LCSD QC pair. A method reporting limit (MRL) standard was run at the end of the analytical sequence and all target analytes were detected, confirming sensitivity of the analytical system.

Certificate of Analysis Summary 19318

Salazar Consulting Group, Inc., Tampa, FL

Project Name: FDOH - Chinese Wallboard

Project Id: 1406.01

Date Received in Lab: Jun-09-09 10:45 am

Contact: Rene R. Salazar, PhD

Report Date: 17-JUN-09

Project Location: Units 90 & 91 Parkland, FL

Project Manager: Mark A. Alessandroni, PE

<i>Analysis Requested</i>	<i>Lab Id:</i>	19318-001	<i>Field Id:</i>	19318-003	<i>Depth:</i>	19318-004	<i>Matrix:</i>	19318-005
	<i>Field Id:</i>	090608-RS-22	<i>Field Id:</i>	090608-RS-24	<i>Field Id:</i>	090608-RS-25	<i>Field Id:</i>	090608-RS-26
	<i>Sampled:</i>	Jun-08-09 17:35	<i>Sampled:</i>	Jun-08-09 19:35	<i>Sampled:</i>	Jun-08-09 19:40	<i>Sampled:</i>	Jun-08-09 21:45
Sulfur Compounds in Air By ASTM D5504-08	<i>Extracted:</i>		<i>Analyzed:</i>	Jun-09-09 15:52	<i>Units/RL:</i>	ppbv PQL	<i>Extracted:</i>	Jun-09-09 20:13
Hydrogen Sulfide	U	5.00	U	5.00	U	5.00	U	5.00
Carbonyl Sulfide	U	5.00	U	5.00	U	5.00	4.14 I	5.00
Methyl Mercaptan	U	5.00	U	5.00	U	5.00	U	5.00
Ethyl Mercaptan	U	5.00	U	5.00	U	5.00	U	5.00
Dimethyl Sulfide	U	5.00	U	5.00	U	5.00	U	5.00
Carbon Disulfide	U	5.00	U	5.00	U	5.00	U	5.00
Isopropyl Mercaptan	U	7.00	U	7.00	U	7.00	U	7.00
tert-Butyl Mercaptan	U	7.00	U	7.00	U	7.00	U	7.00
n-Propyl Mercaptan	U	5.00	U	5.00	U	5.00	U	5.00
Ethyl Methyl Sulfide	U	5.00	U	5.00	U	5.00	U	5.00
Thiophene	U	5.00	U	5.00	U	5.00	U	5.00
Isobutyl Mercaptan	U	5.00	U	5.00	U	5.00	U	5.00
n-Butyl Mercaptan	U	5.00	U	5.00	U	5.00	U	5.00
Diethyl Sulfide	U	5.00	U	5.00	U	5.00	U	5.00
3-Methyl Thiophene	U	5.00	U	5.00	U	5.00	U	5.00
Tetrahydrothiophene	U	5.00	U	5.00	U	5.00	U	5.00
Dimethyl Disulfide	U	5.00	U	5.00	U	5.00	U	5.00
2-Ethyl Thiophene	U	5.00	U	5.00	U	5.00	U	5.00
Diethyl Disulfide	U	5.00	U	5.00	U	5.00	U	5.00
2,5-Dimethyl Thiophene	U	5.00	U	5.00	U	5.00	U	5.00

Certificate of Analysis Summary 19318

Salazar Consulting Group, Inc., Tampa, FL

Project Name: FDOH - Chinese Wallboard

Project Id: 1406.01

Date Received in Lab: Jun-09-09 10:45 am

Contact: Rene R. Salazar, PhD

Report Date: 17-JUN-09

Project Location: Units 90 & 91 Parkland, FL

Project Manager: Mark A. Alessandroni, PE

Analysis Requested	Lab Id: 19318-006	19318-007	19318-008	19318-009	
	Field Id: 090608-RS-27	090608-RS-28	090608-RS-29	090609-RS-30	
	Depth:				
	Matrix: AMBIENT AIR	AMBIENT AIR	AMBIENT AIR	AMBIENT AIR	
	Sampled: Jun-08-09 21:50	Jun-08-09 23:45	Jun-08-09 23:50	Jun-09-09 01:35	
Sulfur Compounds in Air By ASTM D5504-08	Extracted: Analyzed: Units/RL:	Jun-09-09 20:28 ppbv PQL	Jun-09-09 21:13 ppbv PQL	Jun-09-09 21:27 ppbv PQL	Jun-09-09 21:41 ppbv PQL
Hydrogen Sulfide	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00
Carbonyl Sulfide	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00
Methyl Mercaptan	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00
Ethyl Mercaptan	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00
Dimethyl Sulfide	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00
Carbon Disulfide	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00
Isopropyl Mercaptan	U 7.00	U 7.00	U 7.00	U 7.00	U 7.00
tert-Butyl Mercaptan	U 7.00	U 7.00	U 7.00	U 7.00	U 7.00
n-Propyl Mercaptan	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00
Ethyl Methyl Sulfide	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00
Thiophene	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00
Isobutyl Mercaptan	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00
n-Butyl Mercaptan	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00
Diethyl Sulfide	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00
3-Methyl Thiophene	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00
Tetrahydrothiophene	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00
Dimethyl Disulfide	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00
2-Ethyl Thiophene	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00
Diethyl Disulfide	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00
2,5-Dimethyl Thiophene	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00

Certificate of Analysis Summary 19318

Salazar Consulting Group, Inc., Tampa, FL

Project Name: FDOH - Chinese Wallboard

Project Id: 1406.01

Date Received in Lab: Jun-09-09 10:45 am

Contact: Rene R. Salazar, PhD

Report Date: 17-JUN-09

Project Location: Units 90 & 91 Parkland, FL

Project Manager: Mark A. Alessandroni, PE

Analysis Requested	Lab Id: 19318-010	19318-011	19318-012	19318-013	
	Field Id: 090609-RS-31	090609-RS-32	090609-RS-33	090609-RS-34	
	Depth:				
	Matrix: AMBIENT AIR	AMBIENT AIR	AMBIENT AIR	AMBIENT AIR	
	Sampled: Jun-09-09 01:40	Jun-09-09 03:35	Jun-09-09 04:00	Jun-09-09 05:30	
Sulfur Compounds in Air By ASTM D5504-08	Extracted: Analyzed: Units/RL:	Jun-09-09 21:55 ppbv PQL	Jun-09-09 22:52 ppbv PQL	Jun-09-09 23:06 ppbv PQL	Jun-09-09 23:35 ppbv PQL
Hydrogen Sulfide	U 5.00	U 5.00	7.14 5.00	U 5.00	U 5.00
Carbonyl Sulfide	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00
Methyl Mercaptan	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00
Ethyl Mercaptan	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00
Dimethyl Sulfide	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00
Carbon Disulfide	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00
Isopropyl Mercaptan	U 7.00	U 7.00	U 7.00	U 7.00	U 7.00
tert-Butyl Mercaptan	U 7.00	U 7.00	U 7.00	U 7.00	U 7.00
n-Propyl Mercaptan	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00
Ethyl Methyl Sulfide	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00
Thiophene	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00
Isobutyl Mercaptan	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00
n-Butyl Mercaptan	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00
Diethyl Sulfide	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00
3-Methyl Thiophene	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00
Tetrahydrothiophene	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00
Dimethyl Disulfide	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00
2-Ethyl Thiophene	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00
Diethyl Disulfide	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00
2,5-Dimethyl Thiophene	U 5.00	U 5.00	U 5.00	U 5.00	U 5.00

Certificate of Analysis Summary 19318

Salazar Consulting Group, Inc., Tampa, FL

Project Name: FDOH - Chinese Wallboard

Project Id: 1406.01

Date Received in Lab: Jun-09-09 10:45 am

Contact: Rene R. Salazar, PhD

Report Date: 17-JUN-09

Project Location: Units 90 & 91 Parkland, FL

Project Manager: Mark A. Alessandroni, PE

Analysis Requested	Lab Id:	19318-014	19318-015	19318-016	19318-017
	Field Id:	090609-RS-35	090609-RS-36	090609-RS-37	090609-RS-38
	Depth:				
	Matrix:	AMBIENT AIR	AMBIENT AIR	AMBIENT AIR	AMBIENT AIR
	Sampled:	Jun-09-09 05:30	Jun-09-09 07:35	Jun-09-09 07:35	Jun-09-09 09:35
Sulfur Compounds in Air By ASTM D5504-08	Extracted:				
	Analyzed:	Jun-09-09 23:49	Jun-10-09 00:03	Jun-10-09 00:18	Jun-10-09 00:32
	Units/RL:	ppbv PQL	ppbv PQL	ppbv PQL	ppbv PQL
Hydrogen Sulfide		U 5.00	U 5.00	6.09 5.00	5.72 5.00
Carbonyl Sulfide		U 5.00	U 5.00	U 5.00	U 5.00
Methyl Mercaptan		U 5.00	U 5.00	U 5.00	U 5.00
Ethyl Mercaptan		U 5.00	U 5.00	U 5.00	U 5.00
Dimethyl Sulfide		U 5.00	U 5.00	U 5.00	U 5.00
Carbon Disulfide		U 5.00	U 5.00	U 5.00	U 5.00
Isopropyl Mercaptan		U 7.00	U 7.00	U 7.00	U 7.00
tert-Butyl Mercaptan		U 7.00	U 7.00	U 7.00	U 7.00
n-Propyl Mercaptan		U 5.00	U 5.00	U 5.00	U 5.00
Ethyl Methyl Sulfide		U 5.00	U 5.00	U 5.00	U 5.00
Thiophene		U 5.00	U 5.00	U 5.00	U 5.00
Isobutyl Mercaptan		U 5.00	U 5.00	U 5.00	U 5.00
n-Butyl Mercaptan		U 5.00	U 5.00	U 5.00	U 5.00
Diethyl Sulfide		U 5.00	U 5.00	U 5.00	U 5.00
3-Methyl Thiophene		U 5.00	U 5.00	U 5.00	U 5.00
Tetrahydrothiophene		U 5.00	U 5.00	U 5.00	U 5.00
Dimethyl Disulfide		U 5.00	U 5.00	U 5.00	U 5.00
2-Ethyl Thiophene		U 5.00	U 5.00	U 5.00	U 5.00
Diethyl Disulfide		U 5.00	U 5.00	U 5.00	U 5.00
2,5-Dimethyl Thiophene		U 5.00	U 5.00	U 5.00	U 5.00

Certificate of Analysis Summary 19318

Salazar Consulting Group, Inc., Tampa, FL

Project Name: FDOH - Chinese Wallboard

Project Id: 1406.01

Contact: Rene R. Salazar, PhD

Project Location: Units 90 & 91 Parkland, FL

Date Received in Lab: Jun-09-09 10:45 am

Report Date: 17-JUN-09

Project Manager: Mark A. Alessandroni, PE

Analysis Requested	Lab Id:	19318-018	19318-019		
	Field Id:	090609-RS-39	090609-RS-40		
	Depth:				
	Matrix:	AMBIENT AIR	AMBIENT AIR		
	Sampled:	Jun-09-09 09:35	Jun-09-09 10:45		
Sulfur Compounds in Air By ASTM D5504-08	Extracted:				
	Analyzed:	Jun-10-09 00:46	Jun-10-09 01:01		
	Units/RL:	ppbv	PQL	ppbv	PQL
Hydrogen Sulfide		U	5.00	U	5.00
Carbonyl Sulfide		U	5.00	U	5.00
Methyl Mercaptan		U	5.00	U	5.00
Ethyl Mercaptan		U	5.00	U	5.00
Dimethyl Sulfide		U	5.00	U	5.00
Carbon Disulfide		U	5.00	U	5.00
Isopropyl Mercaptan		U	7.00	U	7.00
tert-Butyl Mercaptan		U	7.00	U	7.00
n-Propyl Mercaptan		U	5.00	U	5.00
Ethyl Methyl Sulfide		U	5.00	U	5.00
Thiophene		U	5.00	U	5.00
Isobutyl Mercaptan		U	5.00	U	5.00
n-Butyl Mercaptan		U	5.00	U	5.00
Diethyl Sulfide		U	5.00	U	5.00
3-Methyl Thiophene		U	5.00	U	5.00
Tetrahydrothiophene		U	5.00	U	5.00
Dimethyl Disulfide		U	5.00	U	5.00
2-Ethyl Thiophene		U	5.00	U	5.00
Diethyl Disulfide		U	5.00	U	5.00
2,5-Dimethyl Thiophene		U	5.00	U	5.00



LAKELAND

LABORATORIES

Certificate of Analysis #: 19318

Salazar Consulting Group, Inc., Tampa, FL

FDOH - Chinese Wallboard

Sample Id: 090608-RS-22	Matrix: AMBIENT AIR	Date Received: Jun-09-09 10:45
Lab Sample Id: 19318-001	Date Collected: Jun-08-09 17:35	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08

Prep Method:

Date Analyzed: Jun-09-09 15:52 Analyst: GARGAR Date Prep: Tech: GARGAR
Seq Number: 67413

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	U	5.00	3.35	ppbv	U	1
Carbonyl Sulfide	463-58-1	U	5.00	3.96	ppbv	U	1
Methyl Mercaptan	74-93-1	U	5.00	4.65	ppbv	U	1
Ethyl Mercaptan	75-08-1	U	5.00	4.59	ppbv	U	1
Dimethyl Sulfide	75-18-3	U	5.00	3.41	ppbv	U	1
Carbon Disulfide	75-15-0	U	5.00	1.29	ppbv	U	1
Isopropyl Mercaptan	75-33-2	U	7.00	5.00	ppbv	U	1
tert-Butyl Mercaptan	75-66-1	U	7.00	5.64	ppbv	U	1
n-Propyl Mercaptan	107-03-9	U	5.00	4.36	ppbv	U	1
Ethyl Methyl Sulfide	624-89-5	U	5.00	3.36	ppbv	U	1
Thiophene	110-02-1	U	5.00	3.50	ppbv	U	1
Isobutyl Mercaptan	513-44-0	U	5.00	4.00	ppbv	U	1
n-Butyl Mercaptan	109-79-5	U	5.00	3.39	ppbv	U	1
Diethyl Sulfide	624-92-0	U	5.00	4.29	ppbv	U	1
3-Methyl Thiophene	616-44-4	U	5.00	2.70	ppbv	U	1
Tetrahydrothiophene	110-01-0	U	5.00	2.07	ppbv	U	1
Dimethyl Disulfide	624-92-0	U	5.00	3.25	ppbv	U	1
2-Ethyl Thiophene	872-55-9	U	5.00	1.97	ppbv	U	1
Diethyl Disulfide	110-81-6	U	5.00	1.26	ppbv	U	1
2,5-Dimethyl Thiophene	638-02-8	U	5.00	3.62	ppbv	U	1

*

Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



LAKELAND

LABORATORIES

Certificate of Analysis #: 19318

Salazar Consulting Group, Inc., Tampa, FL

FDOH - Chinese Wallboard

Sample Id: 090608-RS-24	Matrix: AMBIENT AIR	Date Received: Jun-09-09 10:45
Lab Sample Id: 19318-003	Date Collected: Jun-08-09 19:35	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08					Prep Method:		
Date Analyzed: Jun-09-09 16:21	Analyst: GARGAR	Date Prep:		Tech: GARGAR			
	Seq Number: 67413						
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	U	5.00	3.35	ppbv	U	1
Carbonyl Sulfide	463-58-1	U	5.00	3.96	ppbv	U	1
Methyl Mercaptan	74-93-1	U	5.00	4.65	ppbv	U	1
Ethyl Mercaptan	75-08-1	U	5.00	4.59	ppbv	U	1
Dimethyl Sulfide	75-18-3	U	5.00	3.41	ppbv	U	1
Carbon Disulfide	75-15-0	U	5.00	1.29	ppbv	U	1
Isopropyl Mercaptan	75-33-2	U	7.00	5.00	ppbv	U	1
tert-Butyl Mercaptan	75-66-1	U	7.00	5.64	ppbv	U	1
n-Propyl Mercaptan	107-03-9	U	5.00	4.36	ppbv	U	1
Ethyl Methyl Sulfide	624-89-5	U	5.00	3.36	ppbv	U	1
Thiophene	110-02-1	U	5.00	3.50	ppbv	U	1
Isobutyl Mercaptan	513-44-0	U	5.00	4.00	ppbv	U	1
n-Butyl Mercaptan	109-79-5	U	5.00	3.39	ppbv	U	1
Diethyl Sulfide	624-92-0	U	5.00	4.29	ppbv	U	1
3-Methyl Thiophene	616-44-4	U	5.00	2.70	ppbv	U	1
Tetrahydrothiophene	110-01-0	U	5.00	2.07	ppbv	U	1
Dimethyl Disulfide	624-92-0	U	5.00	3.25	ppbv	U	1
2-Ethyl Thiophene	872-55-9	U	5.00	1.97	ppbv	U	1
Diethyl Disulfide	110-81-6	U	5.00	1.26	ppbv	U	1
2,5-Dimethyl Thiophene	638-02-8	U	5.00	3.62	ppbv	U	1

*

Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



Certificate of Analysis #: 19318

LAKELAND
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Salazar Consulting Group, Inc., Tampa, FL

FDOH - Chinese Wallboard

Sample Id: 090608-RS-25	Matrix: AMBIENT AIR	Date Received: Jun-09-09 10:45
Lab Sample Id: 19318-004	Date Collected: Jun-08-09 19:40	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08					Prep Method:		
Date Analyzed: Jun-09-09 16:35	Analyst: GARGAR	Date Prep:		Tech: GARGAR			
	Seq Number: 67413						
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	U	5.00	3.35	ppbv	U	1
Carbonyl Sulfide	463-58-1	U	5.00	3.96	ppbv	U	1
Methyl Mercaptan	74-93-1	U	5.00	4.65	ppbv	U	1
Ethyl Mercaptan	75-08-1	U	5.00	4.59	ppbv	U	1
Dimethyl Sulfide	75-18-3	U	5.00	3.41	ppbv	U	1
Carbon Disulfide	75-15-0	U	5.00	1.29	ppbv	U	1
Isopropyl Mercaptan	75-33-2	U	7.00	5.00	ppbv	U	1
tert-Butyl Mercaptan	75-66-1	U	7.00	5.64	ppbv	U	1
n-Propyl Mercaptan	107-03-9	U	5.00	4.36	ppbv	U	1
Ethyl Methyl Sulfide	624-89-5	U	5.00	3.36	ppbv	U	1
Thiophene	110-02-1	U	5.00	3.50	ppbv	U	1
Isobutyl Mercaptan	513-44-0	U	5.00	4.00	ppbv	U	1
n-Butyl Mercaptan	109-79-5	U	5.00	3.39	ppbv	U	1
Diethyl Sulfide	624-92-0	U	5.00	4.29	ppbv	U	1
3-Methyl Thiophene	616-44-4	U	5.00	2.70	ppbv	U	1
Tetrahydrothiophene	110-01-0	U	5.00	2.07	ppbv	U	1
Dimethyl Disulfide	624-92-0	U	5.00	3.25	ppbv	U	1
2-Ethyl Thiophene	872-55-9	U	5.00	1.97	ppbv	U	1
Diethyl Disulfide	110-81-6	U	5.00	1.26	ppbv	U	1
2,5-Dimethyl Thiophene	638-02-8	U	5.00	3.62	ppbv	U	1

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Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



Certificate of Analysis #: 19318

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Salazar Consulting Group, Inc., Tampa, FL

FDOH - Chinese Wallboard

Sample Id: 090608-RS-26	Matrix: AMBIENT AIR	Date Received: Jun-09-09 10:45
Lab Sample Id: 19318-005	Date Collected: Jun-08-09 21:45	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08			Prep Method:
Date Analyzed: Jun-09-09 20:13	Analyst: GARGAR	Date Prep:	Tech: GARGAR
	Seq Number: 67413		

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	U	5.00	3.35	ppbv	U	1
Carbonyl Sulfide	463-58-1	4.14 I	5.00	3.96	ppbv	I	1
Methyl Mercaptan	74-93-1	U	5.00	4.65	ppbv	U	1
Ethyl Mercaptan	75-08-1	U	5.00	4.59	ppbv	U	1
Dimethyl Sulfide	75-18-3	U	5.00	3.41	ppbv	U	1
Carbon Disulfide	75-15-0	U	5.00	1.29	ppbv	U	1
Isopropyl Mercaptan	75-33-2	U	7.00	5.00	ppbv	U	1
tert-Butyl Mercaptan	75-66-1	U	7.00	5.64	ppbv	U	1
n-Propyl Mercaptan	107-03-9	U	5.00	4.36	ppbv	U	1
Ethyl Methyl Sulfide	624-89-5	U	5.00	3.36	ppbv	U	1
Thiophene	110-02-1	U	5.00	3.50	ppbv	U	1
Isobutyl Mercaptan	513-44-0	U	5.00	4.00	ppbv	U	1
n-Butyl Mercaptan	109-79-5	U	5.00	3.39	ppbv	U	1
Diethyl Sulfide	624-92-0	U	5.00	4.29	ppbv	U	1
3-Methyl Thiophene	616-44-4	U	5.00	2.70	ppbv	U	1
Tetrahydrothiophene	110-01-0	U	5.00	2.07	ppbv	U	1
Dimethyl Disulfide	624-92-0	U	5.00	3.25	ppbv	U	1
2-Ethyl Thiophene	872-55-9	U	5.00	1.97	ppbv	U	1
Diethyl Disulfide	110-81-6	U	5.00	1.26	ppbv	U	1
2,5-Dimethyl Thiophene	638-02-8	U	5.00	3.62	ppbv	U	1

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Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



Certificate of Analysis #: 19318

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FDOH - Chinese Wallboard

Sample Id: 090608-RS-27	Matrix: AMBIENT AIR	Date Received: Jun-09-09 10:45
Lab Sample Id: 19318-006	Date Collected: Jun-08-09 21:50	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08

Prep Method:

Date Analyzed: Jun-09-09 20:28 Analyst: GARGAR Date Prep: Tech: GARGAR
Seq Number: 67413

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	U	5.00	3.35	ppbv	U	1
Carbonyl Sulfide	463-58-1	U	5.00	3.96	ppbv	U	1
Methyl Mercaptan	74-93-1	U	5.00	4.65	ppbv	U	1
Ethyl Mercaptan	75-08-1	U	5.00	4.59	ppbv	U	1
Dimethyl Sulfide	75-18-3	U	5.00	3.41	ppbv	U	1
Carbon Disulfide	75-15-0	U	5.00	1.29	ppbv	U	1
Isopropyl Mercaptan	75-33-2	U	7.00	5.00	ppbv	U	1
tert-Butyl Mercaptan	75-66-1	U	7.00	5.64	ppbv	U	1
n-Propyl Mercaptan	107-03-9	U	5.00	4.36	ppbv	U	1
Ethyl Methyl Sulfide	624-89-5	U	5.00	3.36	ppbv	U	1
Thiophene	110-02-1	U	5.00	3.50	ppbv	U	1
Isobutyl Mercaptan	513-44-0	U	5.00	4.00	ppbv	U	1
n-Butyl Mercaptan	109-79-5	U	5.00	3.39	ppbv	U	1
Diethyl Sulfide	624-92-0	U	5.00	4.29	ppbv	U	1
3-Methyl Thiophene	616-44-4	U	5.00	2.70	ppbv	U	1
Tetrahydrothiophene	110-01-0	U	5.00	2.07	ppbv	U	1
Dimethyl Disulfide	624-92-0	U	5.00	3.25	ppbv	U	1
2-Ethyl Thiophene	872-55-9	U	5.00	1.97	ppbv	U	1
Diethyl Disulfide	110-81-6	U	5.00	1.26	ppbv	U	1
2,5-Dimethyl Thiophene	638-02-8	U	5.00	3.62	ppbv	U	1

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Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



Certificate of Analysis #: 19318

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Salazar Consulting Group, Inc., Tampa, FL

FDOH - Chinese Wallboard

Sample Id: 090608-RS-28	Matrix: AMBIENT AIR	Date Received: Jun-09-09 10:45
Lab Sample Id: 19318-007	Date Collected: Jun-08-09 23:45	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08					Prep Method:		
Date Analyzed: Jun-09-09 21:13	Analyst: GARGAR	Date Prep:		Tech: GARGAR			
	Seq Number: 67413						
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	U	5.00	3.35	ppbv	U	1
Carbonyl Sulfide	463-58-1	U	5.00	3.96	ppbv	U	1
Methyl Mercaptan	74-93-1	U	5.00	4.65	ppbv	U	1
Ethyl Mercaptan	75-08-1	U	5.00	4.59	ppbv	U	1
Dimethyl Sulfide	75-18-3	U	5.00	3.41	ppbv	U	1
Carbon Disulfide	75-15-0	U	5.00	1.29	ppbv	U	1
Isopropyl Mercaptan	75-33-2	U	7.00	5.00	ppbv	U	1
tert-Butyl Mercaptan	75-66-1	U	7.00	5.64	ppbv	U	1
n-Propyl Mercaptan	107-03-9	U	5.00	4.36	ppbv	U	1
Ethyl Methyl Sulfide	624-89-5	U	5.00	3.36	ppbv	U	1
Thiophene	110-02-1	U	5.00	3.50	ppbv	U	1
Isobutyl Mercaptan	513-44-0	U	5.00	4.00	ppbv	U	1
n-Butyl Mercaptan	109-79-5	U	5.00	3.39	ppbv	U	1
Diethyl Sulfide	624-92-0	U	5.00	4.29	ppbv	U	1
3-Methyl Thiophene	616-44-4	U	5.00	2.70	ppbv	U	1
Tetrahydrothiophene	110-01-0	U	5.00	2.07	ppbv	U	1
Dimethyl Disulfide	624-92-0	U	5.00	3.25	ppbv	U	1
2-Ethyl Thiophene	872-55-9	U	5.00	1.97	ppbv	U	1
Diethyl Disulfide	110-81-6	U	5.00	1.26	ppbv	U	1
2,5-Dimethyl Thiophene	638-02-8	U	5.00	3.62	ppbv	U	1

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Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



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FDOH - Chinese Wallboard

Sample Id: 090608-RS-29	Matrix: AMBIENT AIR	Date Received: Jun-09-09 10:45
Lab Sample Id: 19318-008	Date Collected: Jun-08-09 23:50	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08					Prep Method:		
Date Analyzed: Jun-09-09 21:27	Analyst: GARGAR	Date Prep:		Tech: GARGAR			
	Seq Number: 67413						
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	U	5.00	3.35	ppbv	U	1
Carbonyl Sulfide	463-58-1	U	5.00	3.96	ppbv	U	1
Methyl Mercaptan	74-93-1	U	5.00	4.65	ppbv	U	1
Ethyl Mercaptan	75-08-1	U	5.00	4.59	ppbv	U	1
Dimethyl Sulfide	75-18-3	U	5.00	3.41	ppbv	U	1
Carbon Disulfide	75-15-0	U	5.00	1.29	ppbv	U	1
Isopropyl Mercaptan	75-33-2	U	7.00	5.00	ppbv	U	1
tert-Butyl Mercaptan	75-66-1	U	7.00	5.64	ppbv	U	1
n-Propyl Mercaptan	107-03-9	U	5.00	4.36	ppbv	U	1
Ethyl Methyl Sulfide	624-89-5	U	5.00	3.36	ppbv	U	1
Thiophene	110-02-1	U	5.00	3.50	ppbv	U	1
Isobutyl Mercaptan	513-44-0	U	5.00	4.00	ppbv	U	1
n-Butyl Mercaptan	109-79-5	U	5.00	3.39	ppbv	U	1
Diethyl Sulfide	624-92-0	U	5.00	4.29	ppbv	U	1
3-Methyl Thiophene	616-44-4	U	5.00	2.70	ppbv	U	1
Tetrahydrothiophene	110-01-0	U	5.00	2.07	ppbv	U	1
Dimethyl Disulfide	624-92-0	U	5.00	3.25	ppbv	U	1
2-Ethyl Thiophene	872-55-9	U	5.00	1.97	ppbv	U	1
Diethyl Disulfide	110-81-6	U	5.00	1.26	ppbv	U	1
2,5-Dimethyl Thiophene	638-02-8	U	5.00	3.62	ppbv	U	1

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Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



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FDOH - Chinese Wallboard

Sample Id: 090609-RS-30	Matrix: AMBIENT AIR	Date Received: Jun-09-09 10:45
Lab Sample Id: 19318-009	Date Collected: Jun-09-09 01:35	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08					Prep Method:		
Date Analyzed: Jun-09-09 21:41	Analyst: GARGAR	Date Prep:		Tech: GARGAR			
	Seq Number: 67413						
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	U	5.00	3.35	ppbv	U	1
Carbonyl Sulfide	463-58-1	U	5.00	3.96	ppbv	U	1
Methyl Mercaptan	74-93-1	U	5.00	4.65	ppbv	U	1
Ethyl Mercaptan	75-08-1	U	5.00	4.59	ppbv	U	1
Dimethyl Sulfide	75-18-3	U	5.00	3.41	ppbv	U	1
Carbon Disulfide	75-15-0	U	5.00	1.29	ppbv	U	1
Isopropyl Mercaptan	75-33-2	U	7.00	5.00	ppbv	U	1
tert-Butyl Mercaptan	75-66-1	U	7.00	5.64	ppbv	U	1
n-Propyl Mercaptan	107-03-9	U	5.00	4.36	ppbv	U	1
Ethyl Methyl Sulfide	624-89-5	U	5.00	3.36	ppbv	U	1
Thiophene	110-02-1	U	5.00	3.50	ppbv	U	1
Isobutyl Mercaptan	513-44-0	U	5.00	4.00	ppbv	U	1
n-Butyl Mercaptan	109-79-5	U	5.00	3.39	ppbv	U	1
Diethyl Sulfide	624-92-0	U	5.00	4.29	ppbv	U	1
3-Methyl Thiophene	616-44-4	U	5.00	2.70	ppbv	U	1
Tetrahydrothiophene	110-01-0	U	5.00	2.07	ppbv	U	1
Dimethyl Disulfide	624-92-0	U	5.00	3.25	ppbv	U	1
2-Ethyl Thiophene	872-55-9	U	5.00	1.97	ppbv	U	1
Diethyl Disulfide	110-81-6	U	5.00	1.26	ppbv	U	1
2,5-Dimethyl Thiophene	638-02-8	U	5.00	3.62	ppbv	U	1

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Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



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FDOH - Chinese Wallboard

Sample Id: 090609-RS-31	Matrix: AMBIENT AIR	Date Received: Jun-09-09 10:45
Lab Sample Id: 19318-010	Date Collected: Jun-09-09 01:40	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08					Prep Method:		
Date Analyzed: Jun-09-09 21:55	Analyst: GARGAR	Date Prep:		Tech: GARGAR			
	Seq Number: 67414						
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	U	5.00	3.35	ppbv	U	1
Carbonyl Sulfide	463-58-1	U	5.00	3.96	ppbv	U	1
Methyl Mercaptan	74-93-1	U	5.00	4.65	ppbv	U	1
Ethyl Mercaptan	75-08-1	U	5.00	4.59	ppbv	U	1
Dimethyl Sulfide	75-18-3	U	5.00	3.41	ppbv	U	1
Carbon Disulfide	75-15-0	U	5.00	1.29	ppbv	U	1
Isopropyl Mercaptan	75-33-2	U	7.00	5.00	ppbv	U	1
tert-Butyl Mercaptan	75-66-1	U	7.00	5.64	ppbv	U	1
n-Propyl Mercaptan	107-03-9	U	5.00	4.36	ppbv	U	1
Ethyl Methyl Sulfide	624-89-5	U	5.00	3.36	ppbv	U	1
Thiophene	110-02-1	U	5.00	3.50	ppbv	U	1
Isobutyl Mercaptan	513-44-0	U	5.00	4.00	ppbv	U	1
n-Butyl Mercaptan	109-79-5	U	5.00	3.39	ppbv	U	1
Diethyl Sulfide	624-92-0	U	5.00	4.29	ppbv	U	1
3-Methyl Thiophene	616-44-4	U	5.00	2.70	ppbv	U	1
Tetrahydrothiophene	110-01-0	U	5.00	2.07	ppbv	U	1
Dimethyl Disulfide	624-92-0	U	5.00	3.25	ppbv	U	1
2-Ethyl Thiophene	872-55-9	U	5.00	1.97	ppbv	U	1
Diethyl Disulfide	110-81-6	U	5.00	1.26	ppbv	U	1
2,5-Dimethyl Thiophene	638-02-8	U	5.00	3.62	ppbv	U	1

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Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



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Certificate of Analysis #: 19318

Salazar Consulting Group, Inc., Tampa, FL

FDOH - Chinese Wallboard

Sample Id: 090609-RS-32	Matrix: AMBIENT AIR	Date Received: Jun-09-09 10:45
Lab Sample Id: 19318-011	Date Collected: Jun-09-09 03:35	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08					Prep Method:		
Date Analyzed: Jun-09-09 22:52	Analyst: GARGAR	Date Prep:	Tech: GARGAR				
	Seq Number: 67414						
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	U	5.00	3.35	ppbv	U	1
Carbonyl Sulfide	463-58-1	U	5.00	3.96	ppbv	U	1
Methyl Mercaptan	74-93-1	U	5.00	4.65	ppbv	U	1
Ethyl Mercaptan	75-08-1	U	5.00	4.59	ppbv	U	1
Dimethyl Sulfide	75-18-3	U	5.00	3.41	ppbv	U	1
Carbon Disulfide	75-15-0	U	5.00	1.29	ppbv	U	1
Isopropyl Mercaptan	75-33-2	U	7.00	5.00	ppbv	U	1
tert-Butyl Mercaptan	75-66-1	U	7.00	5.64	ppbv	U	1
n-Propyl Mercaptan	107-03-9	U	5.00	4.36	ppbv	U	1
Ethyl Methyl Sulfide	624-89-5	U	5.00	3.36	ppbv	U	1
Thiophene	110-02-1	U	5.00	3.50	ppbv	U	1
Isobutyl Mercaptan	513-44-0	U	5.00	4.00	ppbv	U	1
n-Butyl Mercaptan	109-79-5	U	5.00	3.39	ppbv	U	1
Diethyl Sulfide	624-92-0	U	5.00	4.29	ppbv	U	1
3-Methyl Thiophene	616-44-4	U	5.00	2.70	ppbv	U	1
Tetrahydrothiophene	110-01-0	U	5.00	2.07	ppbv	U	1
Dimethyl Disulfide	624-92-0	U	5.00	3.25	ppbv	U	1
2-Ethyl Thiophene	872-55-9	U	5.00	1.97	ppbv	U	1
Diethyl Disulfide	110-81-6	U	5.00	1.26	ppbv	U	1
2,5-Dimethyl Thiophene	638-02-8	U	5.00	3.62	ppbv	U	1

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Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



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FDOH - Chinese Wallboard

Sample Id: 090609-RS-33	Matrix: AMBIENT AIR	Date Received: Jun-09-09 10:45
Lab Sample Id: 19318-012	Date Collected: Jun-09-09 04:00	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08					Prep Method:		
Date Analyzed: Jun-09-09 23:06	Analyst: GARGAR	Date Prep:		Tech: GARGAR			
	Seq Number: 67414						
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	7.14	5.00	3.35	ppbv		1
Carbonyl Sulfide	463-58-1	U	5.00	3.96	ppbv	U	1
Methyl Mercaptan	74-93-1	U	5.00	4.65	ppbv	U	1
Ethyl Mercaptan	75-08-1	U	5.00	4.59	ppbv	U	1
Dimethyl Sulfide	75-18-3	U	5.00	3.41	ppbv	U	1
Carbon Disulfide	75-15-0	U	5.00	1.29	ppbv	U	1
Isopropyl Mercaptan	75-33-2	U	7.00	5.00	ppbv	U	1
tert-Butyl Mercaptan	75-66-1	U	7.00	5.64	ppbv	U	1
n-Propyl Mercaptan	107-03-9	U	5.00	4.36	ppbv	U	1
Ethyl Methyl Sulfide	624-89-5	U	5.00	3.36	ppbv	U	1
Thiophene	110-02-1	U	5.00	3.50	ppbv	U	1
Isobutyl Mercaptan	513-44-0	U	5.00	4.00	ppbv	U	1
n-Butyl Mercaptan	109-79-5	U	5.00	3.39	ppbv	U	1
Diethyl Sulfide	624-92-0	U	5.00	4.29	ppbv	U	1
3-Methyl Thiophene	616-44-4	U	5.00	2.70	ppbv	U	1
Tetrahydrothiophene	110-01-0	U	5.00	2.07	ppbv	U	1
Dimethyl Disulfide	624-92-0	U	5.00	3.25	ppbv	U	1
2-Ethyl Thiophene	872-55-9	U	5.00	1.97	ppbv	U	1
Diethyl Disulfide	110-81-6	U	5.00	1.26	ppbv	U	1
2,5-Dimethyl Thiophene	638-02-8	U	5.00	3.62	ppbv	U	1

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Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



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FDOH - Chinese Wallboard

Sample Id: 090609-RS-34	Matrix: AMBIENT AIR	Date Received: Jun-09-09 10:45
Lab Sample Id: 19318-013	Date Collected: Jun-09-09 05:30	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08					Prep Method:		
Date Analyzed: Jun-09-09 23:35	Analyst: GARGAR	Date Prep:	Tech: GARGAR				
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	U	5.00	3.35	ppbv	U	1
Carbonyl Sulfide	463-58-1	U	5.00	3.96	ppbv	U	1
Methyl Mercaptan	74-93-1	U	5.00	4.65	ppbv	U	1
Ethyl Mercaptan	75-08-1	U	5.00	4.59	ppbv	U	1
Dimethyl Sulfide	75-18-3	U	5.00	3.41	ppbv	U	1
Carbon Disulfide	75-15-0	U	5.00	1.29	ppbv	U	1
Isopropyl Mercaptan	75-33-2	U	7.00	5.00	ppbv	U	1
tert-Butyl Mercaptan	75-66-1	U	7.00	5.64	ppbv	U	1
n-Propyl Mercaptan	107-03-9	U	5.00	4.36	ppbv	U	1
Ethyl Methyl Sulfide	624-89-5	U	5.00	3.36	ppbv	U	1
Thiophene	110-02-1	U	5.00	3.50	ppbv	U	1
Isobutyl Mercaptan	513-44-0	U	5.00	4.00	ppbv	U	1
n-Butyl Mercaptan	109-79-5	U	5.00	3.39	ppbv	U	1
Diethyl Sulfide	624-92-0	U	5.00	4.29	ppbv	U	1
3-Methyl Thiophene	616-44-4	U	5.00	2.70	ppbv	U	1
Tetrahydrothiophene	110-01-0	U	5.00	2.07	ppbv	U	1
Dimethyl Disulfide	624-92-0	U	5.00	3.25	ppbv	U	1
2-Ethyl Thiophene	872-55-9	U	5.00	1.97	ppbv	U	1
Diethyl Disulfide	110-81-6	U	5.00	1.26	ppbv	U	1
2,5-Dimethyl Thiophene	638-02-8	U	5.00	3.62	ppbv	U	1

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Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



Certificate of Analysis #: 19318

LAKELAND
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Salazar Consulting Group, Inc., Tampa, FL

FDOH - Chinese Wallboard

Sample Id: 090609-RS-35	Matrix: AMBIENT AIR	Date Received: Jun-09-09 10:45
Lab Sample Id: 19318-014	Date Collected: Jun-09-09 05:30	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08					Prep Method:		
Date Analyzed: Jun-09-09 23:49	Analyst: GARGAR	Date Prep:	Tech: GARGAR				
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	U	5.00	3.35	ppbv	U	1
Carbonyl Sulfide	463-58-1	U	5.00	3.96	ppbv	U	1
Methyl Mercaptan	74-93-1	U	5.00	4.65	ppbv	U	1
Ethyl Mercaptan	75-08-1	U	5.00	4.59	ppbv	U	1
Dimethyl Sulfide	75-18-3	U	5.00	3.41	ppbv	U	1
Carbon Disulfide	75-15-0	U	5.00	1.29	ppbv	U	1
Isopropyl Mercaptan	75-33-2	U	7.00	5.00	ppbv	U	1
tert-Butyl Mercaptan	75-66-1	U	7.00	5.64	ppbv	U	1
n-Propyl Mercaptan	107-03-9	U	5.00	4.36	ppbv	U	1
Ethyl Methyl Sulfide	624-89-5	U	5.00	3.36	ppbv	U	1
Thiophene	110-02-1	U	5.00	3.50	ppbv	U	1
Isobutyl Mercaptan	513-44-0	U	5.00	4.00	ppbv	U	1
n-Butyl Mercaptan	109-79-5	U	5.00	3.39	ppbv	U	1
Diethyl Sulfide	624-92-0	U	5.00	4.29	ppbv	U	1
3-Methyl Thiophene	616-44-4	U	5.00	2.70	ppbv	U	1
Tetrahydrothiophene	110-01-0	U	5.00	2.07	ppbv	U	1
Dimethyl Disulfide	624-92-0	U	5.00	3.25	ppbv	U	1
2-Ethyl Thiophene	872-55-9	U	5.00	1.97	ppbv	U	1
Diethyl Disulfide	110-81-6	U	5.00	1.26	ppbv	U	1
2,5-Dimethyl Thiophene	638-02-8	U	5.00	3.62	ppbv	U	1

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Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



Certificate of Analysis #: 19318

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Salazar Consulting Group, Inc., Tampa, FL

FDOH - Chinese Wallboard

Sample Id: 090609-RS-36	Matrix: AMBIENT AIR	Date Received: Jun-09-09 10:45
Lab Sample Id: 19318-015	Date Collected: Jun-09-09 07:35	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08					Prep Method:		
Date Analyzed: Jun-10-09 00:03	Analyst: GARGAR	Date Prep:		Tech: GARGAR			
	Seq Number: 67414						
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	U	5.00	3.35	ppbv	U	1
Carbonyl Sulfide	463-58-1	U	5.00	3.96	ppbv	U	1
Methyl Mercaptan	74-93-1	U	5.00	4.65	ppbv	U	1
Ethyl Mercaptan	75-08-1	U	5.00	4.59	ppbv	U	1
Dimethyl Sulfide	75-18-3	U	5.00	3.41	ppbv	U	1
Carbon Disulfide	75-15-0	U	5.00	1.29	ppbv	U	1
Isopropyl Mercaptan	75-33-2	U	7.00	5.00	ppbv	U	1
tert-Butyl Mercaptan	75-66-1	U	7.00	5.64	ppbv	U	1
n-Propyl Mercaptan	107-03-9	U	5.00	4.36	ppbv	U	1
Ethyl Methyl Sulfide	624-89-5	U	5.00	3.36	ppbv	U	1
Thiophene	110-02-1	U	5.00	3.50	ppbv	U	1
Isobutyl Mercaptan	513-44-0	U	5.00	4.00	ppbv	U	1
n-Butyl Mercaptan	109-79-5	U	5.00	3.39	ppbv	U	1
Diethyl Sulfide	624-92-0	U	5.00	4.29	ppbv	U	1
3-Methyl Thiophene	616-44-4	U	5.00	2.70	ppbv	U	1
Tetrahydrothiophene	110-01-0	U	5.00	2.07	ppbv	U	1
Dimethyl Disulfide	624-92-0	U	5.00	3.25	ppbv	U	1
2-Ethyl Thiophene	872-55-9	U	5.00	1.97	ppbv	U	1
Diethyl Disulfide	110-81-6	U	5.00	1.26	ppbv	U	1
2,5-Dimethyl Thiophene	638-02-8	U	5.00	3.62	ppbv	U	1

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Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



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FDOH - Chinese Wallboard

Sample Id: 090609-RS-37	Matrix: AMBIENT AIR	Date Received: Jun-09-09 10:45
Lab Sample Id: 19318-016	Date Collected: Jun-09-09 07:35	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08			Prep Method:
Date Analyzed: Jun-10-09 00:18	Analyst: GARGAR	Date Prep:	Tech: GARGAR
	Seq Number: 67414		

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	6.09	5.00	3.35	ppbv		1
Carbonyl Sulfide	463-58-1	U	5.00	3.96	ppbv	U	1
Methyl Mercaptan	74-93-1	U	5.00	4.65	ppbv	U	1
Ethyl Mercaptan	75-08-1	U	5.00	4.59	ppbv	U	1
Dimethyl Sulfide	75-18-3	U	5.00	3.41	ppbv	U	1
Carbon Disulfide	75-15-0	U	5.00	1.29	ppbv	U	1
Isopropyl Mercaptan	75-33-2	U	7.00	5.00	ppbv	U	1
tert-Butyl Mercaptan	75-66-1	U	7.00	5.64	ppbv	U	1
n-Propyl Mercaptan	107-03-9	U	5.00	4.36	ppbv	U	1
Ethyl Methyl Sulfide	624-89-5	U	5.00	3.36	ppbv	U	1
Thiophene	110-02-1	U	5.00	3.50	ppbv	U	1
Isobutyl Mercaptan	513-44-0	U	5.00	4.00	ppbv	U	1
n-Butyl Mercaptan	109-79-5	U	5.00	3.39	ppbv	U	1
Diethyl Sulfide	624-92-0	U	5.00	4.29	ppbv	U	1
3-Methyl Thiophene	616-44-4	U	5.00	2.70	ppbv	U	1
Tetrahydrothiophene	110-01-0	U	5.00	2.07	ppbv	U	1
Dimethyl Disulfide	624-92-0	U	5.00	3.25	ppbv	U	1
2-Ethyl Thiophene	872-55-9	U	5.00	1.97	ppbv	U	1
Diethyl Disulfide	110-81-6	U	5.00	1.26	ppbv	U	1
2,5-Dimethyl Thiophene	638-02-8	U	5.00	3.62	ppbv	U	1

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Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



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FDOH - Chinese Wallboard

Sample Id: 090609-RS-38	Matrix: AMBIENT AIR	Date Received: Jun-09-09 10:45
Lab Sample Id: 19318-017	Date Collected: Jun-09-09 09:35	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08					Prep Method:		
Date Analyzed: Jun-10-09 00:32	Analyst: GARGAR	Date Prep:		Tech: GARGAR			
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	5.72	5.00	3.35	ppbv		1
Carbonyl Sulfide	463-58-1	U	5.00	3.96	ppbv	U	1
Methyl Mercaptan	74-93-1	U	5.00	4.65	ppbv	U	1
Ethyl Mercaptan	75-08-1	U	5.00	4.59	ppbv	U	1
Dimethyl Sulfide	75-18-3	U	5.00	3.41	ppbv	U	1
Carbon Disulfide	75-15-0	U	5.00	1.29	ppbv	U	1
Isopropyl Mercaptan	75-33-2	U	7.00	5.00	ppbv	U	1
tert-Butyl Mercaptan	75-66-1	U	7.00	5.64	ppbv	U	1
n-Propyl Mercaptan	107-03-9	U	5.00	4.36	ppbv	U	1
Ethyl Methyl Sulfide	624-89-5	U	5.00	3.36	ppbv	U	1
Thiophene	110-02-1	U	5.00	3.50	ppbv	U	1
Isobutyl Mercaptan	513-44-0	U	5.00	4.00	ppbv	U	1
n-Butyl Mercaptan	109-79-5	U	5.00	3.39	ppbv	U	1
Diethyl Sulfide	624-92-0	U	5.00	4.29	ppbv	U	1
3-Methyl Thiophene	616-44-4	U	5.00	2.70	ppbv	U	1
Tetrahydrothiophene	110-01-0	U	5.00	2.07	ppbv	U	1
Dimethyl Disulfide	624-92-0	U	5.00	3.25	ppbv	U	1
2-Ethyl Thiophene	872-55-9	U	5.00	1.97	ppbv	U	1
Diethyl Disulfide	110-81-6	U	5.00	1.26	ppbv	U	1
2,5-Dimethyl Thiophene	638-02-8	U	5.00	3.62	ppbv	U	1

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Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



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FDOH - Chinese Wallboard

Sample Id: 090609-RS-39	Matrix: AMBIENT AIR	Date Received: Jun-09-09 10:45
Lab Sample Id: 19318-018	Date Collected: Jun-09-09 09:35	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08					Prep Method:		
Date Analyzed: Jun-10-09 00:46	Analyst: GARGAR	Date Prep:		Tech: GARGAR			
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	U	5.00	3.35	ppbv	U	1
Carbonyl Sulfide	463-58-1	U	5.00	3.96	ppbv	U	1
Methyl Mercaptan	74-93-1	U	5.00	4.65	ppbv	U	1
Ethyl Mercaptan	75-08-1	U	5.00	4.59	ppbv	U	1
Dimethyl Sulfide	75-18-3	U	5.00	3.41	ppbv	U	1
Carbon Disulfide	75-15-0	U	5.00	1.29	ppbv	U	1
Isopropyl Mercaptan	75-33-2	U	7.00	5.00	ppbv	U	1
tert-Butyl Mercaptan	75-66-1	U	7.00	5.64	ppbv	U	1
n-Propyl Mercaptan	107-03-9	U	5.00	4.36	ppbv	U	1
Ethyl Methyl Sulfide	624-89-5	U	5.00	3.36	ppbv	U	1
Thiophene	110-02-1	U	5.00	3.50	ppbv	U	1
Isobutyl Mercaptan	513-44-0	U	5.00	4.00	ppbv	U	1
n-Butyl Mercaptan	109-79-5	U	5.00	3.39	ppbv	U	1
Diethyl Sulfide	624-92-0	U	5.00	4.29	ppbv	U	1
3-Methyl Thiophene	616-44-4	U	5.00	2.70	ppbv	U	1
Tetrahydrothiophene	110-01-0	U	5.00	2.07	ppbv	U	1
Dimethyl Disulfide	624-92-0	U	5.00	3.25	ppbv	U	1
2-Ethyl Thiophene	872-55-9	U	5.00	1.97	ppbv	U	1
Diethyl Disulfide	110-81-6	U	5.00	1.26	ppbv	U	1
2,5-Dimethyl Thiophene	638-02-8	U	5.00	3.62	ppbv	U	1

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Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



Certificate of Analysis #: 19318

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FDOH - Chinese Wallboard

Sample Id: 090609-RS-40	Matrix: AMBIENT AIR	Date Received: Jun-09-09 10:45
Lab Sample Id: 19318-019	Date Collected: Jun-09-09 10:45	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08					Prep Method:		
Date Analyzed: Jun-10-09 01:01	Analyst: GARGAR	Date Prep:		Tech: GARGAR			
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	U	5.00	3.35	ppbv	U	1
Carbonyl Sulfide	463-58-1	U	5.00	3.96	ppbv	U	1
Methyl Mercaptan	74-93-1	U	5.00	4.65	ppbv	U	1
Ethyl Mercaptan	75-08-1	U	5.00	4.59	ppbv	U	1
Dimethyl Sulfide	75-18-3	U	5.00	3.41	ppbv	U	1
Carbon Disulfide	75-15-0	U	5.00	1.29	ppbv	U	1
Isopropyl Mercaptan	75-33-2	U	7.00	5.00	ppbv	U	1
tert-Butyl Mercaptan	75-66-1	U	7.00	5.64	ppbv	U	1
n-Propyl Mercaptan	107-03-9	U	5.00	4.36	ppbv	U	1
Ethyl Methyl Sulfide	624-89-5	U	5.00	3.36	ppbv	U	1
Thiophene	110-02-1	U	5.00	3.50	ppbv	U	1
Isobutyl Mercaptan	513-44-0	U	5.00	4.00	ppbv	U	1
n-Butyl Mercaptan	109-79-5	U	5.00	3.39	ppbv	U	1
Diethyl Sulfide	624-92-0	U	5.00	4.29	ppbv	U	1
3-Methyl Thiophene	616-44-4	U	5.00	2.70	ppbv	U	1
Tetrahydrothiophene	110-01-0	U	5.00	2.07	ppbv	U	1
Dimethyl Disulfide	624-92-0	U	5.00	3.25	ppbv	U	1
2-Ethyl Thiophene	872-55-9	U	5.00	1.97	ppbv	U	1
Diethyl Disulfide	110-81-6	U	5.00	1.26	ppbv	U	1
2,5-Dimethyl Thiophene	638-02-8	U	5.00	3.62	ppbv	U	1

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Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



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Certificate of Analysis #: 19318

Salazar Consulting Group, Inc., Tampa, FL

FDOH - Chinese Wallboard

Sample Id: 3930367 D	Matrix: AMBIENT AIR	Date Received: Jun-08-09 22:30
Lab Sample Id: 19303-001 D	Date Collected: Jun-08-09 20:54	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08			Prep Method:				
Date Analyzed: Jun-09-09 17:48	Analyst: GARGAR	Date Prep:	Tech: GARGAR				
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	U	5.00	3.35	ppbv		1
Carbonyl Sulfide	463-58-1	U	5.00	3.96	ppbv		1
Methyl Mercaptan	74-93-1	U	5.00	4.65	ppbv		1
Ethyl Mercaptan	75-08-1	U	5.00	4.59	ppbv		1
Dimethyl Sulfide	75-18-3	U	5.00	3.41	ppbv		1
Carbon Disulfide	75-15-0	U	5.00	1.29	ppbv		1
Isopropyl Mercaptan	75-33-2	U	7.00	5.00	ppbv		1
tert-Butyl Mercaptan	75-66-1	U	7.00	5.64	ppbv		1
n-Propyl Mercaptan	107-03-9	U	5.00	4.36	ppbv		1
Ethyl Methyl Sulfide	624-89-5	U	5.00	3.36	ppbv		1
Thiophene	110-02-1	U	5.00	3.50	ppbv		1
Isobutyl Mercaptan	513-44-0	U	5.00	4.00	ppbv		1
n-Butyl Mercaptan	109-79-5	U	5.00	3.39	ppbv		1
Diethyl Sulfide	624-92-0	U	5.00	4.29	ppbv		1
3-Methyl Thiophene	616-44-4	U	5.00	2.70	ppbv		1
Tetrahydrothiophene	110-01-0	U	5.00	2.07	ppbv		1
Dimethyl Disulfide	624-92-0	U	5.00	3.25	ppbv		1
2-Ethyl Thiophene	872-55-9	U	5.00	1.97	ppbv		1
Diethyl Disulfide	110-81-6	U	5.00	1.26	ppbv		1
2,5-Dimethyl Thiophene	638-02-8	U	5.00	3.62	ppbv		1

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Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



Certificate of Analysis #: 19318

LAKELAND
LABORATORIES

Salazar Consulting Group, Inc., Tampa, FL

FDOH - Chinese Wallboard

Sample Id: 3930367 S	Matrix: AMBIENT AIR	Date Received: Jun-08-09 22:30
Lab Sample Id: 19303-001 S	Date Collected: Jun-08-09 20:54	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08			Prep Method:				
Date Analyzed: Jun-09-09 17:04	Analyst: GARGAR	Date Prep:	Tech: GARGAR				
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	95	5.00	3.35	%		1
Carbonyl Sulfide	463-58-1	88	5.00	3.96	%		1
Methyl Mercaptan	74-93-1	82	5.00	4.65	%		1
Ethyl Mercaptan	75-08-1	73	5.00	4.59	%		1
Dimethyl Sulfide	75-18-3	82	5.00	3.41	%		1
Carbon Disulfide	75-15-0	77	5.00	1.29	%		1
Isopropyl Mercaptan	75-33-2	72	7.00	5.00	%		1
tert-Butyl Mercaptan	75-66-1	70	7.00	5.64	%		1
n-Propyl Mercaptan	107-03-9	81	5.00	4.36	%		1
Ethyl Methyl Sulfide	624-89-5	73	5.00	3.36	%		1
Thiophene	110-02-1	62	5.00	3.50	%		1
Isobutyl Mercaptan	513-44-0	77	5.00	4.00	%		1
n-Butyl Mercaptan	109-79-5	76	5.00	3.39	%		1
Diethyl Sulfide	624-92-0	66	5.00	4.29	%		1
3-Methyl Thiophene	616-44-4	70	5.00	2.70	%		1
Tetrahydrothiophene	110-01-0	65	5.00	2.07	%		1
Dimethyl Disulfide	624-92-0	68	5.00	3.25	%		1
2-Ethyl Thiophene	872-55-9	76	5.00	1.97	%		1
Diethyl Disulfide	110-81-6	63	5.00	1.26	%		1
2,5-Dimethyl Thiophene	638-02-8	70	5.00	3.62	%		1

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Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



Certificate of Analysis #: 19318

LAKELAND
LABORATORIES

Salazar Consulting Group, Inc., Tampa, FL

FDOH - Chinese Wallboard

Sample Id: 3930367 SD	Matrix: AMBIENT AIR	Date Received: Jun-08-09 22:30
Lab Sample Id: 19303-001 SD	Date Collected: Jun-08-09 20:54	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08					Prep Method:		
Date Analyzed: Jun-09-09 17:19	Analyst: GARGAR	Date Prep:		Tech: GARGAR			
	Seq Number: 67413						
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	99	5.00	3.35	%		1
Carbonyl Sulfide	463-58-1	82	5.00	3.96	%		1
Methyl Mercaptan	74-93-1	74	5.00	4.65	%		1
Ethyl Mercaptan	75-08-1	74	5.00	4.59	%		1
Dimethyl Sulfide	75-18-3	76	5.00	3.41	%		1
Carbon Disulfide	75-15-0	80	5.00	1.29	%		1
Isopropyl Mercaptan	75-33-2	86	7.00	5.00	%		1
tert-Butyl Mercaptan	75-66-1	85	7.00	5.64	%		1
n-Propyl Mercaptan	107-03-9	68	5.00	4.36	%		1
Ethyl Methyl Sulfide	624-89-5	70	5.00	3.36	%		1
Thiophene	110-02-1	79	5.00	3.50	%		1
Isobutyl Mercaptan	513-44-0	92	5.00	4.00	%		1
n-Butyl Mercaptan	109-79-5	86	5.00	3.39	%		1
Diethyl Sulfide	624-92-0	104	5.00	4.29	%		1
3-Methyl Thiophene	616-44-4	75	5.00	2.70	%		1
Tetrahydrothiophene	110-01-0	79	5.00	2.07	%		1
Dimethyl Disulfide	624-92-0	74	5.00	3.25	%		1
2-Ethyl Thiophene	872-55-9	78	5.00	1.97	%		1
Diethyl Disulfide	110-81-6	60	5.00	1.26	%		1
2,5-Dimethyl Thiophene	638-02-8	74	5.00	3.62	%		1

*

Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



Certificate of Analysis #: 19318

LAKELAND
LABORATORIES

Salazar Consulting Group, Inc., Tampa, FL

FDOH - Chinese Wallboard

Sample Id: 090609-RS-13 D	Matrix: AMBIENT AIR	Date Received: Jun-09-09 10:45
Lab Sample Id: 19319-009 D	Date Collected: Jun-09-09 10:30	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08					Prep Method:		
Date Analyzed: Jun-10-09 02:41	Analyst: GARGAR	Date Prep:	Tech: GARGAR				
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	U	5.00	3.35	ppbv		1
Carbonyl Sulfide	463-58-1	U	5.00	3.96	ppbv		1
Methyl Mercaptan	74-93-1	U	5.00	4.65	ppbv		1
Ethyl Mercaptan	75-08-1	U	5.00	4.59	ppbv		1
Dimethyl Sulfide	75-18-3	U	5.00	3.41	ppbv		1
Carbon Disulfide	75-15-0	U	5.00	1.29	ppbv		1
Isopropyl Mercaptan	75-33-2	U	7.00	5.00	ppbv		1
tert-Butyl Mercaptan	75-66-1	U	7.00	5.64	ppbv		1
n-Propyl Mercaptan	107-03-9	U	5.00	4.36	ppbv		1
Ethyl Methyl Sulfide	624-89-5	U	5.00	3.36	ppbv		1
Thiophene	110-02-1	U	5.00	3.50	ppbv		1
Isobutyl Mercaptan	513-44-0	U	5.00	4.00	ppbv		1
n-Butyl Mercaptan	109-79-5	U	5.00	3.39	ppbv		1
Diethyl Sulfide	624-92-0	U	5.00	4.29	ppbv		1
3-Methyl Thiophene	616-44-4	U	5.00	2.70	ppbv		1
Tetrahydrothiophene	110-01-0	U	5.00	2.07	ppbv		1
Dimethyl Disulfide	624-92-0	U	5.00	3.25	ppbv		1
2-Ethyl Thiophene	872-55-9	U	5.00	1.97	ppbv		1
Diethyl Disulfide	110-81-6	U	5.00	1.26	ppbv		1
2,5-Dimethyl Thiophene	638-02-8	U	5.00	3.62	ppbv		1

*

Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



LAKELAND

LABORATORIES

Certificate of Analysis #: 19318

Salazar Consulting Group, Inc., Tampa, FL

FDOH - Chinese Wallboard

Sample Id: 090609-RS-13 S	Matrix: AMBIENT AIR	Date Received: Jun-09-09 10:45
Lab Sample Id: 19319-009 S	Date Collected: Jun-09-09 10:30	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08			Prep Method:
Date Analyzed: Jun-10-09 01:44	Analyst: GARGAR	Date Prep:	Tech: GARGAR

Seq Number: 67414

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	100	5.00	3.35	%		1
Carbonyl Sulfide	463-58-1	84	5.00	3.96	%		1
Methyl Mercaptan	74-93-1	87	5.00	4.65	%		1
Ethyl Mercaptan	75-08-1	68	5.00	4.59	%		1
Dimethyl Sulfide	75-18-3	92	5.00	3.41	%		1
Carbon Disulfide	75-15-0	89	5.00	1.29	%		1
Isopropyl Mercaptan	75-33-2	98	7.00	5.00	%		1
tert-Butyl Mercaptan	75-66-1	88	7.00	5.64	%		1
n-Propyl Mercaptan	107-03-9	94	5.00	4.36	%		1
Ethyl Methyl Sulfide	624-89-5	98	5.00	3.36	%		1
Thiophene	110-02-1	70	5.00	3.50	%		1
Isobutyl Mercaptan	513-44-0	81	5.00	4.00	%		1
n-Butyl Mercaptan	109-79-5	84	5.00	3.39	%		1
Diethyl Sulfide	624-92-0	74	5.00	4.29	%		1
3-Methyl Thiophene	616-44-4	91	5.00	2.70	%		1
Tetrahydrothiophene	110-01-0	64	5.00	2.07	%		1
Dimethyl Disulfide	624-92-0	84	5.00	3.25	%		1
2-Ethyl Thiophene	872-55-9	85	5.00	1.97	%		1
Diethyl Disulfide	110-81-6	69	5.00	1.26	%		1
2,5-Dimethyl Thiophene	638-02-8	84	5.00	3.62	%		1

*

Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



LAKELAND

LABORATORIES

Certificate of Analysis #: 19318

Salazar Consulting Group, Inc., Tampa, FL

FDOH - Chinese Wallboard

Sample Id: 090609-RS-13 SD	Matrix: AMBIENT AIR	Date Received: Jun-09-09 10:45
Lab Sample Id: 19319-009 SD	Date Collected: Jun-09-09 10:30	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08					Prep Method:		
Date Analyzed: Jun-10-09 02:12	Analyst: GARGAR	Date Prep:		Tech: GARGAR			
	Seq Number: 67414						
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	89	5.00	3.35	%		1
Carbonyl Sulfide	463-58-1	78	5.00	3.96	%		1
Methyl Mercaptan	74-93-1	97	5.00	4.65	%		1
Ethyl Mercaptan	75-08-1	108	5.00	4.59	%		1
Dimethyl Sulfide	75-18-3	85	5.00	3.41	%		1
Carbon Disulfide	75-15-0	91	5.00	1.29	%		1
Isopropyl Mercaptan	75-33-2	104	7.00	5.00	%		1
tert-Butyl Mercaptan	75-66-1	92	7.00	5.64	%		1
n-Propyl Mercaptan	107-03-9	93	5.00	4.36	%		1
Ethyl Methyl Sulfide	624-89-5	90	5.00	3.36	%		1
Thiophene	110-02-1	80	5.00	3.50	%		1
Isobutyl Mercaptan	513-44-0	98	5.00	4.00	%		1
n-Butyl Mercaptan	109-79-5	89	5.00	3.39	%		1
Diethyl Sulfide	624-92-0	90	5.00	4.29	%		1
3-Methyl Thiophene	616-44-4	82	5.00	2.70	%		1
Tetrahydrothiophene	110-01-0	72	5.00	2.07	%		1
Dimethyl Disulfide	624-92-0	93	5.00	3.25	%		1
2-Ethyl Thiophene	872-55-9	88	5.00	1.97	%		1
Diethyl Disulfide	110-81-6	72	5.00	1.26	%		1
2,5-Dimethyl Thiophene	638-02-8	77	5.00	3.62	%		1

*

Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



Certificate of Analysis #: 19318

LAKELAND
LABORATORIES

Salazar Consulting Group, Inc., Tampa, FL

FDOH - Chinese Wallboard

Sample Id: 67413-1-BKS	Matrix: AIR	Date Received:
Lab Sample Id: 67413-1-BKS	Date Collected:	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08					Prep Method:			
Date Analyzed: Jun-09-09 15:37		Analyst: GARGAR		Date Prep:		Tech: GARGAR		
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil	
Hydrogen Sulfide	7783-06-4	98	5.00	3.35	%		1	
Carbonyl Sulfide	463-58-1	98	5.00	3.96	%		1	
Methyl Mercaptan	74-93-1	90	5.00	4.65	%		1	
Ethyl Mercaptan	75-08-1	78	5.00	4.59	%		1	
Dimethyl Sulfide	75-18-3	91	5.00	3.41	%		1	
Carbon Disulfide	75-15-0	100	5.00	1.29	%		1	
Isopropyl Mercaptan	75-33-2	94	7.00	5.00	%		1	
tert-Butyl Mercaptan	75-66-1	82	7.00	5.64	%		1	
n-Propyl Mercaptan	107-03-9	94	5.00	4.36	%		1	
Ethyl Methyl Sulfide	624-89-5	87	5.00	3.36	%		1	
Thiophene	110-02-1	94	5.00	3.50	%		1	
Isobutyl Mercaptan	513-44-0	93	5.00	4.00	%		1	
n-Butyl Mercaptan	109-79-5	91	5.00	3.39	%		1	
Diethyl Sulfide	624-92-0	81	5.00	4.29	%		1	
3-Methyl Thiophene	616-44-4	102	5.00	2.70	%		1	
Tetrahydrothiophene	110-01-0	96	5.00	2.07	%		1	
Dimethyl Disulfide	624-92-0	99	5.00	3.25	%		1	
2-Ethyl Thiophene	872-55-9	99	5.00	1.97	%		1	
Diethyl Disulfide	110-81-6	90	5.00	1.26	%		1	
2,5-Dimethyl Thiophene	638-02-8	94	5.00	3.62	%		1	

*

Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



Certificate of Analysis #: 19318

LAKELAND
LABORATORIES

Salazar Consulting Group, Inc., Tampa, FL

FDOH - Chinese Wallboard

Sample Id: 67413-1-BLK	Matrix: AIR	Date Received:
Lab Sample Id: 67413-1-BLK	Date Collected:	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08			Prep Method:
Date Analyzed: Jun-09-09 15:23	Analyst: GARGAR	Date Prep:	Tech: GARGAR

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	U	5.00	3.35	ppbv	U	1
Carbonyl Sulfide	463-58-1	U	5.00	3.96	ppbv	U	1
Methyl Mercaptan	74-93-1	U	5.00	4.65	ppbv	U	1
Ethyl Mercaptan	75-08-1	U	5.00	4.59	ppbv	U	1
Dimethyl Sulfide	75-18-3	U	5.00	3.41	ppbv	U	1
Carbon Disulfide	75-15-0	U	5.00	1.29	ppbv	U	1
Isopropyl Mercaptan	75-33-2	U	7.00	5.00	ppbv	U	1
tert-Butyl Mercaptan	75-66-1	U	7.00	5.64	ppbv	U	1
n-Propyl Mercaptan	107-03-9	U	5.00	4.36	ppbv	U	1
Ethyl Methyl Sulfide	624-89-5	U	5.00	3.36	ppbv	U	1
Thiophene	110-02-1	U	5.00	3.50	ppbv	U	1
Isobutyl Mercaptan	513-44-0	U	5.00	4.00	ppbv	U	1
n-Butyl Mercaptan	109-79-5	U	5.00	3.39	ppbv	U	1
Diethyl Sulfide	624-92-0	U	5.00	4.29	ppbv	U	1
3-Methyl Thiophene	616-44-4	U	5.00	2.70	ppbv	U	1
Tetrahydrothiophene	110-01-0	U	5.00	2.07	ppbv	U	1
Dimethyl Disulfide	624-92-0	U	5.00	3.25	ppbv	U	1
2-Ethyl Thiophene	872-55-9	U	5.00	1.97	ppbv	U	1
Diethyl Disulfide	110-81-6	U	5.00	1.26	ppbv	U	1
2,5-Dimethyl Thiophene	638-02-8	U	5.00	3.62	ppbv	U	1

*

Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



LAKELAND

LABORATORIES

Certificate of Analysis #: 19318

Salazar Consulting Group, Inc., Tampa, FL

FDOH - Chinese Wallboard

Sample Id: 67413-1-BSD	Matrix: AIR	Date Received:
Lab Sample Id: 67413-1-BSD	Date Collected:	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08					Prep Method:					
Date Analyzed:	Analyst:	Date Prep:	Tech:							
Seq Number: 67413										
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil			
Hydrogen Sulfide	7783-06-4	103	5.00	3.35	%		1			
Carbonyl Sulfide	463-58-1	105	5.00	3.96	%		1			
Methyl Mercaptan	74-93-1	94	5.00	4.65	%		1			
Ethyl Mercaptan	75-08-1	93	5.00	4.59	%		1			
Dimethyl Sulfide	75-18-3	100	5.00	3.41	%		1			
Carbon Disulfide	75-15-0	99	5.00	1.29	%		1			
Isopropyl Mercaptan	75-33-2	96	7.00	5.00	%		1			
tert-Butyl Mercaptan	75-66-1	102	7.00	5.64	%		1			
n-Propyl Mercaptan	107-03-9	92	5.00	4.36	%		1			
Ethyl Methyl Sulfide	624-89-5	92	5.00	3.36	%		1			
Thiophene	110-02-1	95	5.00	3.50	%		1			
Isobutyl Mercaptan	513-44-0	110	5.00	4.00	%		1			
n-Butyl Mercaptan	109-79-5	102	5.00	3.39	%		1			
Diethyl Sulfide	624-92-0	118	5.00	4.29	%		1			
3-Methyl Thiophene	616-44-4	108	5.00	2.70	%		1			
Tetrahydrothiophene	110-01-0	91	5.00	2.07	%		1			
Dimethyl Disulfide	624-92-0	96	5.00	3.25	%		1			
2-Ethyl Thiophene	872-55-9	100	5.00	1.97	%		1			
Diethyl Disulfide	110-81-6	94	5.00	1.26	%		1			
2,5-Dimethyl Thiophene	638-02-8	96	5.00	3.62	%		1			

*

Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



Certificate of Analysis #: 19318

LAKELAND
LABORATORIES

Salazar Consulting Group, Inc., Tampa, FL

FDOH - Chinese Wallboard

Sample Id: 67414-1-BKS	Matrix: AIR	Date Received:
Lab Sample Id: 67414-1-BKS	Date Collected:	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08					Prep Method:		
Date Analyzed:	Analyst:	Date Prep:	Tech:				
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	108	5.00	3.35	%		1
Carbonyl Sulfide	463-58-1	113	5.00	3.96	%		1
Methyl Mercaptan	74-93-1	98	5.00	4.65	%		1
Ethyl Mercaptan	75-08-1	96	5.00	4.59	%		1
Dimethyl Sulfide	75-18-3	115	5.00	3.41	%		1
Carbon Disulfide	75-15-0	104	5.00	1.29	%		1
Isopropyl Mercaptan	75-33-2	81	7.00	5.00	%		1
tert-Butyl Mercaptan	75-66-1	105	7.00	5.64	%		1
n-Propyl Mercaptan	107-03-9	81	5.00	4.36	%		1
Ethyl Methyl Sulfide	624-89-5	110	5.00	3.36	%		1
Thiophene	110-02-1	98	5.00	3.50	%		1
Isobutyl Mercaptan	513-44-0	108	5.00	4.00	%		1
n-Butyl Mercaptan	109-79-5	100	5.00	3.39	%		1
Diethyl Sulfide	624-92-0	102	5.00	4.29	%		1
3-Methyl Thiophene	616-44-4	100	5.00	2.70	%		1
Tetrahydrothiophene	110-01-0	89	5.00	2.07	%		1
Dimethyl Disulfide	624-92-0	96	5.00	3.25	%		1
2-Ethyl Thiophene	872-55-9	104	5.00	1.97	%		1
Diethyl Disulfide	110-81-6	92	5.00	1.26	%		1
2,5-Dimethyl Thiophene	638-02-8	100	5.00	3.62	%		1

*

Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



Certificate of Analysis #: 19318

LAKELAND
LABORATORIES

Salazar Consulting Group, Inc., Tampa, FL

FDOH - Chinese Wallboard

Sample Id: 67414-1-BLK	Matrix: AIR	Date Received:
Lab Sample Id: 67414-1-BLK	Date Collected:	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08					Prep Method:		
Date Analyzed:	Analyst:	Date Prep:	Tech:				
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	U	5.00	3.35	ppbv	U	1
Carbonyl Sulfide	463-58-1	U	5.00	3.96	ppbv	U	1
Methyl Mercaptan	74-93-1	U	5.00	4.65	ppbv	U	1
Ethyl Mercaptan	75-08-1	U	5.00	4.59	ppbv	U	1
Dimethyl Sulfide	75-18-3	U	5.00	3.41	ppbv	U	1
Carbon Disulfide	75-15-0	U	5.00	1.29	ppbv	U	1
Isopropyl Mercaptan	75-33-2	U	7.00	5.00	ppbv	U	1
tert-Butyl Mercaptan	75-66-1	U	7.00	5.64	ppbv	U	1
n-Propyl Mercaptan	107-03-9	U	5.00	4.36	ppbv	U	1
Ethyl Methyl Sulfide	624-89-5	U	5.00	3.36	ppbv	U	1
Thiophene	110-02-1	U	5.00	3.50	ppbv	U	1
Isobutyl Mercaptan	513-44-0	U	5.00	4.00	ppbv	U	1
n-Butyl Mercaptan	109-79-5	U	5.00	3.39	ppbv	U	1
Diethyl Sulfide	624-92-0	U	5.00	4.29	ppbv	U	1
3-Methyl Thiophene	616-44-4	U	5.00	2.70	ppbv	U	1
Tetrahydrothiophene	110-01-0	U	5.00	2.07	ppbv	U	1
Dimethyl Disulfide	624-92-0	U	5.00	3.25	ppbv	U	1
2-Ethyl Thiophene	872-55-9	U	5.00	1.97	ppbv	U	1
Diethyl Disulfide	110-81-6	U	5.00	1.26	ppbv	U	1
2,5-Dimethyl Thiophene	638-02-8	U	5.00	3.62	ppbv	U	1

*

Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



LAKELAND

LABORATORIES

Certificate of Analysis #: 19318

Salazar Consulting Group, Inc., Tampa, FL

FDOH - Chinese Wallboard

Sample Id: 67414-1-BSD	Matrix: AIR	Date Received:
Lab Sample Id: 67414-1-BSD	Date Collected:	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08					Prep Method:			
Date Analyzed: Jun-10-09 03:10		Analyst: GARGAR		Date Prep:		Tech: GARGAR		
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil	
Hydrogen Sulfide	7783-06-4	95	5.00	3.35	%		1	
Carbonyl Sulfide	463-58-1	108	5.00	3.96	%		1	
Methyl Mercaptan	74-93-1	96	5.00	4.65	%		1	
Ethyl Mercaptan	75-08-1	88	5.00	4.59	%		1	
Dimethyl Sulfide	75-18-3	110	5.00	3.41	%		1	
Carbon Disulfide	75-15-0	103	5.00	1.29	%		1	
Isopropyl Mercaptan	75-33-2	102	7.00	5.00	%		1	
tert-Butyl Mercaptan	75-66-1	106	7.00	5.64	%		1	
n-Propyl Mercaptan	107-03-9	86	5.00	4.36	%		1	
Ethyl Methyl Sulfide	624-89-5	110	5.00	3.36	%		1	
Thiophene	110-02-1	88	5.00	3.50	%		1	
Isobutyl Mercaptan	513-44-0	90	5.00	4.00	%		1	
n-Butyl Mercaptan	109-79-5	104	5.00	3.39	%		1	
Diethyl Sulfide	624-92-0	85	5.00	4.29	%		1	
3-Methyl Thiophene	616-44-4	100	5.00	2.70	%		1	
Tetrahydrothiophene	110-01-0	94	5.00	2.07	%		1	
Dimethyl Disulfide	624-92-0	88	5.00	3.25	%		1	
2-Ethyl Thiophene	872-55-9	97	5.00	1.97	%		1	
Diethyl Disulfide	110-81-6	92	5.00	1.26	%		1	
2,5-Dimethyl Thiophene	638-02-8	89	5.00	3.62	%		1	

*

Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.

Quality Control Sample Legend

Lakeland Labs Quality Control Sample Legend

This analytical report may include results for various quality assurance/quality control (QA/QC) samples prepared and analyzed as required within various sample preparation and analytical batches. In-house sample identification is based on the Lakeland Labs Work Order No. followed by the Work Order Item No. For example, the second item on Work Order No. 10000 would be assigned Lab Sample ID 10000-002. The QA/QC sample identifications are affixed with suffixes to differentiate them from the actual sample results. For QA/QC samples generated in-house such as method blanks, blank spikes, blank spike duplicates, etc., the preparation or analytical batch number is used instead of the Work Order No. To assist the data reviewer, the following legend provides information on the various QA/QC samples and the suffixes used to denote them:

- BLK Method Blank. A method blank, also known as a laboratory control blank (LCB), is a sample of a matrix similar to the batch of associated samples (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences are present at concentrations that impact the analytical results for sample analyses.
- BKS Blank Spike. A blank spike, also known as a calibration verification or laboratory control sample (LCS), is a sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes. It is generally used to establish intra-laboratory or analyst-specific precision and bias (accuracy) or to assess the performance of all or a portion of the measurement system. Successful analysis of the blank spike sample demonstrates an analytical system's ability to accurately measure target analyte concentrations.
- BSD Blank Spike Duplicate. A blank spike duplicate, also known as a laboratory control sample duplicate (LCSD), is a second blank spike sample, often bracketing a group of samples within a batch. Successful analysis of the blank spike duplicate sample demonstrates not only an analytical system's continuing ability to accurately measure target analyte concentrations, but also, when compared with the blank spike results, the system's precision.
- S Matrix Spike (MS). A matrix spike is a sample prepared by adding a known mass of target analyte(s) to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. Matrix spikes are used, for example, to determine the effect of the matrix on a method's recovery efficiency.
- SD Matrix Spike Duplicate (MSD). A matrix spike duplicate is a second replicate matrix spike prepared in the laboratory and analyzed to obtain a measure of the precision of the recovery for each analyte.
- D Matrix Duplicate (MD). A matrix duplicate is a second replicate matrix prepared in the laboratory and analyzed to obtain a measure of precision.
- MRL Method Reporting Limit. A method reporting limit standard is an analyte-free matrix similar to the sample matrices spiked with one or more of the target analytes at a concentration equal to or less than the method reporting limit (also known as the practical quantitation limit or PQL). Successful analysis of the MRL standard demonstrates the analytical system's ability to identify the spiked analytes of interest at the MRL/PQL.

FLORIDA Flagging Criteria

Data were reviewed by the Department Supervisor and QA Director

- A Value reported is the mean (average) of two or more determinations. This code shall be used if the reported value is the average of results for two or more discrete and separate samples. These samples shall have been processed and analyzed independently. Do not use this code if the data are the result of replicate analysis on the same sample aliquot, extract or digestate.
- B Results based upon colony counts outside the acceptable range. This code applies to microbiological tests and specifically to membrane filter colony counts. The code is to be used if the colony count is generated from a plate in which the total number of coliform colonies is outside the method indicated ideal range. This code is not to be used if a 100 mL sample has been filtered and the colony count is less than the lower value of the ideal range.
- J Estimated value. A "J" value shall be accompanied by a narrative justification for its use. Where possible, the organization shall report whether the actual value is less than or greater than the reported value. A "J" value shall not be used as a substitute for K, L, M, T, V, or Y, however, if additional reasons exist for identifying the value as estimate (e.g., matrix spiked failed to meet acceptance criteria), the "J" code may be added to a K, L, M, T, V, or Y. The following are some examples of narrative descriptions that may accompany a "J" code:
 - J1: No known quality control criteria exist for the component;
 - J2: The reported value failed to meet the established quality control criteria for either precision or accuracy (the specific failure must be identified);
 - J3: The sample matrix interfered with the ability to make any accurate determination;
 - J4: The data are questionable because of improper laboratory or field protocols
- Q Sample held beyond the accepted holding time. This code shall be used if the value is derived from a sample that was prepared or analyzed after the approved holding time restrictions for sample preparation or analysis.
- T Value reported is less than the laboratory method detection limit. The value is reported for informational purposes, only and shall not be used in statistical analysis.
- U Indicates that the compound was analyzed for but not detected. This symbol shall be used to indicate that the specified component was not detected. The value associated with the qualifier shall be the laboratory method detection limit. Unless requested by the client, less than the method detection limit values shall not be reported (see "T" above).
- V Indicates that the analyte was detected in both the sample and the associated method blank. Note: the value in the blank shall not be subtracted from associated samples.
- Y The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
- I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

FLORIDA Flagging Criteria

- * Not analyzed due to interference
- R Significant rain in the past 48 hours. (Significant rain typically involves rain in excess of 1/2 inch within the past 48 hours.) This code shall be used when the rainfall might contribute to a lower than normal value.
- ! Data deviate from historically established concentration ranges.
- + Analyte falls outside current scope of NELAP accreditation.
- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.
- D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- F When reporting species: F indicates the female sex. Otherwise it indicates RPD value is outside the acceptable range.
- L Off-scale high. Actual value is known to be greater than value given. To be used when the concentration of the analyte is above the acceptable level for quantitation (exceeds the linear range or highest calibration standard) and the calibration curve is known to exhibit a negative deflection.
- H Value based on field kit determination; results may not be accurate. This code shall be used if a field screening test (i.e., field gas chromatograph data, immunoassay, vendor-supplied field kit, etc.) was used to generate the value and the field kit or method has not been recognized by the Department as equivalent to laboratory methods.



BS / BSD Recoveries

Project Name: FDOH - Chinese Wallboard

Work Order #: 19318

Analyst: GARGAR

Lab Batch ID: 67413

Sample: 67413-1-BKS

Batch #: 1

Report Date 17-JUN-09

Project ID: 1406.01

Date Analyzed: 06/09/2009

Matrix: Air

Units: ppbv

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Sulfur Compounds in Air By ASTM D5504-08 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Hydrogen Sulfide	<3.35	25.0	24.4	98	25.0	25.7	103	5	70-130	30	
Carbonyl Sulfide	<3.96	25.0	24.4	98	25.0	26.2	105	7	70-130	30	
Methyl Mercaptan	<4.65	25.0	22.5	90	25.0	23.6	94	5	70-130	30	
Ethyl Mercaptan	<4.59	25.0	19.6	78	25.0	23.2	93	17	70-130	30	
Dimethyl Sulfide	<3.41	25.0	22.7	91	25.0	24.9	100	9	70-130	30	
Carbon Disulfide	<1.29	25.0	24.9	100	25.0	24.8	99	0	70-130	30	
Isopropyl Mercaptan	<5.00	25.0	23.6	94	25.0	23.9	96	1	70-130	30	
tert-Butyl Mercaptan	<5.64	25.0	20.5	82	25.0	25.4	102	21	70-130	30	
n-Propyl Mercaptan	<4.36	25.0	23.6	94	25.0	23.0	92	3	70-130	30	
Ethyl Methyl Sulfide	<3.36	25.0	21.7	87	25.0	23.0	92	6	70-130	30	
Thiophene	<3.50	25.0	23.6	94	25.0	23.8	95	1	70-130	30	
Isobutyl Mercaptan	<4.00	25.0	23.2	93	25.0	27.6	110	17	70-130	30	
n-Butyl Mercaptan	<3.39	25.0	22.8	91	25.0	25.5	102	11	70-130	30	
Diethyl Sulfide	<4.29	25.0	20.2	81	25.0	29.5	118	37	70-130	30	JF
3-Methyl Thiophene	<2.70	25.0	25.4	102	25.0	26.9	108	6	70-130	30	
Tetrahydrothiophene	<2.07	25.0	24.0	96	25.0	22.7	91	6	70-130	30	
Dimethyl Disulfide	<3.25	25.0	24.8	99	25.0	24.0	96	3	70-130	30	
2-Ethyl Thiophene	<1.97	25.0	24.7	99	25.0	25.0	100	1	70-130	30	
Diethyl Disulfide	<1.26	25.0	22.4	90	25.0	23.6	94	5	70-130	30	
2,5-Dimethyl Thiophene	<3.62	25.0	23.4	94	25.0	24.1	96	3	70-130	30	

Relative Percent Difference RPD = $200 \times |(D-F)/(D+F)|$

Blank Spike Recovery [D] = $100 \times (C)/[B]$

Blank Spike Duplicate Recovery [G] = $100 \times (F)/[E]$

All results are based on MDL and Validated for QC Purposes



BS / BSD Recoveries

Project Name: FDOH - Chinese Wallboard

Work Order #: 19318

Analyst: GARGAR

Lab Batch ID: 67414

Sample: 67414-1-BKS

Batch #: 1

Report Date 17-JUN-09

Project ID: 1406.01

Date Analyzed: 06/10/2009

Matrix: Air

Units: ppbv

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Sulfur Compounds in Air By ASTM D5504-08 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Hydrogen Sulfide	<3.35	25.0	27.0	108	25.0	23.8	95	13	70-130	30	
Carbonyl Sulfide	<3.96	25.0	28.2	113	25.0	27.0	108	4	70-130	30	
Methyl Mercaptan	<4.65	25.0	24.5	98	25.0	24.0	96	2	70-130	30	
Ethyl Mercaptan	<4.59	25.0	24.1	96	25.0	21.9	88	10	70-130	30	
Dimethyl Sulfide	<3.41	25.0	28.8	115	25.0	27.6	110	4	70-130	30	
Carbon Disulfide	<1.29	25.0	26.1	104	25.0	25.8	103	1	70-130	30	
Isopropyl Mercaptan	<5.00	25.0	20.2	81	25.0	25.5	102	23	70-130	30	
tert-Butyl Mercaptan	<5.64	25.0	26.3	105	25.0	26.5	106	1	70-130	30	
n-Propyl Mercaptan	<4.36	25.0	20.2	81	25.0	21.4	86	6	70-130	30	
Ethyl Methyl Sulfide	<3.36	25.0	27.4	110	25.0	27.5	110	0	70-130	30	
Thiophene	<3.50	25.0	24.4	98	25.0	22.1	88	10	70-130	30	
Isobutyl Mercaptan	<4.00	25.0	27.1	108	25.0	22.5	90	19	70-130	30	
n-Butyl Mercaptan	<3.39	25.0	25.1	100	25.0	26.1	104	4	70-130	30	
Diethyl Sulfide	<4.29	25.0	25.6	102	25.0	21.2	85	19	70-130	30	
3-Methyl Thiophene	<2.70	25.0	25.1	100	25.0	25.0	100	0	70-130	30	
Tetrahydrothiophene	<2.07	25.0	22.2	89	25.0	23.4	94	5	70-130	30	
Dimethyl Disulfide	<3.25	25.0	23.9	96	25.0	21.9	88	9	70-130	30	
2-Ethyl Thiophene	<1.97	25.0	25.9	104	25.0	24.2	97	7	70-130	30	
Diethyl Disulfide	<1.26	25.0	23.1	92	25.0	23.0	92	0	70-130	30	
2,5-Dimethyl Thiophene	<3.62	25.0	24.9	100	25.0	22.2	89	11	70-130	30	

Relative Percent Difference RPD = $200 \times |(D-F)/(D+F)|$

Blank Spike Recovery [D] = $100 \times (C)/[B]$

Blank Spike Duplicate Recovery [G] = $100 \times (F)/[E]$

All results are based on MDL and Validated for QC Purposes



Form 3 - MS / MSD Recoveries

Project Name: FDOH - Chinese Wallboard

Report Date: 17-JUN-09

Project ID: 1406.01

Work Order #: 19318

Lab Batch ID: 67413

Date Analyzed: 06/09/2009

Reporting Units: ppbv

QC- Sample ID: 19303-001 S

Date Prepared: 06/09/2009

Batch #: 1 **Matrix:** Ambient Air

Analyst: GARGAR

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Sulfur Compounds in Air By ASTM D5504-08 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Hydrogen Sulfide	<3.35	25.0	23.7	95	25.0	24.8	99	4	70-130	30	
Carbonyl Sulfide	<3.96	25.0	22.0	88	25.0	20.4	82	7	70-130	30	
Methyl Mercaptan	<4.65	25.0	20.4	82	25.0	18.4	74	10	70-130	30	
Ethyl Mercaptan	<4.59	25.0	18.3	73	25.0	18.5	74	1	70-130	30	
Dimethyl Sulfide	<3.41	25.0	20.5	82	25.0	18.9	76	8	70-130	30	
Carbon Disulfide	<1.29	25.0	19.2	77	25.0	19.9	80	4	70-130	30	
Isopropyl Mercaptan	<5.00	25.0	18.0	72	25.0	21.4	86	18	70-130	30	
tert-Butyl Mercaptan	<5.64	25.0	17.5	70	25.0	21.2	85	19	70-130	30	
n-Propyl Mercaptan	<4.36	25.0	20.2	81	25.0	17.0	68	17	70-130	30	J
Ethyl Methyl Sulfide	<3.36	25.0	18.2	73	25.0	17.4	70	4	70-130	30	
Thiophene	<3.50	25.0	15.4	62	25.0	19.8	79	24	70-130	30	J
Isobutyl Mercaptan	<4.00	25.0	19.2	77	25.0	22.9	92	18	70-130	30	
n-Butyl Mercaptan	<3.39	25.0	19.1	76	25.0	21.4	86	12	70-130	30	
Diethyl Sulfide	<4.29	25.0	16.6	66	25.0	26.1	104	45	70-130	30	JF
3-Methyl Thiophene	<2.70	25.0	17.6	70	25.0	18.7	75	7	70-130	30	
Tetrahydrothiophene	<2.07	25.0	16.2	65	25.0	19.8	79	19	70-130	30	J
Dimethyl Disulfide	<3.25	25.0	16.9	68	25.0	18.4	74	8	70-130	30	J
2-Ethyl Thiophene	<1.97	25.0	18.9	76	25.0	19.4	78	3	70-130	30	
Diethyl Disulfide	<1.26	25.0	15.7	63	25.0	15.1	60	5	70-130	30	J
2,5-Dimethyl Thiophene	<3.62	25.0	17.6	70	25.0	18.4	74	6	70-130	30	

Matrix Spike Percent Recovery [D] = $100 \times (C-A)/B$
 Relative Percent Difference RPD = $200 \times (D-G)/(D+G)$

Matrix Spike Duplicate Percent Recovery [G] = $100 \times (F-A)/E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit



Form 3 - MS / MSD Recoveries

Project Name: FDOH - Chinese Wallboard

Work Order #: 19318

Lab Batch ID: 67414

Date Analyzed: 06/10/2009

Reporting Units: ppbv

Report Date: 17-JUN-09

Project ID: 1406.01

QC- Sample ID: 19319-009 S

Date Prepared: 06/10/2009

Batch #: 1 **Matrix:** Ambient Air

Analyst: GARGAR

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Sulfur Compounds in Air By ASTM D5504-08 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Hydrogen Sulfide	<3.35	25.0	24.9	100	25.0	22.2	89	12	70-130	30	
Carbonyl Sulfide	<3.96	25.0	21.0	84	25.0	19.4	78	7	70-130	30	
Methyl Mercaptan	<4.65	25.0	21.8	87	25.0	24.3	97	11	70-130	30	
Ethyl Mercaptan	<4.59	25.0	16.9	68	25.0	27.0	108	45	70-130	30	JF
Dimethyl Sulfide	<3.41	25.0	23.1	92	25.0	21.3	85	8	70-130	30	
Carbon Disulfide	<1.29	25.0	22.3	89	25.0	22.7	91	2	70-130	30	
Isopropyl Mercaptan	<5.00	25.0	24.4	98	25.0	25.9	104	6	70-130	30	
tert-Butyl Mercaptan	<5.64	25.0	21.9	88	25.0	22.9	92	4	70-130	30	
n-Propyl Mercaptan	<4.36	25.0	23.5	94	25.0	23.3	93	1	70-130	30	
Ethyl Methyl Sulfide	<3.36	25.0	24.4	98	25.0	22.5	90	9	70-130	30	
Thiophene	<3.50	25.0	17.4	70	25.0	20.0	80	13	70-130	30	
Isobutyl Mercaptan	<4.00	25.0	20.3	81	25.0	24.4	98	19	70-130	30	
n-Butyl Mercaptan	<3.39	25.0	21.1	84	25.0	22.2	89	6	70-130	30	
Diethyl Sulfide	<4.29	25.0	18.5	74	25.0	22.5	90	20	70-130	30	
3-Methyl Thiophene	<2.70	25.0	22.8	91	25.0	20.6	82	10	70-130	30	
Tetrahydrothiophene	<2.07	25.0	16.0	64	25.0	18.1	72	12	70-130	30	J
Dimethyl Disulfide	<3.25	25.0	21.0	84	25.0	23.3	93	10	70-130	30	
2-Ethyl Thiophene	<1.97	25.0	21.2	85	25.0	21.9	88	3	70-130	30	
Diethyl Disulfide	<1.26	25.0	17.3	69	25.0	17.9	72	4	70-130	30	J
2,5-Dimethyl Thiophene	<3.62	25.0	20.9	84	25.0	19.3	77	9	70-130	30	

Matrix Spike Percent Recovery [D] = $100 \times (C-A)/B$
 Relative Percent Difference RPD = $200 \times (D-G)/(D+G)$

Matrix Spike Duplicate Percent Recovery [G] = $100 \times (F-A)/E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit



Sample Duplicate Recovery

LAKELAND
LABORATORIES

Project Name: FDOH - Chinese Wallboard

Work Order #: 19318

Report Date: 17-JUN-09

Lab Batch #: 67413

Project ID: 1406.01

Date Analyzed: 06/09/2009

Date Prepared: 06/09/2009

Analyst: GARGAR

QC- Sample ID: 19303-001 D

Batch #: 1

Matrix: Air

Reporting Units: ppbv

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Sulfur Compounds in Air By ASTM D5504-08	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Hydrogen Sulfide	<3.35	<3.35	NC	30	
Carbonyl Sulfide	<3.96	<3.96	NC	30	
Methyl Mercaptan	<4.65	<4.65	NC	30	
Ethyl Mercaptan	<4.59	<4.59	NC	30	
Dimethyl Sulfide	<3.41	<3.41	NC	30	
Carbon Disulfide	<1.29	<1.29	NC	30	
Isopropyl Mercaptan	<5.00	<5.00	NC	30	
tert-Butyl Mercaptan	<5.64	<5.64	NC	30	
n-Propyl Mercaptan	<4.36	<4.36	NC	30	
Ethyl Methyl Sulfide	<3.36	<3.36	NC	30	
Thiophene	<3.50	<3.50	NC	30	
Isobutyl Mercaptan	<4.00	<4.00	NC	30	
n-Butyl Mercaptan	<3.39	<3.39	NC	30	
Diethyl Sulfide	<4.29	<4.29	NC	30	
3-Methyl Thiophene	<2.70	<2.70	NC	30	
Tetrahydrothiophene	<2.07	<2.07	NC	30	
Dimethyl Disulfide	<3.25	<3.25	NC	30	
2-Ethyl Thiophene	<1.97	<1.97	NC	30	
Diethyl Disulfide	<1.26	<1.26	NC	30	
2,5-Dimethyl Thiophene	<3.62	<3.62	NC	30	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.



Sample Duplicate Recovery

LAKELAND
LABORATORIES

Project Name: FDOH - Chinese Wallboard

Work Order #: 19318

Report Date: 17-JUN-09

Lab Batch #: 67414

Project ID: 1406.01

Date Analyzed: 06/10/2009

Date Prepared: 06/10/2009

Analyst: GARGAR

QC- Sample ID: 19319-009 D

Batch #: 1

Matrix: Air

Reporting Units: ppbv

SAMPLE / SAMPLE DUPLICATE RECOVERY

Sulfur Compounds in Air By ASTM D5504-08	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Hydrogen Sulfide	<3.35	<3.35	NC	30	
Carbonyl Sulfide	<3.96	<3.96	NC	30	
Methyl Mercaptan	<4.65	<4.65	NC	30	
Ethyl Mercaptan	<4.59	<4.59	NC	30	
Dimethyl Sulfide	<3.41	<3.41	NC	30	
Carbon Disulfide	<1.29	<1.29	NC	30	
Isopropyl Mercaptan	<5.00	<5.00	NC	30	
tert-Butyl Mercaptan	<5.64	<5.64	NC	30	
n-Propyl Mercaptan	<4.36	<4.36	NC	30	
Ethyl Methyl Sulfide	<3.36	<3.36	NC	30	
Thiophene	<3.50	<3.50	NC	30	
Isobutyl Mercaptan	<4.00	<4.00	NC	30	
n-Butyl Mercaptan	<3.39	<3.39	NC	30	
Diethyl Sulfide	<4.29	<4.29	NC	30	
3-Methyl Thiophene	<2.70	<2.70	NC	30	
Tetrahydrothiophene	<2.07	<2.07	NC	30	
Dimethyl Disulfide	<3.25	<3.25	NC	30	
2-Ethyl Thiophene	<1.97	<1.97	NC	30	
Diethyl Disulfide	<1.26	<1.26	NC	30	
2,5-Dimethyl Thiophene	<3.62	<3.62	NC	30	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

Project Name: FDOH - Chinese Wallboard

Work Order #: 19318

Report Date: 17-JUN-09

Project ID: 1406.01

Sample: 67413-1-MRL

Lab Batch #: 67413

Date Analyzed: 06/10/2009

Analyst: GARGAR

Reporting Units: ppbv

Sulfur Compounds in Air By ASTM D5504-08	Instrument QC RECOVERY STUDY					
	Analytes	Result [A]	Spike Added [B]	Spike %R [C]	Control Limits %R	Flags
Hydrogen Sulfide	6.93	5.00	139	50-200		
Carbonyl Sulfide	8.04	5.00	161	50-200		
Methyl Mercaptan	7.37	5.00	147	50-200		
Ethyl Mercaptan	12.4	5.00	248	50-200	J	
Dimethyl Sulfide	6.00	5.00	120	50-200		
Carbon Disulfide	7.36	5.00	147	50-200		
Isopropyl Mercaptan	16.7	5.00	334	50-200	J	
tert-Butyl Mercaptan	7.83	5.00	157	50-200		
n-Propyl Mercaptan	9.70	5.00	194	50-200		
Ethyl Methyl Sulfide	6.76	5.00	135	50-200		
Thiophene	8.13	5.00	163	50-200		
Isobutyl Mercaptan	11.0	5.00	220	50-200	J	
n-Butyl Mercaptan	7.40	5.00	148	50-200		
Diethyl Sulfide	8.32	5.00	166	50-200		
3-Methyl Thiophene	8.14	5.00	163	50-200		
Tetrahydrothiophene	6.19	5.00	124	50-200		
Dimethyl Disulfide	12.6	5.00	252	50-200	J	
2-Ethyl Thiophene	5.90	5.00	118	50-200		
Diethyl Disulfide	7.04	5.00	141	50-200		
2,5-Dimethyl Thiophene	6.37	5.00	127	50-200		

Recovery [C] = 100*[A]/[B]

All results are based on MDL and validated for QC purposes.

CC WORKS/INTER-13318

SALAZAR CONSULTING GROUP, INC.

6607 Heatherton Court, Tampa, Florida 33617
(813) 980-1915 • FAX (813) 988-7486

CHAIN OF CUSTODY

Project 6607 Heatherton Court Project No. 146661
Location Unit 90 Date: 6/19/09
Sampled by: L. Salazar, Inc., Crime Lab, Inc.
Unit 90

SAMPLE NO.	LOCATION	TYPE	COMMENTS
5:35P 090608-25-22	2nd Floor FR	Teddy Bag	Unit 90
5:40P -23	OUTDOORS		
7:35P -24	OUTDOORS 3D.R.		
7:40P -25	OUTDOORS		
9:45P -26	2nd FL - RR		
9:45P -27	OUTDOORS		
11:45P -28	OUTDOORS		
11:56P -29	Master Bedroom		

Laboratory Instructions:

- Please invoice Salazar Consulting Group, Inc.
- FAX preliminary results and mail final results.
- Other: _____

CHAIN OF CUSTODY DATA:

Collected by: Salazar, Inc., Inc. Date: 6/19/09
Packaged/Sent by: L. Salazar Date: 6/19/09
Transporter: L. Salazar, Inc. Date: 6/19/09
Laboratory: Interstate Laboratories Date: 1-JUN-2009 1045
Lab Receiver: M. Ellsworth Date: _____
Lab Analyst: _____

PLEASE RETURN THIS FORM WITH ANALYTICAL RESULTS

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Salazar Consulting Group, Inc.

Project *FDR 4th Avenue & Main Street*
Project No. *190-0001*

Date 6/13/09

Page 2 of 2

CHAIN OF CUSTODY

Analytical Report #: 19299

for

Salazar Consulting Group, Inc.

Project Manager: Rene R. Salazar, PhD

Project Name: FDOH - Chinese Wallboard

Project ID: 1406.01

Project Location: Units 90 & 91 - Parkland, FL

16-JUN-09



NELAP Certification Number: E84880

**1910 Harden Boulevard, Suite 101
Lakeland, Florida 33803-1829**
Phone: (863) 686-4271
Fax: (863) 686-4389



16-JUN-09

Rene R. Salazar, PhD
Salazar Consulting Group, Inc.
6607 Heatherton Court
Tampa, FL 33617

Reference: LAKELAND Work Order No: **19299**

FDOH - Chinese Wallboard

Project Location: Units 90 & 91 - Parkland, FL
Project Ref No: 1406.01
Lab Quote No:

Dear Rene R. Salazar, PhD :

The attached Analytical and QC Summaries list the analytical results from the analyses performed on the samples received under the project name referenced above and identified with the Lakeland Laboratories Work Order numbered **19299**.

All work recorded herein has been done in accordance with normal professional standards using accepted testing methodologies and QA/QC procedures. Lakeland Laboratories is limited in liability to the actual cost of the pertinent analysis done. Your samples will be retained by Lakeland Laboratories for a period of 30 days following receipt of the samples. After that time, they will be properly disposed of without further notice, unless there is a pre-arranged contractual arrangement. We reserve the right to return any unused samples, extracts or related solutions to you, if we consider it necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Lakeland Laboratories. This report will be filed for at least 3 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you.

We thank you for selecting Lakeland Laboratories Incorporated to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Sincerely,

Mark A. Alessandroni, PE
Technical Director

1910 Harden Boulevard, Suite 101
Lakeland, Florida 33803-1829
Phone: (863) 686-4271
Fax: (863) 686-4389



CASE NARRATIVE

Client Name: Salazar Consulting Group, Inc.

Project Name: FDOH - Chinese Wallboard

Project ID: 1406.01
Work Order Number: 19299

Report Date: 16-JUN-09
Date Received: 08-JUN-09

Sample receipt non conformances and Comments:

Samples were retrieved from the field sampling representative by a lab representative at 5:00 PM on June 8, 2009 and transported directly to the laboratory. All samples were analyzed on June 8-9, 2009 within the mandated holding time of 24 hours. Unless noted elsewhere in the report, no deviations from the laboratory SOP were made.

Sample receipt Non Conformances and Comments per Sample:

None

Analytical Non Conformances and Comments:

Batch: LBA-67401 | Sulfur Compounds in Air By ASTM D5504-08

All recoveries were within acceptance limits for the blank spike (BKS-LCS) and the blank spike duplicate (BSD-LCSD). Two compounds, carbonyl sulfide and carbon disulfide, fell outside acceptance limits for percent recovery (accuracy) in the matrix spike-matrix spike duplicate (MS-MSD). One compound, dimethyl disulfide, fell outside acceptance limits for relative percent difference (precision) in the MS-MSD.

Certificate of Analysis Summary 19299

Salazar Consulting Group, Inc., Tampa, FL

Project Name: FDOH - Chinese Wallboard

Project Id: 1406.01

Date Received in Lab: Jun-08-09 05:00 pm

Contact: Rene R. Salazar, PhD

Report Date: 16-JUN-09

Project Location: Units 90 & 91 Parkland, FL

Project Manager: Mark A. Alessandroni, PE

Analysis Requested	Lab Id:	19299-001	Lab Id:	19299-002	Lab Id:	19299-003	Lab Id:	19299-004
	Field Id:	090608-RS-15		090608-RS-16		090608-RS-17		090608-RS-18
	Depth:			<th></th> <td><th></th><td></td></td>		<th></th> <td></td>		
	Matrix:	AMBIENT AIR		AMBIENT AIR		AMBIENT AIR		AMBIENT AIR
	Sampled:	Jun-08-09 11:30		Jun-08-09 11:35		Jun-08-09 13:35		Jun-08-09 13:35
Sulfur Compounds in Air By ASTM D5504-08	Extracted:		Analyzed:	Jun-08-09 22:23	Extracted:	Jun-08-09 22:37	Analyzed:	Jun-08-09 22:51
	Units/RL:	ppbv	Units/RL:	PQL	Units/RL:	ppbv	Units/RL:	PQL
Hydrogen Sulfide		U 5.00		U 5.00		U 5.00		U 5.00
Carbonyl Sulfide		U 5.00		U 5.00		U 5.00		U 5.00
Methyl Mercaptan		U 5.00		U 5.00		U 5.00		U 5.00
Ethyl Mercaptan		U 5.00		U 5.00		U 5.00		U 5.00
Dimethyl Sulfide		U 5.00		U 5.00		U 5.00		U 5.00
Carbon Disulfide		U 5.00		U 5.00		U 5.00		U 5.00
Isopropyl Mercaptan		U 7.00		U 7.00		U 7.00		U 7.00
tert-Butyl Mercaptan		U 7.00		U 7.00		U 7.00		U 7.00
n-Propyl Mercaptan		U 5.00		U 5.00		U 5.00		U 5.00
Ethyl Methyl Sulfide		U 5.00		U 5.00		U 5.00		U 5.00
Thiophene		U 5.00		U 5.00		U 5.00		U 5.00
Isobutyl Mercaptan		U 5.00		U 5.00		U 5.00		U 5.00
n-Butyl Mercaptan		U 5.00		U 5.00		U 5.00		U 5.00
Diethyl Sulfide		U 5.00		U 5.00		U 5.00		U 5.00
3-Methyl Thiophene		U 5.00		U 5.00		U 5.00		U 5.00
Tetrahydrothiophene		U 5.00		U 5.00		U 5.00		U 5.00
Dimethyl Disulfide		U 5.00		U 5.00		U 5.00		U 5.00
2-Ethyl Thiophene		U 5.00		U 5.00		U 5.00		U 5.00
Diethyl Disulfide		U 5.00		U 5.00		U 5.00		U 5.00
2,5-Dimethyl Thiophene		U 5.00		U 5.00		U 5.00		U 5.00

Certificate of Analysis Summary 19299

Salazar Consulting Group, Inc., Tampa, FL

Project Name: FDOH - Chinese Wallboard

Project Id: 1406.01

Date Received in Lab: Jun-08-09 05:00 pm

Contact: Rene R. Salazar, PhD

Report Date: 16-JUN-09

Project Location: Units 90 & 91 Parkland, FL

Project Manager: Mark A. Alessandroni, PE

Analysis Requested	Lab Id: 19299-005	19299-006	19299-007	
	Field Id: 090608-RS-19	090608-RS-20	090608-RS-21	
	Depth:			
	Matrix: AMBIENT AIR	AMBIENT AIR	AMBIENT AIR	
	Sampled: Jun-08-09 15:35	Jun-08-09 15:35	Jun-08-09 15:35	
Sulfur Compounds in Air By ASTM D5504-08	Extracted: Analyzed: Units/RL:	Jun-08-09 23:20 ppbv PQL	Jun-08-09 23:34 ppbv PQL	Jun-08-09 23:48 ppbv PQL
Hydrogen Sulfide	U 5.00	U 5.00	U 5.00	
Carbonyl Sulfide	U 5.00	U 5.00	160 D 50.0	
Methyl Mercaptan	U 5.00	U 5.00	U 5.00	
Ethyl Mercaptan	U 5.00	U 5.00	U 5.00	
Dimethyl Sulfide	U 5.00	U 5.00	U 5.00	
Carbon Disulfide	U 5.00	U 5.00	4.90 I 5.00	
Isopropyl Mercaptan	U 7.00	U 7.00	U 7.00	
tert-Butyl Mercaptan	U 7.00	U 7.00	U 7.00	
n-Propyl Mercaptan	U 5.00	U 5.00	U 5.00	
Ethyl Methyl Sulfide	U 5.00	U 5.00	U 5.00	
Thiophene	U 5.00	U 5.00	U 5.00	
Isobutyl Mercaptan	U 5.00	U 5.00	U 5.00	
n-Butyl Mercaptan	U 5.00	U 5.00	U 5.00	
Diethyl Sulfide	U 5.00	U 5.00	U 5.00	
3-Methyl Thiophene	U 5.00	U 5.00	U 5.00	
Tetrahydrothiophene	U 5.00	U 5.00	U 5.00	
Dimethyl Disulfide	U 5.00	U 5.00	U 5.00	
2-Ethyl Thiophene	U 5.00	U 5.00	U 5.00	
Diethyl Disulfide	U 5.00	U 5.00	U 5.00	
2,5-Dimethyl Thiophene	U 5.00	U 5.00	U 5.00	



Certificate of Analysis #: 19299

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FDOH - Chinese Wallboard

Sample Id: 090608-RS-15	Matrix: AMBIENT AIR	Date Received: Jun-08-09 17:00
Lab Sample Id: 19299-001	Date Collected: Jun-08-09 11:30	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08					Prep Method:		
Date Analyzed: Jun-08-09 22:23	Analyst: GARGAR	Date Prep:		Tech: GARGAR			
	Seq Number: 67401						
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	U	5.00	3.35	ppbv	U	1
Carbonyl Sulfide	463-58-1	U	5.00	3.96	ppbv	U	1
Methyl Mercaptan	74-93-1	U	5.00	4.65	ppbv	U	1
Ethyl Mercaptan	75-08-1	U	5.00	4.59	ppbv	U	1
Dimethyl Sulfide	75-18-3	U	5.00	3.41	ppbv	U	1
Carbon Disulfide	75-15-0	U	5.00	1.29	ppbv	U	1
Isopropyl Mercaptan	75-33-2	U	7.00	5.00	ppbv	U	1
tert-Butyl Mercaptan	75-66-1	U	7.00	5.64	ppbv	U	1
n-Propyl Mercaptan	107-03-9	U	5.00	4.36	ppbv	U	1
Ethyl Methyl Sulfide	624-89-5	U	5.00	3.36	ppbv	U	1
Thiophene	110-02-1	U	5.00	3.50	ppbv	U	1
Isobutyl Mercaptan	513-44-0	U	5.00	4.00	ppbv	U	1
n-Butyl Mercaptan	109-79-5	U	5.00	3.39	ppbv	U	1
Diethyl Sulfide	624-92-0	U	5.00	4.29	ppbv	U	1
3-Methyl Thiophene	616-44-4	U	5.00	2.70	ppbv	U	1
Tetrahydrothiophene	110-01-0	U	5.00	2.07	ppbv	U	1
Dimethyl Disulfide	624-92-0	U	5.00	3.25	ppbv	U	1
2-Ethyl Thiophene	872-55-9	U	5.00	1.97	ppbv	U	1
Diethyl Disulfide	110-81-6	U	5.00	1.26	ppbv	U	1
2,5-Dimethyl Thiophene	638-02-8	U	5.00	3.62	ppbv	U	1

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Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



Certificate of Analysis #: 19299

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FDOH - Chinese Wallboard

Sample Id: 090608-RS-16	Matrix: AMBIENT AIR	Date Received: Jun-08-09 17:00
Lab Sample Id: 19299-002	Date Collected: Jun-08-09 11:35	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08					Prep Method:		
Date Analyzed: Jun-08-09 22:37	Analyst: GARGAR	Date Prep:		Tech: GARGAR			
	Seq Number: 67401						
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	U	5.00	3.35	ppbv	U	1
Carbonyl Sulfide	463-58-1	U	5.00	3.96	ppbv	U	1
Methyl Mercaptan	74-93-1	U	5.00	4.65	ppbv	U	1
Ethyl Mercaptan	75-08-1	U	5.00	4.59	ppbv	U	1
Dimethyl Sulfide	75-18-3	U	5.00	3.41	ppbv	U	1
Carbon Disulfide	75-15-0	U	5.00	1.29	ppbv	U	1
Isopropyl Mercaptan	75-33-2	U	7.00	5.00	ppbv	U	1
tert-Butyl Mercaptan	75-66-1	U	7.00	5.64	ppbv	U	1
n-Propyl Mercaptan	107-03-9	U	5.00	4.36	ppbv	U	1
Ethyl Methyl Sulfide	624-89-5	U	5.00	3.36	ppbv	U	1
Thiophene	110-02-1	U	5.00	3.50	ppbv	U	1
Isobutyl Mercaptan	513-44-0	U	5.00	4.00	ppbv	U	1
n-Butyl Mercaptan	109-79-5	U	5.00	3.39	ppbv	U	1
Diethyl Sulfide	624-92-0	U	5.00	4.29	ppbv	U	1
3-Methyl Thiophene	616-44-4	U	5.00	2.70	ppbv	U	1
Tetrahydrothiophene	110-01-0	U	5.00	2.07	ppbv	U	1
Dimethyl Disulfide	624-92-0	U	5.00	3.25	ppbv	U	1
2-Ethyl Thiophene	872-55-9	U	5.00	1.97	ppbv	U	1
Diethyl Disulfide	110-81-6	U	5.00	1.26	ppbv	U	1
2,5-Dimethyl Thiophene	638-02-8	U	5.00	3.62	ppbv	U	1

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Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



Certificate of Analysis #: 19299

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FDOH - Chinese Wallboard

Sample Id: 090608-RS-17	Matrix: AMBIENT AIR	Date Received: Jun-08-09 17:00
Lab Sample Id: 19299-003	Date Collected: Jun-08-09 13:35	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08					Prep Method:		
Date Analyzed: Jun-08-09 22:51	Analyst: GARGAR	Date Prep:		Tech: GARGAR			
	Seq Number: 67401						
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	U	5.00	3.35	ppbv	U	1
Carbonyl Sulfide	463-58-1	U	5.00	3.96	ppbv	U	1
Methyl Mercaptan	74-93-1	U	5.00	4.65	ppbv	U	1
Ethyl Mercaptan	75-08-1	U	5.00	4.59	ppbv	U	1
Dimethyl Sulfide	75-18-3	U	5.00	3.41	ppbv	U	1
Carbon Disulfide	75-15-0	U	5.00	1.29	ppbv	U	1
Isopropyl Mercaptan	75-33-2	U	7.00	5.00	ppbv	U	1
tert-Butyl Mercaptan	75-66-1	U	7.00	5.64	ppbv	U	1
n-Propyl Mercaptan	107-03-9	U	5.00	4.36	ppbv	U	1
Ethyl Methyl Sulfide	624-89-5	U	5.00	3.36	ppbv	U	1
Thiophene	110-02-1	U	5.00	3.50	ppbv	U	1
Isobutyl Mercaptan	513-44-0	U	5.00	4.00	ppbv	U	1
n-Butyl Mercaptan	109-79-5	U	5.00	3.39	ppbv	U	1
Diethyl Sulfide	624-92-0	U	5.00	4.29	ppbv	U	1
3-Methyl Thiophene	616-44-4	U	5.00	2.70	ppbv	U	1
Tetrahydrothiophene	110-01-0	U	5.00	2.07	ppbv	U	1
Dimethyl Disulfide	624-92-0	U	5.00	3.25	ppbv	U	1
2-Ethyl Thiophene	872-55-9	U	5.00	1.97	ppbv	U	1
Diethyl Disulfide	110-81-6	U	5.00	1.26	ppbv	U	1
2,5-Dimethyl Thiophene	638-02-8	U	5.00	3.62	ppbv	U	1

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Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



Certificate of Analysis #: 19299

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FDOH - Chinese Wallboard

Sample Id: 090608-RS-18	Matrix: AMBIENT AIR	Date Received: Jun-08-09 17:00
Lab Sample Id: 19299-004	Date Collected: Jun-08-09 13:35	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08					Prep Method:		
Date Analyzed: Jun-08-09 23:05	Analyst: GARGAR	Date Prep:		Tech: GARGAR			
	Seq Number: 67401						
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	U	5.00	3.35	ppbv	U	1
Carbonyl Sulfide	463-58-1	U	5.00	3.96	ppbv	U	1
Methyl Mercaptan	74-93-1	U	5.00	4.65	ppbv	U	1
Ethyl Mercaptan	75-08-1	U	5.00	4.59	ppbv	U	1
Dimethyl Sulfide	75-18-3	U	5.00	3.41	ppbv	U	1
Carbon Disulfide	75-15-0	U	5.00	1.29	ppbv	U	1
Isopropyl Mercaptan	75-33-2	U	7.00	5.00	ppbv	U	1
tert-Butyl Mercaptan	75-66-1	U	7.00	5.64	ppbv	U	1
n-Propyl Mercaptan	107-03-9	U	5.00	4.36	ppbv	U	1
Ethyl Methyl Sulfide	624-89-5	U	5.00	3.36	ppbv	U	1
Thiophene	110-02-1	U	5.00	3.50	ppbv	U	1
Isobutyl Mercaptan	513-44-0	U	5.00	4.00	ppbv	U	1
n-Butyl Mercaptan	109-79-5	U	5.00	3.39	ppbv	U	1
Diethyl Sulfide	624-92-0	U	5.00	4.29	ppbv	U	1
3-Methyl Thiophene	616-44-4	U	5.00	2.70	ppbv	U	1
Tetrahydrothiophene	110-01-0	U	5.00	2.07	ppbv	U	1
Dimethyl Disulfide	624-92-0	U	5.00	3.25	ppbv	U	1
2-Ethyl Thiophene	872-55-9	U	5.00	1.97	ppbv	U	1
Diethyl Disulfide	110-81-6	U	5.00	1.26	ppbv	U	1
2,5-Dimethyl Thiophene	638-02-8	U	5.00	3.62	ppbv	U	1

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Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



Certificate of Analysis #: 19299

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FDOH - Chinese Wallboard

Sample Id: 090608-RS-19	Matrix: AMBIENT AIR	Date Received: Jun-08-09 17:00
Lab Sample Id: 19299-005	Date Collected: Jun-08-09 15:35	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08					Prep Method:		
Date Analyzed: Jun-08-09 23:20	Analyst: GARGAR	Date Prep:		Tech: GARGAR			
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	U	5.00	3.35	ppbv	U	1
Carbonyl Sulfide	463-58-1	U	5.00	3.96	ppbv	U	1
Methyl Mercaptan	74-93-1	U	5.00	4.65	ppbv	U	1
Ethyl Mercaptan	75-08-1	U	5.00	4.59	ppbv	U	1
Dimethyl Sulfide	75-18-3	U	5.00	3.41	ppbv	U	1
Carbon Disulfide	75-15-0	U	5.00	1.29	ppbv	U	1
Isopropyl Mercaptan	75-33-2	U	7.00	5.00	ppbv	U	1
tert-Butyl Mercaptan	75-66-1	U	7.00	5.64	ppbv	U	1
n-Propyl Mercaptan	107-03-9	U	5.00	4.36	ppbv	U	1
Ethyl Methyl Sulfide	624-89-5	U	5.00	3.36	ppbv	U	1
Thiophene	110-02-1	U	5.00	3.50	ppbv	U	1
Isobutyl Mercaptan	513-44-0	U	5.00	4.00	ppbv	U	1
n-Butyl Mercaptan	109-79-5	U	5.00	3.39	ppbv	U	1
Diethyl Sulfide	624-92-0	U	5.00	4.29	ppbv	U	1
3-Methyl Thiophene	616-44-4	U	5.00	2.70	ppbv	U	1
Tetrahydrothiophene	110-01-0	U	5.00	2.07	ppbv	U	1
Dimethyl Disulfide	624-92-0	U	5.00	3.25	ppbv	U	1
2-Ethyl Thiophene	872-55-9	U	5.00	1.97	ppbv	U	1
Diethyl Disulfide	110-81-6	U	5.00	1.26	ppbv	U	1
2,5-Dimethyl Thiophene	638-02-8	U	5.00	3.62	ppbv	U	1

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Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



Certificate of Analysis #: 19299

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FDOH - Chinese Wallboard

Sample Id: 090608-RS-20	Matrix: AMBIENT AIR	Date Received: Jun-08-09 17:00
Lab Sample Id: 19299-006	Date Collected: Jun-08-09 15:35	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08					Prep Method:		
Date Analyzed: Jun-08-09 23:34	Analyst: GARGAR	Date Prep:	Tech: GARGAR				
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	U	5.00	3.35	ppbv	U	1
Carbonyl Sulfide	463-58-1	U	5.00	3.96	ppbv	U	1
Methyl Mercaptan	74-93-1	U	5.00	4.65	ppbv	U	1
Ethyl Mercaptan	75-08-1	U	5.00	4.59	ppbv	U	1
Dimethyl Sulfide	75-18-3	U	5.00	3.41	ppbv	U	1
Carbon Disulfide	75-15-0	U	5.00	1.29	ppbv	U	1
Isopropyl Mercaptan	75-33-2	U	7.00	5.00	ppbv	U	1
tert-Butyl Mercaptan	75-66-1	U	7.00	5.64	ppbv	U	1
n-Propyl Mercaptan	107-03-9	U	5.00	4.36	ppbv	U	1
Ethyl Methyl Sulfide	624-89-5	U	5.00	3.36	ppbv	U	1
Thiophene	110-02-1	U	5.00	3.50	ppbv	U	1
Isobutyl Mercaptan	513-44-0	U	5.00	4.00	ppbv	U	1
n-Butyl Mercaptan	109-79-5	U	5.00	3.39	ppbv	U	1
Diethyl Sulfide	624-92-0	U	5.00	4.29	ppbv	U	1
3-Methyl Thiophene	616-44-4	U	5.00	2.70	ppbv	U	1
Tetrahydrothiophene	110-01-0	U	5.00	2.07	ppbv	U	1
Dimethyl Disulfide	624-92-0	U	5.00	3.25	ppbv	U	1
2-Ethyl Thiophene	872-55-9	U	5.00	1.97	ppbv	U	1
Diethyl Disulfide	110-81-6	U	5.00	1.26	ppbv	U	1
2,5-Dimethyl Thiophene	638-02-8	U	5.00	3.62	ppbv	U	1

*

Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



Certificate of Analysis #: 19299

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Salazar Consulting Group, Inc., Tampa, FL

FDOH - Chinese Wallboard

Sample Id: 090608-RS-21	Matrix: AMBIENT AIR	Date Received: Jun-08-09 17:00
Lab Sample Id: 19299-007	Date Collected: Jun-08-09 15:35	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08			Prep Method:
Date Analyzed: Jun-08-09 23:48	Analyst: GARGAR	Date Prep:	Tech: GARGAR
	Seq Number: 67401		

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	U	5.00	3.35	ppbv	U	1
Carbonyl Sulfide	463-58-1	160 D	50.0	39.6	ppbv	D	10
Methyl Mercaptan	74-93-1	U	5.00	4.65	ppbv	U	1
Ethyl Mercaptan	75-08-1	U	5.00	4.59	ppbv	U	1
Dimethyl Sulfide	75-18-3	U	5.00	3.41	ppbv	U	1
Carbon Disulfide	75-15-0	4.90 I	5.00	1.29	ppbv	I	1
Isopropyl Mercaptan	75-33-2	U	7.00	5.00	ppbv	U	1
tert-Butyl Mercaptan	75-66-1	U	7.00	5.64	ppbv	U	1
n-Propyl Mercaptan	107-03-9	U	5.00	4.36	ppbv	U	1
Ethyl Methyl Sulfide	624-89-5	U	5.00	3.36	ppbv	U	1
Thiophene	110-02-1	U	5.00	3.50	ppbv	U	1
Isobutyl Mercaptan	513-44-0	U	5.00	4.00	ppbv	U	1
n-Butyl Mercaptan	109-79-5	U	5.00	3.39	ppbv	U	1
Diethyl Sulfide	624-92-0	U	5.00	4.29	ppbv	U	1
3-Methyl Thiophene	616-44-4	U	5.00	2.70	ppbv	U	1
Tetrahydrothiophene	110-01-0	U	5.00	2.07	ppbv	U	1
Dimethyl Disulfide	624-92-0	U	5.00	3.25	ppbv	U	1
2-Ethyl Thiophene	872-55-9	U	5.00	1.97	ppbv	U	1
Diethyl Disulfide	110-81-6	U	5.00	1.26	ppbv	U	1
2,5-Dimethyl Thiophene	638-02-8	U	5.00	3.62	ppbv	U	1

*

Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



LAKELAND

LABORATORIES

Certificate of Analysis #: 19299

Salazar Consulting Group, Inc., Tampa, FL

FDOH - Chinese Wallboard

Sample Id: 3930311 D	Matrix: AMBIENT AIR	Date Received: Jun-08-09 11:43
Lab Sample Id: 19295-001 D	Date Collected: Jun-08-09 09:20	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08			Prep Method:				
Date Analyzed: Jun-08-09 19:58	Analyst: GARGAR	Date Prep:	Tech: GARGAR				
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	U	5.00	3.35	ppbv		1
Carbonyl Sulfide	463-58-1	U	5.00	3.96	ppbv		1
Methyl Mercaptan	74-93-1	U	5.00	4.65	ppbv		1
Ethyl Mercaptan	75-08-1	U	5.00	4.59	ppbv		1
Dimethyl Sulfide	75-18-3	U	5.00	3.41	ppbv		1
Carbon Disulfide	75-15-0	U	5.00	1.29	ppbv		1
Isopropyl Mercaptan	75-33-2	U	7.00	5.00	ppbv		1
tert-Butyl Mercaptan	75-66-1	U	7.00	5.64	ppbv		1
n-Propyl Mercaptan	107-03-9	U	5.00	4.36	ppbv		1
Ethyl Methyl Sulfide	624-89-5	U	5.00	3.36	ppbv		1
Thiophene	110-02-1	U	5.00	3.50	ppbv		1
Isobutyl Mercaptan	513-44-0	U	5.00	4.00	ppbv		1
n-Butyl Mercaptan	109-79-5	U	5.00	3.39	ppbv		1
Diethyl Sulfide	624-92-0	U	5.00	4.29	ppbv		1
3-Methyl Thiophene	616-44-4	U	5.00	2.70	ppbv		1
Tetrahydrothiophene	110-01-0	U	5.00	2.07	ppbv		1
Dimethyl Disulfide	624-92-0	U	5.00	3.25	ppbv		1
2-Ethyl Thiophene	872-55-9	U	5.00	1.97	ppbv		1
Diethyl Disulfide	110-81-6	U	5.00	1.26	ppbv		1
2,5-Dimethyl Thiophene	638-02-8	U	5.00	3.62	ppbv		1

*

Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



LAKELAND

LABORATORIES

Certificate of Analysis #: 19299

Salazar Consulting Group, Inc., Tampa, FL

FDOH - Chinese Wallboard

Sample Id: 3930311 S	Matrix: AMBIENT AIR	Date Received: Jun-08-09 11:43
Lab Sample Id: 19295-001 S	Date Collected: Jun-08-09 09:20	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08			Prep Method:				
Date Analyzed: Jun-08-09 19:15	Analyst: GARGAR	Date Prep:	Tech: GARGAR				
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	96	5.00	3.35	%		1
Carbonyl Sulfide	463-58-1	185	5.00	3.96	%		1
Methyl Mercaptan	74-93-1	90	5.00	4.65	%		1
Ethyl Mercaptan	75-08-1	86	5.00	4.59	%		1
Dimethyl Sulfide	75-18-3	87	5.00	3.41	%		1
Carbon Disulfide	75-15-0	137	5.00	1.29	%		1
Isopropyl Mercaptan	75-33-2	76	7.00	5.00	%		1
tert-Butyl Mercaptan	75-66-1	94	7.00	5.64	%		1
n-Propyl Mercaptan	107-03-9	102	5.00	4.36	%		1
Ethyl Methyl Sulfide	624-89-5	92	5.00	3.36	%		1
Thiophene	110-02-1	96	5.00	3.50	%		1
Isobutyl Mercaptan	513-44-0	106	5.00	4.00	%		1
n-Butyl Mercaptan	109-79-5	95	5.00	3.39	%		1
Diethyl Sulfide	624-92-0	80	5.00	4.29	%		1
3-Methyl Thiophene	616-44-4	87	5.00	2.70	%		1
Tetrahydrothiophene	110-01-0	91	5.00	2.07	%		1
Dimethyl Disulfide	624-92-0	111	5.00	3.25	%		1
2-Ethyl Thiophene	872-55-9	87	5.00	1.97	%		1
Diethyl Disulfide	110-81-6	85	5.00	1.26	%		1
2,5-Dimethyl Thiophene	638-02-8	95	5.00	3.62	%		1

*

Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



LAKELAND

LABORATORIES

Certificate of Analysis #: 19299

Salazar Consulting Group, Inc., Tampa, FL

FDOH - Chinese Wallboard

Sample Id: 3930311 SD	Matrix: AMBIENT AIR	Date Received: Jun-08-09 11:43
Lab Sample Id: 19295-001 SD	Date Collected: Jun-08-09 09:20	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08			Prep Method:			
Date Analyzed: Jun-08-09 19:30	Analyst: GARGAR	Date Prep:	Tech: GARGAR			
	Seq Number: 67401					
Parameter	Cas Number	Result	PQL	MDL	Units	Flag
Hydrogen Sulfide	7783-06-4	84	5.00	3.35	%	1
Carbonyl Sulfide	463-58-1	172	5.00	3.96	%	1
Methyl Mercaptan	74-93-1	93	5.00	4.65	%	1
Ethyl Mercaptan	75-08-1	99	5.00	4.59	%	1
Dimethyl Sulfide	75-18-3	92	5.00	3.41	%	1
Carbon Disulfide	75-15-0	134	5.00	1.29	%	1
Isopropyl Mercaptan	75-33-2	92	7.00	5.00	%	1
tert-Butyl Mercaptan	75-66-1	87	7.00	5.64	%	1
n-Propyl Mercaptan	107-03-9	84	5.00	4.36	%	1
Ethyl Methyl Sulfide	624-89-5	89	5.00	3.36	%	1
Thiophene	110-02-1	92	5.00	3.50	%	1
Isobutyl Mercaptan	513-44-0	87	5.00	4.00	%	1
n-Butyl Mercaptan	109-79-5	88	5.00	3.39	%	1
Diethyl Sulfide	624-92-0	86	5.00	4.29	%	1
3-Methyl Thiophene	616-44-4	90	5.00	2.70	%	1
Tetrahydrothiophene	110-01-0	79	5.00	2.07	%	1
Dimethyl Disulfide	624-92-0	78	5.00	3.25	%	1
2-Ethyl Thiophene	872-55-9	87	5.00	1.97	%	1
Diethyl Disulfide	110-81-6	78	5.00	1.26	%	1
2,5-Dimethyl Thiophene	638-02-8	77	5.00	3.62	%	1

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Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



LAKELAND

LABORATORIES

Certificate of Analysis #: 19299

Salazar Consulting Group, Inc., Tampa, FL

FDOH - Chinese Wallboard

Sample Id: 67401-1-BKS	Matrix: AIR	Date Received:
Lab Sample Id: 67401-1-BKS	Date Collected:	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08					Prep Method:		
Date Analyzed:	Analyst:	Date Prep:	Tech:	GARGAR			
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	92	5.00	3.35	%		1
Carbonyl Sulfide	463-58-1	98	5.00	3.96	%		1
Methyl Mercaptan	74-93-1	84	5.00	4.65	%		1
Ethyl Mercaptan	75-08-1	88	5.00	4.59	%		1
Dimethyl Sulfide	75-18-3	91	5.00	3.41	%		1
Carbon Disulfide	75-15-0	100	5.00	1.29	%		1
Isopropyl Mercaptan	75-33-2	84	7.00	5.00	%		1
tert-Butyl Mercaptan	75-66-1	84	7.00	5.64	%		1
n-Propyl Mercaptan	107-03-9	92	5.00	4.36	%		1
Ethyl Methyl Sulfide	624-89-5	94	5.00	3.36	%		1
Thiophene	110-02-1	92	5.00	3.50	%		1
Isobutyl Mercaptan	513-44-0	91	5.00	4.00	%		1
n-Butyl Mercaptan	109-79-5	92	5.00	3.39	%		1
Diethyl Sulfide	624-92-0	82	5.00	4.29	%		1
3-Methyl Thiophene	616-44-4	97	5.00	2.70	%		1
Tetrahydrothiophene	110-01-0	112	5.00	2.07	%		1
Dimethyl Disulfide	624-92-0	88	5.00	3.25	%		1
2-Ethyl Thiophene	872-55-9	96	5.00	1.97	%		1
Diethyl Disulfide	110-81-6	86	5.00	1.26	%		1
2,5-Dimethyl Thiophene	638-02-8	79	5.00	3.62	%		1

*

Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



LAKELAND

LABORATORIES

Certificate of Analysis #: 19299

Salazar Consulting Group, Inc., Tampa, FL

FDOH - Chinese Wallboard

Sample Id: 67401-1-BLK	Matrix: AIR	Date Received:
Lab Sample Id: 67401-1-BLK	Date Collected:	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08			Prep Method:
Date Analyzed: Jun-08-09 16:08	Analyst: GARGAR	Date Prep:	Tech: GARGAR

Seq Number: 67401

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	U	5.00	3.35	ppbv	U	1
Carbonyl Sulfide	463-58-1	U	5.00	3.96	ppbv	U	1
Methyl Mercaptan	74-93-1	U	5.00	4.65	ppbv	U	1
Ethyl Mercaptan	75-08-1	U	5.00	4.59	ppbv	U	1
Dimethyl Sulfide	75-18-3	U	5.00	3.41	ppbv	U	1
Carbon Disulfide	75-15-0	U	5.00	1.29	ppbv	U	1
Isopropyl Mercaptan	75-33-2	U	7.00	5.00	ppbv	U	1
tert-Butyl Mercaptan	75-66-1	U	7.00	5.64	ppbv	U	1
n-Propyl Mercaptan	107-03-9	U	5.00	4.36	ppbv	U	1
Ethyl Methyl Sulfide	624-89-5	U	5.00	3.36	ppbv	U	1
Thiophene	110-02-1	U	5.00	3.50	ppbv	U	1
Isobutyl Mercaptan	513-44-0	U	5.00	4.00	ppbv	U	1
n-Butyl Mercaptan	109-79-5	U	5.00	3.39	ppbv	U	1
Diethyl Sulfide	624-92-0	U	5.00	4.29	ppbv	U	1
3-Methyl Thiophene	616-44-4	U	5.00	2.70	ppbv	U	1
Tetrahydrothiophene	110-01-0	U	5.00	2.07	ppbv	U	1
Dimethyl Disulfide	624-92-0	U	5.00	3.25	ppbv	U	1
2-Ethyl Thiophene	872-55-9	U	5.00	1.97	ppbv	U	1
Diethyl Disulfide	110-81-6	U	5.00	1.26	ppbv	U	1
2,5-Dimethyl Thiophene	638-02-8	U	5.00	3.62	ppbv	U	1

*

Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.



LAKELAND

LABORATORIES

Certificate of Analysis #: 19299

Salazar Consulting Group, Inc., Tampa, FL

FDOH - Chinese Wallboard

Sample Id: 67401-1-BSD	Matrix: AIR	Date Received:
Lab Sample Id: 67401-1-BSD	Date Collected:	% Moisture:
Sample Depth:		Basis: Wet

Analytical Method: Sulfur Compounds in Air By ASTM D5504-08					Prep Method:		
Date Analyzed: Jun-09-09 00:17	Analyst: GARGAR	Date Prep:		Tech: GARGAR			
Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Hydrogen Sulfide	7783-06-4	99	5.00	3.35	%		1
Carbonyl Sulfide	463-58-1	100	5.00	3.96	%		1
Methyl Mercaptan	74-93-1	83	5.00	4.65	%		1
Ethyl Mercaptan	75-08-1	82	5.00	4.59	%		1
Dimethyl Sulfide	75-18-3	98	5.00	3.41	%		1
Carbon Disulfide	75-15-0	100	5.00	1.29	%		1
Isopropyl Mercaptan	75-33-2	78	7.00	5.00	%		1
tert-Butyl Mercaptan	75-66-1	89	7.00	5.64	%		1
n-Propyl Mercaptan	107-03-9	91	5.00	4.36	%		1
Ethyl Methyl Sulfide	624-89-5	85	5.00	3.36	%		1
Thiophene	110-02-1	94	5.00	3.50	%		1
Isobutyl Mercaptan	513-44-0	86	5.00	4.00	%		1
n-Butyl Mercaptan	109-79-5	103	5.00	3.39	%		1
Diethyl Sulfide	624-92-0	92	5.00	4.29	%		1
3-Methyl Thiophene	616-44-4	97	5.00	2.70	%		1
Tetrahydrothiophene	110-01-0	99	5.00	2.07	%		1
Dimethyl Disulfide	624-92-0	88	5.00	3.25	%		1
2-Ethyl Thiophene	872-55-9	95	5.00	1.97	%		1
Diethyl Disulfide	110-81-6	93	5.00	1.26	%		1
2,5-Dimethyl Thiophene	638-02-8	99	5.00	3.62	%		1

*

Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.

Quality Control Sample Legend

Lakeland Labs Quality Control Sample Legend

This analytical report may include results for various quality assurance/quality control (QA/QC) samples prepared and analyzed as required within various sample preparation and analytical batches. In-house sample identification is based on the Lakeland Labs Work Order No. followed by the Work Order Item No. For example, the second item on Work Order No. 10000 would be assigned Lab Sample ID 10000-002. The QA/QC sample identifications are affixed with suffixes to differentiate them from the actual sample results. For QA/QC samples generated in-house such as method blanks, blank spikes, blank spike duplicates, etc., the preparation or analytical batch number is used instead of the Work Order No. To assist the data reviewer, the following legend provides information on the various QA/QC samples and the suffixes used to denote them:

- BLK Method Blank. A method blank, also known as a laboratory control blank (LCB), is a sample of a matrix similar to the batch of associated samples (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences are present at concentrations that impact the analytical results for sample analyses.
- BKS Blank Spike. A blank spike, also known as a calibration verification or laboratory control sample (LCS), is a sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes. It is generally used to establish intra-laboratory or analyst-specific precision and bias (accuracy) or to assess the performance of all or a portion of the measurement system. Successful analysis of the blank spike sample demonstrates an analytical system's ability to accurately measure target analyte concentrations.
- BSD Blank Spike Duplicate. A blank spike duplicate, also known as a laboratory control sample duplicate (LCSD), is a second blank spike sample, often bracketing a group of samples within a batch. Successful analysis of the blank spike duplicate sample demonstrates not only an analytical system's continuing ability to accurately measure target analyte concentrations, but also, when compared with the blank spike results, the system's precision.
- S Matrix Spike (MS). A matrix spike is a sample prepared by adding a known mass of target analyte(s) to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. Matrix spikes are used, for example, to determine the effect of the matrix on a method's recovery efficiency.
- SD Matrix Spike Duplicate (MSD). A matrix spike duplicate is a second replicate matrix spike prepared in the laboratory and analyzed to obtain a measure of the precision of the recovery for each analyte.
- D Matrix Duplicate (MD). A matrix duplicate is a second replicate matrix prepared in the laboratory and analyzed to obtain a measure of precision.
- MRL Method Reporting Limit. A method reporting limit standard is an analyte-free matrix similar to the sample matrices spiked with one or more of the target analytes at a concentration equal to or less than the method reporting limit (also known as the practical quantitation limit or PQL). Successful analysis of the MRL standard demonstrates the analytical system's ability to identify the spiked analytes of interest at the MRL/PQL.

FLORIDA Flagging Criteria

Data were reviewed by the Department Supervisor and QA Director

- A Value reported is the mean (average) of two or more determinations. This code shall be used if the reported value is the average of results for two or more discrete and separate samples. These samples shall have been processed and analyzed independently. Do not use this code if the data are the result of replicate analysis on the same sample aliquot, extract or digestate.
- B Results based upon colony counts outside the acceptable range. This code applies to microbiological tests and specifically to membrane filter colony counts. The code is to be used if the colony count is generated from a plate in which the total number of coliform colonies is outside the method indicated ideal range. This code is not to be used if a 100 mL sample has been filtered and the colony count is less than the lower value of the ideal range.
- J Estimated value. A "J" value shall be accompanied by a narrative justification for its use. Where possible, the organization shall report whether the actual value is less than or greater than the reported value. A "J" value shall not be used as a substitute for K, L, M, T, V, or Y, however, if additional reasons exist for identifying the value as estimate (e.g., matrix spiked failed to meet acceptance criteria), the "J" code may be added to a K, L, M, T, V, or Y. The following are some examples of narrative descriptions that may accompany a "J" code:
 - J1: No known quality control criteria exist for the component;
 - J2: The reported value failed to meet the established quality control criteria for either precision or accuracy (the specific failure must be identified);
 - J3: The sample matrix interfered with the ability to make any accurate determination;
 - J4: The data are questionable because of improper laboratory or field protocols
- Q Sample held beyond the accepted holding time. This code shall be used if the value is derived from a sample that was prepared or analyzed after the approved holding time restrictions for sample preparation or analysis.
- T Value reported is less than the laboratory method detection limit. The value is reported for informational purposes, only and shall not be used in statistical analysis.
- U Indicates that the compound was analyzed for but not detected. This symbol shall be used to indicate that the specified component was not detected. The value associated with the qualifier shall be the laboratory method detection limit. Unless requested by the client, less than the method detection limit values shall not be reported (see "T" above).
- V Indicates that the analyte was detected in both the sample and the associated method blank. Note: the value in the blank shall not be subtracted from associated samples.
- Y The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
- I The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

FLORIDA Flagging Criteria

- * Not analyzed due to interference
- R Significant rain in the past 48 hours. (Significant rain typically involves rain in excess of 1/2 inch within the past 48 hours.) This code shall be used when the rainfall might contribute to a lower than normal value.
- ! Data deviate from historically established concentration ranges.
- + Analyte falls outside current scope of NELAP accreditation.
- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.
- D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- F When reporting species: F indicates the female sex. Otherwise it indicates RPD value is outside the acceptable range.
- L Off-scale high. Actual value is known to be greater than value given. To be used when the concentration of the analyte is above the acceptable level for quantitation (exceeds the linear range or highest calibration standard) and the calibration curve is known to exhibit a negative deflection.
- H Value based on field kit determination; results may not be accurate. This code shall be used if a field screening test (i.e., field gas chromatograph data, immunoassay, vendor-supplied field kit, etc.) was used to generate the value and the field kit or method has not been recognized by the Department as equivalent to laboratory methods.



BS / BSD Recoveries

Project Name: FDOH - Chinese Wallboard

Work Order #: 19299

Analyst: GARGAR

Lab Batch ID: 67401

Sample: 67401-1-BKS

Date Prepared: 06/09/2009

Batch #: 1

Report Date 16-JUN-09

Project ID: 1406.01

Date Analyzed: 06/09/2009

Matrix: Air

Units: ppbv

BLANK /BLANK SPIKE / BLANK SPIKE DUPLICATE RECOVERY STUDY

Sulfur Compounds in Air By ASTM D5504-08 Analytes	Blank Sample Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Spike Added [E]	Blank Spike Duplicate Result [F]	Blk. Spk Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Hydrogen Sulfide	<3.35	25.0	22.9	92	25.0	24.8	99	8	70-130	30	
Carbonyl Sulfide	<3.96	25.0	24.6	98	25.0	24.9	100	1	70-130	30	
Methyl Mercaptan	<4.65	25.0	20.9	84	25.0	20.7	83	1	70-130	30	
Ethyl Mercaptan	<4.59	25.0	21.9	88	25.0	20.6	82	6	70-130	30	
Dimethyl Sulfide	<3.41	25.0	22.8	91	25.0	24.4	98	7	70-130	30	
Carbon Disulfide	<1.29	25.0	25.0	100	25.0	25.0	100	0	70-130	30	
Isopropyl Mercaptan	<5.00	25.0	21.0	84	25.0	19.6	78	7	70-130	30	
tert-Butyl Mercaptan	<5.64	25.0	20.9	84	25.0	22.3	89	6	70-130	30	
n-Propyl Mercaptan	<4.36	25.0	22.9	92	25.0	22.8	91	0	70-130	30	
Ethyl Methyl Sulfide	<3.36	25.0	23.4	94	25.0	21.2	85	10	70-130	30	
Thiophene	<3.50	25.0	23.1	92	25.0	23.6	94	2	70-130	30	
Isobutyl Mercaptan	<4.00	25.0	22.7	91	25.0	21.6	86	5	70-130	30	
n-Butyl Mercaptan	<3.39	25.0	23.0	92	25.0	25.8	103	11	70-130	30	
Diethyl Sulfide	<4.29	25.0	20.4	82	25.0	23.1	92	12	70-130	30	
3-Methyl Thiophene	<2.70	25.0	24.2	97	25.0	24.3	97	0	70-130	30	
Tetrahydrothiophene	<2.07	25.0	28.0	112	25.0	24.8	99	12	70-130	30	
Dimethyl Disulfide	<3.25	25.0	22.0	88	25.0	22.1	88	0	70-130	30	
2-Ethyl Thiophene	<1.97	25.0	24.1	96	25.0	23.7	95	2	70-130	30	
Diethyl Disulfide	<1.26	25.0	21.4	86	25.0	23.3	93	9	70-130	30	
2,5-Dimethyl Thiophene	<3.62	25.0	19.8	79	25.0	24.7	99	22	70-130	30	

Relative Percent Difference RPD = $200 \times |(D-F)/(D+F)|$

Blank Spike Recovery [D] = $100 \times (C)/[B]$

Blank Spike Duplicate Recovery [G] = $100 \times (F)/[E]$

All results are based on MDL and Validated for QC Purposes



Form 3 - MS / MSD Recoveries

Project Name: FDOH - Chinese Wallboard

Report Date: 16-JUN-09

Project ID: 1406.01

Work Order #: 19299

Lab Batch ID: 67401

Date Analyzed: 06/08/2009

Reporting Units: ppbv

QC- Sample ID: 19295-001 S

Date Prepared: 06/08/2009

Batch #: 1 **Matrix:** Ambient Air

Analyst: GARGAR

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY

Sulfur Compounds in Air By ASTM D5504-08 Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Hydrogen Sulfide	<3.35	25.0	23.9	96	25.0	21.1	84	13	70-130	30	
Carbonyl Sulfide	<3.96	25.0	46.2	185	25.0	43.0	172	7	70-130	30	J
Methyl Mercaptan	<4.65	25.0	22.5	90	25.0	23.2	93	3	70-130	30	
Ethyl Mercaptan	<4.59	25.0	21.6	86	25.0	24.8	99	14	70-130	30	
Dimethyl Sulfide	<3.41	25.0	21.8	87	25.0	23.0	92	6	70-130	30	
Carbon Disulfide	<1.29	25.0	34.2	137	25.0	33.4	134	2	70-130	30	J
Isopropyl Mercaptan	<5.00	25.0	19.0	76	25.0	23.0	92	19	70-130	30	
tert-Butyl Mercaptan	<5.64	25.0	23.5	94	25.0	21.7	87	8	70-130	30	
n-Propyl Mercaptan	<4.36	25.0	25.4	102	25.0	21.1	84	19	70-130	30	
Ethyl Methyl Sulfide	<3.36	25.0	23.0	92	25.0	22.2	89	3	70-130	30	
Thiophene	<3.50	25.0	24.1	96	25.0	22.9	92	4	70-130	30	
Isobutyl Mercaptan	<4.00	25.0	26.4	106	25.0	21.8	87	20	70-130	30	
n-Butyl Mercaptan	<3.39	25.0	23.7	95	25.0	22.0	88	8	70-130	30	
Diethyl Sulfide	<4.29	25.0	20.1	80	25.0	21.5	86	7	70-130	30	
3-Methyl Thiophene	<2.70	25.0	21.7	87	25.0	22.6	90	3	70-130	30	
Tetrahydrothiophene	<2.07	25.0	22.8	91	25.0	19.8	79	14	70-130	30	
Dimethyl Disulfide	<3.25	25.0	27.7	111	25.0	19.4	78	35	70-130	30	JF
2-Ethyl Thiophene	<1.97	25.0	21.7	87	25.0	21.7	87	0	70-130	30	
Diethyl Disulfide	<1.26	25.0	21.2	85	25.0	19.5	78	9	70-130	30	
2,5-Dimethyl Thiophene	<3.62	25.0	23.7	95	25.0	19.2	77	21	70-130	30	

Matrix Spike Percent Recovery [D] = $100 \times (C-A)/B$
 Relative Percent Difference RPD = $200 \times (D-G)/(D+G)$

Matrix Spike Duplicate Percent Recovery [G] = $100 \times (F-A)/E$

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit



Sample Duplicate Recovery

LAKELAND
LABORATORIES

Project Name: FDOH - Chinese Wallboard

Work Order #: 19299

Report Date: 16-JUN-09

Lab Batch #: 67401

Project ID: 1406.01

Date Analyzed: 06/08/2009

Date Prepared: 06/08/2009

Analyst: GARGAR

QC- Sample ID: 19295-001 D

Batch #: 1

Matrix: Air

Reporting Units: ppbv

SAMPLE / SAMPLE DUPLICATE RECOVERY

Sulfur Compounds in Air By ASTM D5504-08	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Hydrogen Sulfide	<3.35	<3.35	NC	30	
Carbonyl Sulfide	<3.96	<3.96	NC	30	
Methyl Mercaptan	<4.65	<4.65	NC	30	
Ethyl Mercaptan	<4.59	<4.59	NC	30	
Dimethyl Sulfide	<3.41	<3.41	NC	30	
Carbon Disulfide	<1.29	<1.29	NC	30	
Isopropyl Mercaptan	<5.00	<5.00	NC	30	
tert-Butyl Mercaptan	<5.64	<5.64	NC	30	
n-Propyl Mercaptan	<4.36	<4.36	NC	30	
Ethyl Methyl Sulfide	<3.36	<3.36	NC	30	
Thiophene	<3.50	<3.50	NC	30	
Isobutyl Mercaptan	<4.00	<4.00	NC	30	
n-Butyl Mercaptan	<3.39	<3.39	NC	30	
Diethyl Sulfide	<4.29	<4.29	NC	30	
3-Methyl Thiophene	<2.70	<2.70	NC	30	
Tetrahydrothiophene	<2.07	<2.07	NC	30	
Dimethyl Disulfide	<3.25	<3.25	NC	30	
2-Ethyl Thiophene	<1.97	<1.97	NC	30	
Diethyl Disulfide	<1.26	<1.26	NC	30	
2,5-Dimethyl Thiophene	<3.62	<3.62	NC	30	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

Project Name: FDOH - Chinese Wallboard

Work Order #: 19299

Report Date: 16-JUN-09

Project ID: 1406.01

Sample: **67401-1-MRL**

Lab Batch #: 67401

Date Analyzed: 06/09/2009

Analyst: GARGAR

Reporting Units: ppbv

Instrument QC RECOVERY STUDY

Sulfur Compounds in Air By ASTM D5504-08 Analytes	Result [A]	Spike Added [B]	Spike %R [C]	Control Limits %R	Flags
Hydrogen Sulfide	6.77	5.00	135	50-200	
Carbonyl Sulfide	8.09	5.00	162	50-200	
Methyl Mercaptan	6.80	5.00	136	50-200	
Ethyl Mercaptan	1.74	5.00	35	50-200	J
Dimethyl Sulfide	3.38	5.00	68	50-200	
Carbon Disulfide	6.40	5.00	128	50-200	
Isopropyl Mercaptan	6.50	5.00	130	50-200	
tert-Butyl Mercaptan	7.48	5.00	150	50-200	
n-Propyl Mercaptan	7.08	5.00	142	50-200	
Ethyl Methyl Sulfide	8.12	5.00	162	50-200	
Thiophene	4.31	5.00	86	50-200	
Isobutyl Mercaptan	4.78	5.00	96	50-200	
n-Butyl Mercaptan	6.26	5.00	125	50-200	
Diethyl Sulfide	7.03	5.00	141	50-200	
3-Methyl Thiophene	7.16	5.00	143	50-200	
Tetrahydrothiophene	7.58	5.00	152	50-200	
Dimethyl Disulfide	7.20	5.00	144	50-200	
2-Ethyl Thiophene	7.51	5.00	150	50-200	
Diethyl Disulfide	5.64	5.00	113	50-200	
2,5-Dimethyl Thiophene	6.39	5.00	128	50-200	

Recovery [C] = 100*[A]/[B]

All results are based on MDL and validated for QC purposes.

(Page 1 of 1)

WILLIAM MCKEEAN, 1929.

SALAZAR CONSULTING GROUP, INC.

6607 Heatherton Court, Tampa, Florida 33617
(813) 980-1915 • FAX (813) 988-7486

CHAIN OF CUSTODY

Project FDOH/Florida Wallboard **Project No.** 1466.01
Location Turkland, FL **Date:** 09-06-02
Sampled by: R. Salazar / H. Hernandez
Unit 90

SAMPLE NO.	LOCATION	TYPE	COMMENTS
070408-PS-15	FIREST 1st Floor MSBRM	Test Kit Beg	
-16	Outdoors		
-17	2nd & 3rd FR		
-18	Outdoors		
-19	1st Fl. - Master Bedroom		
-20	Outdoors		
-21	Field Blank		
X-16	X X X X X X X X X X X X X X X X		

Laboratory Instructions:

- Please invoice Salazar Consulting Group, Inc.
 - FAX preliminary results and mail final results.
 - Other:

CHAIN OF CUSTODY DATA:

Collected by: R. Salazar / M. Henningsen Date: 6/8/09
Packaged/Sent by: R. Salazar Date: 6/8/09
Transporter: Flexbox Lakeland Labs Date: 6/8/09
Laboratory: Labs (and) Lab 5, Currie
Lab Receiver: M. Henningsen Date: 6/8/09
Lab Analyst: _____ Date: _____

PLEASE RETURN THIS FORM WITH ANALYTICAL RESULTS

Appendix E

Units 80 & 81 Volatile Organic Compound Results

Unit 80 VOC Data

cas_number	chemical	16308-010AA SV1 (1.000) c_522720	16308-010AA SV2 (2.000) c_522721	16308-010AA SV3 (3.000) c_522722	16308-010AA SV4 (4.000) c_522723	16308-010AA SV5 (5.000) c_522724	16308-010AA SV16 (16.000) c_522737	16308-010AA SV17 (17.000) c_522738	16308-010AA SV18 (18.000) c_522739	16308-020AA SV1 (1.000) c_522803	16308-020AA SV2 (2.000) c_522805	
		Unit 80 Loc 1A 1st FL LR	Unit 80 Loc 1B 1st FL LR	Unit 80 Loc 1C 1st FL LR	Unit 80 Loc 1D 1st FL LR	Unit 80 Loc 1E 1st FL LR	Unit 80 Loc 1A 1st FL LR	Unit 80 Loc 1B 1st FL LR	Unit 80 Loc 1C 1st FL LR	Unit 80 Loc 1D 1st FL LR	Unit 80 Loc 1E 1st FL LR	Unit 80 Loc 1F 1st FL LR
	Test Home											
	Home Identification	Unit 80	Unit 80	Unit 80	Unit 80	Unit 80	Unit 80					
	Sample Location	Loc 1A	Loc 1B	Loc 1C	Loc 1D	Loc 1E	Loc 1A	Loc 1B	Loc 1C	Loc 1D	Loc 1E	Loc 1F
	Location Description	1st FL LR	1st FL LR	1st FL LR	1st FL LR	1st FL LR	1st FL LR					
	Start-End Times	9:19-13:19	9:19-13:19	9:19-13:19	9:19-13:19	9:19-13:19	9:19-13:19	15:45-19:45	15:45-19:45	15:45-19:45	15:45-19:45	15:45-19:45
	TVOC (ug/m3)	644	669	722	711	680	538	593	552	540	574	
1000282-73-6	Pentanoic acid, 6-ethyl-3-octyl ester		0.5		0.7	0.6						
1000-86-8	1,3-Pentadiene, 2,4-dimethyl											
1002-43-3	Undecane, 3-methyl											
100-41-4	Benzene, ethyl	5.5	6.3	5.9	6.3	7	4.2	5.3	4.5	4.4	4.9	
100-42-5	Styrene	5.5	5.8	5.8	6.3	5.8	4.4	4.6	4.6	4.4	4.6	
100-47-0	Benzonitrile											
100-52-7	Benzaldehyde	10.6	10.9	11.2	12	11.1	8.4	12.2	8.9	8.6	9	
100-97-0	1,3,5,7-Tetraazatricyclo[3.3.1.13.7]decane (Methenamine)											
10105-38-1	Pentadecane, 6-methyl	0.2	0.2	0.8	0.2	0.1						
101-39-3	Methylcinnamic aldehyde (2-Propenal, 2-methyl-3-phenyl-)	1.6	1.7	2.8	2.3	2.3	1.5	1.4	1.2	1.1	1.5	
102-76-1	1,2,3-Propanetriol, triacetate (Triacetin)											
103-09-3	Acetic acid, 2-ethylhexyl ester											
103-23-1	Hexanedioic acid, bis(2-ethylhexyl) ester											
104-55-2	Cinnamic aldehyde (2-Propenal, 3-phenyl-)	2	2.1	3.2	0.1	2.2	1.8	1.9	1.6	1.4	1.9	
104-67-6	2(3H)-Furanone, 5-heptylidihydro											
10473-13-9	3-Buten-2-ol, 2,3-dimethyl-											
104-76-7	1-Hexanol, 2-ethyl											
10486-19-8	Tridecanal											
10496-18-1	Decyl sulfide											
105-60-2	1-Caprolactam (2H-Azepin-2-one, hexahydro)											
106-35-4	3-Heptanone											
106-42-3	Xylene (para and/or meta)	17.6	18.7	19	20.3	19.3	13.7	14.6	14.6	14.2	14.9	
106-46-7	Benzene, 1,4-dichloro											
106-62-7	1-Propanol, 2-(2-hydroxypropoxy)											
107-02-8	Acrolein (2-Propenal)											
107-06-2	Ethane, 1,2-dichloro	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
107-66-2	2-n-Butylacrolein											
1071-81-4	Hexane, 2,2,5,5-tetramethyl											
107-21-1	1,2-Ethanediol (Ethylene glycol)											
107-39-1	1-Pentene, 2,4,4-trimethyl											
107-83-5	Pentane, 2-methyl	0.4	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.2	
107-86-8	2-Butenal, 3-methyl											
107-87-9	2-Pentanone											
107-89-1	Butanal, 3-hydroxy											
107-92-6	Butanoic acid	1.2	1.3	1.2	1.2	1.2	0.9	1	1	1	1	
108-05-4	Acetate, vinyl (Acetic acid ethenyl ester)											
108-08-7	Pentane, 2,4-dimethyl											
108-10-1	2-Pentanone, 4-methyl (Methyl isobutyl ketone, MIBK)	5	5.3	0.7	0.7	0.6	0.5	0.5	0.6	0.6	0.6	
108-67-8	Benzene, 1,3,5-trimethyl (Mesitylene)											
108-87-2	Cyclohexane, methyl	13.3	14.2	14.6	15.4	14.8	10	10.8	10.7	10.2	10.9	
108-95-2	Phenol											
109-52-4	Pentanoic acid (Valeric acid)											
109-66-0	Pentane	1.7		2.1	2	2						
109-69-3	Butane, 1-chloro	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
109-94-4	Formic acid, ethyl ester											
109-99-9	Furan, tetrahydro (THF)											
110-19-0	Acetic acid, 2-methylpropyl ester (Isobutyl acetate)	1.2	1.3	1.3	1.4	1.3	0.9	1	0.9	0.9	1	
110-27-0	Tetradecanoic acid, 1-methylethyl ester (Isopropyl Myristate)	0.2	0.2	0.1	0.1		0.2					
11028-42-5	Cedrene											
110-43-0	2-Heptanone	3.4	3.6	3.6	3.9	3.7	3	3.2	3.1	3.3		
110-54-3	Hexane											
110-62-3	Pentanal	12.3	13.2	12.9	14.3	13.7	11.7	14.6	11.6	10.5	11.7	
110-80-5	Ethanol, 2-ethoxy											
110-82-7	Cyclohexane											
110-86-1	Pyridine	0.2	0.2	0.2	0.2	0.2	0.5	0.8	0.4	0.3	0.1	
110-87-2	2H-Pyran, 3,4-dihydro											
110-93-0	5-Hepten-2-one, 6-methyl											
110-12-4	2,6,10,14,18,22-Tetrasorahexane, 2,6,10,15,19,23-hexamethyl											
111-14-8	Heptanoic acid											
111-27-3	1-Hexanol (N-Hexyl alcohol)											
111-65-9	Octane											
111-66-0	1-Octene											
111-70-6	1-Heptanol	4.7	4.8	4.9	6.2	5.6	3.9	4.1		3.9	4	
111-71-7	Heptanal (Heptaldehyde)	7.4	7.3	7.7	8.6	7.9	6.2	6.7	6.8	6.4	6.7	
111-76-2	Ethanol, 2-butoxy											
111-77-3	Ethanol, 2-(2-methoxyethoxy)											
111-84-2	Nonane	1.9	2	2	2.1	2	1.4	1.6	1.5	1.6	1.6	
111-87-5	1-Octanol											
1120-21-4	Undecane	11.6	12	13.3	12.4	12.5	9.1	9.5	9.1	8.1	10.5	
1120-24-7	1-Decanamine, N,N-dimethyl-											
1120-36-1	1-Tetradecene											
112-05-0	Nonanoic acid											
1120-73-6	2-Cyclopenten-1-one, 2-methyl											
112-12-9	2-Undecanone											
1122-82-3	Cyclohexane, isothiocyanato											
112-31-2	Decanal	2.6	2.4	4.1	2.6	2.7	2.3	2.3	2	1.6	2.5	
112-34-5	Ethanol, 2-(2-butoxyethoxy)											
112-40-3	Dodecane											
112-41-4	1-Dodecene	2.9	2.8	4	3.1	3.1	2.2	2.4	2	2.1	2.5	
112-44-7	Undecanal											
112-54-9	Dodecanol											
112-72-1	1-Tetradecanol											
112-88-9	1-Octadecene											
112-95-8	Eicosane											
1138-52-9	Phenol, 3,5-bis(1,1-dimethylethyl)-											
115-18-4	3-Buten-2-ol, 2-methyl											
119209-20-0	Decane, 5,6-dipropyl-											
1192-18-3	Cyclopentane, 1,2-dimethyl, cis											
1192-33-2	Cyclobutane, 3,3-dimethyl-											
1195-79-5	Bicyclo[2.2.1]heptan-2-one, 1,3,3-trimethyl											
1196-01-6	Bicyclo[3.1.1]hept-3-en-2-one, 4,6,6-trimethyl-, (1S)-	2.1	2.2	2.6	2.2	2.2	1.7	2.1	1.6	1.6	1.9	
119-61-9	Benzophenone (Diphenyl methanone)	0.2	0.2	0.1	0.1	0.1		4.3	4.2			
122-03-2	Benzaldehyde, 4-(1-methylethyl)	0.4			0.4	0.4	0.6		0.5	0.1	0.2	
122-99-5	Cyclopentenol[2-2-benzopyran, 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8,											
122-99-6	Ethanol, 2-phenoxy											
123-05-7	Hexanal, 2-ethyl											
123-11-5	Benzaldehyde, 4-methoxy-											
123-35-3	1,6-Octadiene, 7-methyl-3-methylene (Myrcene)											
123-51-3	1-Butanol, 3-methyl	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	
123-72-8	Butanal											
123-73-9	2-Butenal, (E)-											
124-07-2	Octanoic Acid											
124-10-7	Methyl tetradecanoate											
124-11-8	1-Nonenene											
124-13-0	Octanal											
124-18-5	Decane	12.7</										

Unit 80 VOC Data

Unit 80 VOC Data

Unit 80 VOC Data

Unit 81 VOC Data

cas_number	chemical	Control Home											
		Unit 81 Loc 1A 1st FL LR	Unit 81 Loc 1B 1st FL LR	Unit 81 Loc 1C 1st FL LR	Unit 81 Loc 1D 1st FL LR	Unit 81 Loc 1E 1st FL LR	Unit 81 Loc 1A 1st FL LR						
	TVOC (ug/m3)	298	324	297	299	308	276	254	261	319	321		
1000282-73-6	Pentanoic acid, 6-ethyl-3-octyl ester											0.1	
1000-86-8	1,3-Pentadiene, 2,4-dimethyl											0.4	0.5
1002-43-3	Undecane, 3-methyl											0.6	0.7
100-41-4	Benzene, ethyl	0.5	0.5	0.5	0.4	0.5	0.4	0.3	0.3	0.3	0.3	0.4	0.5
100-42-5	Styrene	1.1	1.3	1	1.1	1.2	1	0.9	0.9	0.9	0.9	0.9	1
100-47-0	Benzonitrile												
100-52-7	Benzaldehyde	3.9	4.3	3.9	3.9	4	3.4	3.2	3.5	3.5	3.5	3.5	3.5
100-97-0	1,3,5,7-Tetraazatricyclo[3.3.1.13.7]decane (Methenamine)											0.3	
10105-38-1	Pentadecane, 6-methyl											0.4	0.4
101-39-3	Methylnicnamic aldehyde (2-Propenal, 2-methyl-3-phenyl-)												
102-76-1	1,2,3-Propanetriol, Triacetate (Triacetin)												
103-09-3	Acetic acid, 2-ethylhexyl ester											0.3	
103-23-1	Hexanedioic acid, bis(2-ethylhexyl) ester												
104-55-2	Cinnamic aldehyde (2-Propenal, 3-phenyl-)												
104-67-6	2(3H)-Furanone, 5-heptylidihydro												
10473-13-9	3-Buten-2-ol, 2,3-dimethyl-	1.6	1.7	1.5	1.5	2							
10476-77-6	1-Hexanol, 2-ethyl	4.9	4.2	3.9	4	4.5	3.8		3.3	3.9	4.1		
10486-19-8	Tridecanal											0.7	0.8
10496-18-1	Decyl disulfide											0.1	
105-60-2	1-Caprolactam (2H-Azepin-2-one, hexahydro)	0.6	0.6	0.6	0.6	0.7	0.6	0.5	0.4	0.7	0.6		
106-35-4	3-Heptanone												
106-42-3	Xylene (para and/or meta)	1.6	1.6	1.5	1.5	1.5	1.2	1	1.2	1	1		
106-46-7	Benzene, 1,4-dichloro												
106-62-7	1-Propanol, 2-(2-hydroxypropoxy)											0.5	0.7
107-02-8	Acrolein (2-Propenal)												
107-06-2	Ethane, 1,2-dichloro											0.1	
1070-66-2	2-n-Butylacrolein	0.3	0.3	0.3	0.2	0.3		0.2	0.2	0.2	0.2		
1071-81-4	Hexane, 2,2,5,5-tetramethyl											1.2	2.1
107-21-1	1,2-Ethanediol (Ethylene glycol)												
107-39-1	1-Pentene, 2,4,4-trimethyl												
107-83-5	Pentane, 2-methyl	0.3	0.3	0.3	0.3	0.2							
107-86-8	2-Butenal, 3-methyl	0.6	0.6	0.5	0.6	0.5	0.4	0.4	0.4	0.4	0.4		
107-87-9	2-Pentanone	1.1	1.1	0.9	1	0.9	0.8	0.7	0.6	0.6	0.6		
107-89-1	Butanal, 3-hydroxy												
107-92-6	Butanoic acid	1	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8		
108-05-4	Acetate, vinyl (Acetic acid ethenyl ester)												
108-08-7	Pentane, 2,4-dimethyl	0.3	0.2	0.1	0.2	0.1							
108-10-1	2-Pentanone, 4-methyl (Methyl isobutyl ketone, MIBK)											0.2	
108-67-8	Benzene, 1,3,5-trimethyl (Mesitylene)												
108-87-2	Cyclohexane, methyl	0.7	0.8	0.5	0.7								
108-88-3	Toluene (Methylbenzene)	2.4	2.3	2.2	2.1	2.2	1.6	1.4	1.5	1.3	1.5		
108-95-2	Phenol												
109-52-4	Pentanoic acid (Valeric acid)			1.1									
109-66-0	Pentane			1.3	1.3	1.2	1.5						
109-69-3	Butane, 1-chloro												
109-94-4	Formic acid, ethyl ester					0.5							
109-99-9	Furan, tetrahydro (THF)											0.1	0.2
110-19-0	Acetic acid, 2-methylpropyl ester (Isobutyl acetate)	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.3	0.4		
110-27-0	Tetradecanoic acid, 1-methylethyl ester (Isopropyl Myristate)												
11028-42-5	Cedrene	2.4	2.5	2.4	2.4	2.4	2.2	2.1	2.2	1.8	2		
110-43-0	2-Heptanone												
110-54-3	Hexane												
110-62-3	Pentanal	6.8	6.9	5.7	6.6	5.6	5	4.5	4.9	3.5	3.8		
110-80-5	Ethanol, 2-ethoxy	0.1										0.1	0.2
110-82-7	Cyclohexane												
110-86-1	Pyridine	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		
110-87-2	2H-Pyran, 3,4-dihydro												
110-93-0	5-Hepten-2-one, 6-methyl												
111-02-4	2,6,10,14,18,22-Tetrasorahexane, 2,6,10,15,19,23-hexamethyl											1.1	
111-14-8	Heptanol, acid	4.7	3.5	4.9	4.8	5	3.3	3.9	3.4	4.2	4.7		
111-27-3	1-Hexanol (N-Hexyl alcohol)												
111-65-9	Octane												
111-66-0	1-Octene												
111-70-6	1-Heptanol	3.9	3.9	3.8	3.7	3.8	3.4	3.2	3.5	3.4	3.5		
111-71-7	Heptanal (Heptaldehyde)	5.1	5.1	5	5	4.3	4.2	4.5	4.4	4.4	4.5		
111-76-2	Ethanol, 2-butoxy												
111-77-3	Ethanol, 2-(2-methoxyethoxy)	0.9	0.7	0.6	0.8	0.6						0.1	0.2
111-84-2	Nonane	0.9	0.9	0.9	0.8	0.9	0.9	0.8	0.9	0.7	0.8		
111-87-5	1-Octanol	3.4	3.6	3.5	3.4							3.7	3.8
1120-21-4	Undecane											4.9	5.3
1120-24-7	1-Decanamine, N,N-dimethyl-												
1120-36-1	1-Tetradecene											0.4	
112-05-0	Nonanoic acid												1.4
1120-73-6	2-Cyclopenten-1-one, 2-methyl												
112-12-9	2-Undecanone												0.5
1122-82-3	Cyclohexane, isothiocyanato	0.2	0.2	0.3	0.3								
112-31-2	Decanal	1.7	1.9	1.8	2	2.8	2.1	2.1	1.3	4	3.7		
112-34-5	Ethanol, 2-(2-butoxyethoxy)												
112-40-3	Dodecane												
112-41-4	1-Dodecene												
112-44-7	Undecanal												
112-54-9	Dodecanal												
112-72-1	1-Tetradecanol												
112-88-9	1-Octadecene												
112-95-6	Eicosane												
1138-52-9	Phenol, 3,5-bis(1,1-dimethylethyl)-												
115-18-4	3-Buten-2-ol, 2-methyl												
119209-20-0	Decane, 5,6-dipropyl-												
1192-18-3	Cyclopentane, 1,2-dimethyl, cis												
1192-33-2	Cyclobutanone, 3,3-dimethyl-												
1195-79-5	Bicyclo[2.2.1]heptan-2-one, 1,3,3-trimethyl												
1196-01-6	Bicyclo[3.1.1]hept-3-en-2-one, 4,6,6-trimethyl-, (1S)-	1.5	1.6	1.6	1.7	1.8	1.5	1.4	1.4	2.1	2.2		
1199-61-9	Benzophenone (Diphenyl methanone)					0.1				0.4	0.4		
122-03-2	Benzaldehyde, 4-(1-methylethyl)												
1222-05-5	Cyclopentyl[2-2-benzopyran, 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8]											0.3	0.5
122-99-6	Ethanol, 2-phenoxy	0.5	0.6	0.6	0.5	0.8	0.7	0.5	0.4	0.9	0.9		
123-05-7	Hexanal, 2-ethyl	2.5	2.7	2.3	2.4	2.5	2.5	2	2.5	1.9	1.8		
123-11-5	Benzaldehyde, 4-methoxy-												
123-35-3	1,6-Octadiene,7-methyl-3-methylene (Myrcene)												
123-51-3	1-Butanol, 3-methyl												
123-72-8	Butanal												
123-73-9	2-Butenal, (E)-												
124-07-2	Octanoic Acid												
124-10-7	Methyl tetradecanoate												
124-11-8	1-Nonene												
124-13-0	Octanal	9.3	11.3	9.2	9.1	9.1	8.9	8	10.2	8.8	9		
124-18-5	Decane												
124-19-6	Nonyl aldehyde (Nonanal)	14.7	14.5	14.8	14.7	14.7	13.5	13.6	13.4	16.7	16.8		

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127-00-4	2-Propanol, 1-chloro									
127-18-4	Ethene, 1,1,2,2-tetrachloro (Tetrachloroethylene)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
127-51-5	à-Isomethyl ionone									
127-91-3	Pinene, à (6,6-Dimethyl-2-methylene-bicyclo[3.1.1]heptane)	14.2 1.1	15.2 1.1	14	14	14.2	13.3	12.2	13.7	9 9.5
13150-81-7	Decane, 2,6-dimethyl									
13151-05-8	1-Heptene, 4-methyl									
13151-34-3	Decane, 3-methyl									
13151-35-4	Decane, 5-methyl									
13151-94-5	Cyclooctane, 1,2-dimethyl-									
13287-23-5	Heptadecane, 8-methyl-									
13466-78-9	3-Carene									
13475-82-6	Heptane, 2,2,4,6,6-pentamethyl									
13547-70-1	2-Butanone, 1-chloro-3,3-dimethyl-									
13674-84-5	Tris(1-chloro-2-propyl)phosphate									
137-32-6	1-Butanol, 2-methyl									
13851-11-1	Fenethyl acetate									
138-86-3	Limonene (Dipentene; 1-Methyl-4-(1-methylethyl)cyclohexene)	10.1	10.9	10.6	10.3	11.8	10.2	9.4	9.4	7.9 8.2
140-11-4	Acetic acid, phenylmethyl ester (Benzyl acetate)									
140-67-0	Estragole (4-Allylanisole)	3.3	3.6	3.4	3.4	3.9	3.2	3.1	2.6	3.8 4
141-63-9	Pentasiloxane, dodecamethyl									
141-78-6	Acetate, ethyl	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1 0.1
142-29-0	Cyclopentene									
142-62-1	Hexanoic acid									
142-82-5	Heptane									
143-07-7	Dodecanoic acid									
143-08-8	1-Nonanol									
14411-56-4	Benzene, 1-(1,1-dimethylethyl)-3-ethyl									
1462-03-9	Cyclopentanol, 1-methyl									
14686-13-6	2-Heptene, (E)									
1472-09-9	Cyclopropane, octyl	0.8								
1486-51-7	4-Benzoyloxybenzoic acid									
1498-69-7	Anthracene, 9-butyl-									
1503-49-7	4-Cyanobenzenophenone	0.1								
1560-88-9	Octadecane, 2-methyl	0.1	0.3	0.1	0.2	0.2				0.6
1560-89-0	Heptadecane, 2-methyl									0.8
1560-92-5	Hexadecane, 2-methyl									0.5
1560-93-6	Pentadecane, 2-methyl									0.4
1560-95-8	Tetradecane, 2-methyl									0.3
1560-96-9	Tridecane, 2-methyl									0.5
1560-97-0	Dodecane, 2-methyl									
15798-64-8	2-Butenal, (Z)-									
15869-87-1	Octane, 2,2-dimethyl									
15869-94-0	Octane, 3,6-dimethyl	0.3	0.3							0.3
15877-57-3	Pentanal, 3-methyl									
1632-73-1	Bicyclo[2.2.1]heptan-2-ol, 1,3,3-trimethyl	1.5	1.7	2.6	2.6	1.8	1.4	1.3	2.2	1.6 1.7
1640-89-7	Cyclopentane, ethyl									
16728-99-7	Naphthalene, 1,2,3,4,4a,7-hexahydro-1,6-dimethyl-4-(1-methyl									
17302-11-3	Nonane, 3-ethyl									
17302-27-1	Nonane, 2,5-dimethyl									
17302-32-8	Nonane, 3,7-dimethyl									
17302-37-3	Decane, 2,2-dimethyl									
17312-53-7	Decane, 3,6-dimethyl									
17312-54-8	Decane, 3,7-dimethyl-									
17312-57-1	Dodecane, 3-methyl									
17312-80-0	Undecane, 2,4-dimethyl									
17453-93-9	Dodecane, 5-methyl	0.5	0.6	0.5	1.1	1.4				
1757-42-2	Cyclopentanone, 3-methyl	0.6								
17603-57-5	4-Methyl-1,3-heptadiene (c,t)	0.7								
1809-10-5	Pentane, 3-bromo-	0.9	1.5	1.2	1.2	1.7	1.1	1.1	0.7	0.7 0.8
1838-59-1	Formic acid, 2-propenyl ester									
18435-22-8	Tetradecane, 3-methyl									
18435-45-5	1-Nonadecene	0.1	0.6	0.2	0.1	0.5	0.3			0.3 0.6
18491-15-1	2,2-Dimethyl-1-isopropyl-1,3-propanediol monoisobutyrate	0.4	0.9	0.7	0.8	1.9	1.1	1	0.5	16 16.6
18794-77-9	Thiophene, 2-hexyl	1.3	1.7	1.3	1.6	2.5	1.6	1.5	0.9	0.8 0.9
18968-23-5	Bicyclo[4.1.0]heptane, 3,7,7-trimethyl-, (1 à, 3à, 6à)									
19095-23-9	Heptasioxane, 1,1,3,5,5,7,7,9,9,11,11,13,13-tetradecamethyl									
19095-24-0	Octasioxane, 1,1,3,5,5,7,7,9,9,11,11,13,13,15,15-hexamethyl									
1921-70-6	Pentadecane, 2,6,10,14-tetramethyl									
192823-15-7	Decane, 2,3,5,8-tetramethyl-									
2004-70-8	1,3-Pentadiene, (E)		0.4							
2021-28-5	Benzenepropanoic acid, ethyl ester									
2040-96-2	Cyclopentane, propyl	0.3								0.2
2051-30-1	Octane, 2,6-dimethyl									
20521-42-0	2-Butenal, 2-ethenyl									
20959-33-5	Heptadecane, 7-methyl-	0.1								1
2116-65-6	Pyridine, 4-(phenylmethyl)-									
2142-73-6	Ethanone, 1-(2,5-dimethylphenyl)-									
21856-89-3	2-Hexanone, 6-hydroxy-									
2213-23-2	Heptane, 2,4-dimethyl	0.1		0.1	0.1	0.1	0.1	0.1	0.1	
2213-32-3	1-Pentene, 2,4-dimethyl	0.7	1	0.6	0.7	0.7	0.5	0.6	0.1	
2216-33-3	Octane, 3-methyl	0.6	0.5	0.4	0.5	0.4	0.4	0.5		
24081-57-0	Ketone, 1,5-dimethylbicyclo[2.1.0]pent-5-yl methyl	2.7								
2452-99-5	Cyclopentane, 1,2-dimethyl									
2453-00-1	Cyclopentane, 1,3-dimethyl									
24851-98-7	3-Oxo-2-pentylcyclopentane acetate, methyl (Methyl dihydrojas-									
24903-95-5	Bicyclo[3.1.1]heptan-2-one, 6,6-dimethyl-									
2497-25-8	2-Decenal, (Z)-	1	1.2	1.1	1	1.5	0.6	0.6	0.6	0.6 0.6
25117-26-4	Hexadecane, 4-methyl-									0.3 0.3
25117-31-1	Tridecane, 5-methyl									0.8 1
25117-33-3	Pentadecane, 5-methyl									0.3
25119-13-3	Cyclopropane, pentyl-									
2548-87-0	2-Octenal, (E)	1.9	1.8	1.7	1.7	3.8	1.7	1.6	1.4	3.5 3.6
26730-20-1	Hexadecane, 7-methyl-									0.5 0.5
2755-07-9	Undecane, 5-ethyl-5-propyl									0.3 0.3
2758-18-1	2-Cyclopenten-1-one, 3-methyl									
2792-39-4	2,6-Octadiene, 2,6-dimethyl-									
2801-87-8	Pentadecane, 4-methyl									
28634-89-1	Bicyclo[3.1.0]hex-2-ene, 4-methyl-1-(1-methylethyl)-	5.7								
287-92-3	Cyclopentane	0.3	0.6			0.5	0.7			
2882-96-4	Pentadecane, 3-methyl		0.4	0.9		0.2	0.2	0.6	0.5	0.3 0.3
290-37-9	Pyrazine					0.2	0.1	0.2	0.1	0.1 0.1
29066-34-0	Menthyl acetate									
291-64-5	Cycloheptane									
292-64-8	Cyclooctane									
295-17-0	Cyclotetradecane									
2980-69-0	Undecane, 4-methyl									0.4 0.4
3074-78-0	1-Heptene, 2,6-dimethyl-	0.1								
3208-16-0	Furan, 2-ethyl	0.2	0.2	0.2	0.2	0.2	0.1	0.1		0.1 0.1
32210-23-4	4-tert-Butylcyclohexyl acetate (Vertenex)	0.4	0.5	0.4	0.4	0.6	0.5	0.4	0.3	0.6 0.8
334-48-5	Decanoic acid									1.7
3391-86-4	1-Octen-3-ol									0.8 0.9
3404-61-3	1-Hexene, 3-methyl									
3452-07-1	1-Eicosene									
35953-53-9	2-Tetradecene, (E)-									
36653-82-4	1-Hexadecanol									
3741-00-2	Cyclopentane, pentyl									
37617-26-8	Cyclopropane, 1-methyl-2-octyl					1.2				

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6418-44-6	Heptadecane, 3-methyl										
64-19-7	Acetic acid	13.5	13.3	16.2	0.1	13.8	0.2	10.4	12.5	13.5	0.5
645-13-6	Ethanone, 1-[4-(1-methylethyl)phenyl]-		0.1	0.3							0.4
6508-77-6	6-Tridecene, (Z)-										0.4
65-85-0	Benzoic Acid		1								1.2
66-25-1	Hexanal	22.5	22.7	22.4	22.3	22.5	0.9	1.1	19.6	19.5	1.1
67-63-0	2-Propanol (Isopropanol)			1.4	1.2	1.1			20.3	21.1	1.8
67-64-1	Acetone		1.5								22.1
6765-39-5	1-Heptadecene										
6795-87-5	Butane, 2-methoxy										
68-12-2	Formamide, N,N-dimethyl										
6846-50-0	TXII (2,2,4-Trimethyl-1,3-pentanediol diisobutyrate)				0.1	0.1	0.1				2.1
6876-23-9	Cyclohexane, t,1,2-dimethyl										
689-67-8	5,9-Undecadien-2-one, 6,10-dimethyl-										
690-08-4	2-Pentene, 4,4-dimethyl, (E)	0.4	0.3		0.3	0.3					
693-54-9	2-Decanone		3	2.7	2.8	3.5	2.7	2.5	2.2	4.4	4.5
6938-94-9	Hexanedioic acid, bis(1-methylethyl) ester						0.5	0.1	0.3	0.3	0.4
6975-92-4	1-Hexene, 2,5-dimethyl							0.4			
6975-98-0	Decane, 2-methyl										
7045-71-8	Undecane, 2-methyl										
71-23-8	1-Propanol (Propyl alcohol)										
71-36-3	1-Butanol (N-Butyl alcohol)	1	1.3	1.7	1.3	1.7	1.8	1.6	1.7	0.8	1.1
71-41-0	1-Pentanol (N-Pentyl alcohol)	7	7	7	6.9	6.9	6	5.9	6.3	5.5	6.3
7146-60-3	Octane, 2,3-dimethyl										
71579-69-6	3-Isopropoxy-1,1,7,7,7-hexamethyl-3,5,5-tris(trimethylsiloxy)t										
719-22-2	2,5-Cyclohexadiene-1,4-dione, 2,6-bis(1,1-dimethylethyl)	0.2	0.2	0.4		0.4	0.2	0.3	0.3	1.2	1.5
7206-13-5	2-Dodecene, (E)					0.7				1.2	1
7206-26-0	2-Dodecene, (Z)										
7364-19-4	Benzene, 1-(1,1-dimethylethyl)-4-ethyl	0.4					0.3				
7446-09-5	Sulfur dioxide										
75-12-7	Formamide (Methanamide)										
75-18-3	Methyl sulfide (Methane, thiobis)										0.1
756-02-5	1,4-Pentadiene, 2,3,3-trimethyl		0.7	0.6	0.8						
761-65-9	Formamide, N,N-dibutyl										
762-63-0	2-Pentene, 4,4-dimethyl-, (Z)										
76-49-3	Bicyclo[2.2.1]Heptan-2-ol,1,7,7-trimethyl,acetate,endo(bornyl a										
766-94-9	Benzene, (ethenyl)oxy-										
77-53-2	1H-3a,7-Methanoazulen-6-ol, octahydro-3,6,8,8-tetramethyl-, [
77-68-9	2,2,4-Trimethyl-1,3-pentanediol monoisobutyrate	0.7	1.7	1.1	1.3	3.2	1.9	1.7	0.9	15.7	16
77-73-6	4,7-Methano-1H-indene, 3a,4,7,7a-tetrahydro						0.3	0.1	0.2		
78-78-4	Butane, 2-methyl (Isopentane)	0.5	0.4	0.5	0.4	0.5	0.3	0.3	0.2	0.4	0.3
78-79-5	1,3-Butadiene, 2-methyl	0.3					1.2				0.3
78-83-1	1-Propanol, 2-methyl (Isobutyl alcohol)	0.2	0.3	0.3	0.3	0.3	0.5	0.5	0.4	0.2	0.2
78-84-2	Propanal, 2-methyl (Isobutanal)	3.6	3.5	3.7	3.4	3.1	2.8	2.8	3.2		
78-85-3	2-Propenal, 2-methyl					0.1	0.1	0.1	0.1	0.1	0.1
78-89-7	1-Propanol, 2-chloro-					0.1	0.1				
78-93-3	2-Butanone (Methyl ethyl ketone, MEK)										0.6
79-09-4	Propanoic acid	0.5	0.5		0.4		0.5	0.4	0.3		
79-10-7	2-Propenoic acid										
79-20-9	Acetate, methyl (Acetic acid, methyl ester)									0.2	0.2
79-31-2	Propanoic acid, 2-methyl	1.7	1.6	1.8	1.8	1.8	1.3	1.3	1.5	0.7	0.8
79-33-4	(S)-2-Hydroxypropanoic acid						7.3	1.1	5.5	0.8	1.2
80-54-6	Lilac									1	1
80-56-8	Pinene, à (2,6,6-Trimethyl-bicyclo[3.1.1]hept-2-ene)	45.4	46.9	46.1	46.1	46.1	42.1	42	41.6	25.2	27.7
80-62-6	Methyl methacrylate (2-Propenoic acid, 2-methyl-, methyl ester)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
80655-44-3	Decahydro-4,4,8,9,10-pentamethylnaphthalene			0.1	0.3	0.1	0.2				
821-95-4	1-Undecene	1.7	1.7	1.6	1.5	1.7	1.4	1.3	1.3	1.1	1.3
822-50-4	Cyclopentane, 1,2-dimethyl, trans										
85-41-6	1H-Isoindole-1,3(2H)-dione					0.1	0.2	0.1			
85-44-9	Phthalic anhydride (1,3-Isonbenzofuranidine)	0.8	0.9	0.5	0.5	0.6	0.4	0.3	0.3		
871-83-0	Nonane, 2-methyl							0.2			
872-05-9	1-Decene						0.5	0.5	0.3	0.4	0.5
872-50-4	2-Pyrrolidinone, 1-methyl										
89-48-5	Methyl acetate										
90346-45-5	Cyclobutene, 1,2,3,4-tetramethyl-										
91-20-3	Naphthalene	0.8	0.9	0.9							0.3
91-64-5	Coumarin (2H-1-Benzopyran-2-one)										
92-63-4	2-Ethylacrolein										
92-51-3	1,1'-Bicyclohexyl										
93-27-8	Furan, 3-methyl										
93-60-9	4-Cyclopentene-1,3-dione										
93-58-3	Benzoic acid, methyl ester										
95-16-9	Benzothiazole	1.1	0.9	0.7	0.8	0.8	0.8	0.6	0.5	1.4	1.7
95-47-6	Xylene, ortho	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.5	0.3	0.3
95-93-2	Benzene, 1,2,4,5-tetramethyl	1.1		1.1	1.1	1.4			0.2		
96-14-0	Pentane, 3-methyl										
96-37-7	Cyclopentane, methyl			0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
96-48-0	2(3H)-Furanone, dihydro (Butyrolactone)										
96-76-4	Phenol, 2,4-bis(1,1-dimethylethyl)-										
97-64-3	Propanoic acid, 2-hydroxy-, ethyl ester			7.9							
97-95-0	1-Butanol, 2-ethyl										
97-96-1	Butanal, 2-ethyl-										
98-01-1	Furfural (2-Furaldehyde)	2.8	2.6	2.6	2.5	2.5	2	2.1	2.2	1.9	2.1
98-19-1	Benzene, 1-(1,1-dimethylethyl)-3,5-dimethyl							0.5	0.3	0.8	1.6
98-56-6	Benzene, 1-chloro-4-(trifluoromethyl)-										
98-83-9	à-Methylstyrene (iso-Propenylbenzene; (1-Methylethyl)benz										
98-86-2	Acetophenone (Ethanone, 1-phenyl)	3.5	3.6	3.3	3.4	4.3	3.3	2.9	2.7		
99-82-4	Hexasiloxane, 1,1,3,3,5,5,7,7,9,9,11,11-dodecamethyl-									0.3	0.4
99-62-7	Benzene, 1,3-disopropyl			0.5	0.3	0.8					

Outside VOC Data

cas_number	chemical	16308-01AA SV11 (11.000) c_522730	16308-010AA SV12 (12.000) c_522731	16308-010AA SV13 (13.000) c_522732	16308-010AA SV14 (14.000) c_522733	16308-010AA SV15 (15.000) c_522734	16308-020AA SV8 (8.000) c_522811	16308-020AA SV9 (9.000) c_522812	16308-020AA SV10 (10.000) c_522813	16308-020AA SV11 (11.000) c_522814	16308-020AA SV12 (12.000) c_522815	
		Outside Air										
		Home Identification Sample Location	Unit 80 Loc 2A Outside	Unit 80 Loc 2B Outside	Unit 80 Loc 2C Outside	Unit 80 Loc 2D Outside	Unit 80 Loc 2E Outside	Unit 80 Loc 2A Outside	Unit 80 Loc 2B Outside	Unit 80 Loc 2C Outside	Unit 80 Loc 2D Outside	Unit 80 Loc 2E Outside
		Location Description Start-End Times	9:26-13:26	9:26-13:26	9:26-13:26	9:26-13:26	9:26-13:26	16:05-20:05	16:05-20:05	16:05-20:05	16:05-20:05	16:05-20:05
	TVOC (ug/m3)		22.8	26.2	22.1	22.5	21.9	20.7	10.2	10.8	18.2	18.1
1000282-73-6	Pentanoic acid, 6-ethyl-3-octyl ester											
1000-86-8	1,3-Pentadiene, 2,4-dimethyl											
1002-43-3	Undecane, 3-methyl											
100-41-4	Benzene, ethyl		0.2	0.2	0.2	0.3	0.2	0.1	0.2	0.1	0.1	0.2
100-42-5	Styrene		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
100-47-0	Benzonitrile		0.1			0.1						
100-52-7	Benzaldehyde		0.2	0.6	0.8	0.6	0.4	0.1	0.1	0.1		0.5
100-97-0	1,3,5,7-Tetraazatricyclo[3.3.1.13.7]decane (Methenamine)						0.1					
10105-38-1	Pentadecane, 6-methyl						0.1					
101-39-3	Methylcinnamic aldehyde (2-Propenal, 2-methyl-3-phenyl-)											
102-76-1	1,2,3-Propanetriol, triacetate (Triacetin)									0.1	0.1	0.1
103-09-3	Acetic acid, 2-ethylhexyl ester		0.1	0.1			0.1					
103-23-1	Hexanedioic acid, bis(2-ethylhexyl) ester		0.3						1.5	0.7	0.4	0.2
104-55-2	Cinnamic aldehyde (2-Propenal, 3-phenyl-)											
104-67-6	2(3H)-Furanone, 5-heptylidihydro											
10473-13-9	3-Buten-2-ol, 2,3-dimethyl-											
104-76-7	1-Hexanol, 2-ethyl		0.4	0.5	0.4	0.4	0.5	0.3	0.2	0.4	0.4	0.1
10486-19-8	Tridecanal											
10496-18-1	Decyl disulfide											
105-60-2	1-Caprolactam (2H-Azepin-2-one, hexahydro)		0.1								0.1	
106-35-4	3-Heptanone											
106-42-3	Xylene (para and/or meta)		0.3	0.4	0.6	0.4	0.4	0.4	0.5	0.5	0.3	0.4
106-46-7	Benzene, 1,4-dichloro		0.1	0.1	0.1	0.1						
106-62-7	1-Propanol, 2-(2-hydroxypropoxy)								0.1	0.1	0.1	0.2
107-02-8	Acrolein (2-Propenal)											
107-06-2	Ethane, 1,2-dichloro											
1070-66-2	2-n-Butylacrolein											
1071-81-4	Hexane, 2,2,5,5-tetramethyl											
1072-21-1	1,2-Ethanediol (Ethylene glycol)											
1073-91-1	1-Pentene, 2,4,4-trimethyl			0.1								
107-83-5	Pentane, 2-methyl		0.1		0.1	0.1	0.1	0.1	0.1	0.1		0.1
107-86-6	2-Butenal, 3-methyl											
107-87-9	2-Pentanone		0.1		0.1	0.1						
107-89-1	Butanal, 3-hydroxy											
107-92-6	Butanoic acid											
108-05-4	Acetate, vinyl (Acetic acid ethenyl ester)											
108-08-7	Pentane, 2,4-dimethyl			0.1	0.1	0.1	0.1	0.1				
108-10-1	2-Pentanone, 4-methyl (Methyl isobutyl ketone, MIBK)		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
108-67-8	Benzene, 1,3,5-trimethyl (Mesitylene)								0.1	0.1	0.1	0.1
108-87-2	Cyclohexane, methyl		0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.1
108-88-3	Toluene (Methylbenzene)		0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.5
108-95-2	Phenol											
109-52-4	Pentanoic acid (Valeric acid)											
109-66-0	Pentane											
109-69-3	Butane, 1-chloro											
109-94-4	Formic acid, ethyl ester											
109-99-3	Furan, tetrahydro (THF)											
110-19-0	Acetic acid, 2-methylpropyl ester (Isobutyl acetate)											
110-27-0	Tetradecanoic acid, 1-methylethyl ester (Isopropyl Myristate)											
11028-42-5	Cedrene											
110-43-0	2-Heptanone							0.1				
110-54-3	Hexane						0.2	0.2			0.1	
110-62-3	Pentanal											
110-80-5	Ethanol, 2-ethoxy											
110-82-7	Cyclohexane								0.1		0.1	
110-86-1	Pyridine		0.1	0.1	0.1	0.1	0.1	0.1				
110-87-2	2H-Pyan, 3,4-dihydro								0.1		0.1	
110-93-0	5-Hepten-2-one, 6-methyl											
111-02-4	2,6,10,14,18,22-Tetraacosahexaene, 2,6,10,15,19,23-hexamethyl		3		0.1		0.1	0.3		0.6	1.5	0.4
111-14-8	Heptanoic acid											
111-27-3	1-Hexanol (N-Hexyl alcohol)								0.1			
111-65-9	Octane											
111-66-0	1-Octene			0.1			0.3					0.1
111-70-6	1-Heptanol											
111-71-7	Heptanal (Heptaldehyde)		0.1	0.1	0.1	0.1	0.1	0.1				
111-76-2	Ethanol, 2-butoxy											
111-77-3	Ethanol, 2-(2-methoxyethoxy)											
111-84-2	Nonane		0.1	0.1	0.1		0.1	0.1	0.1	0.1	0.1	0.1
111-87-5	1-Octanol											
1120-21-4	Undecane		0.2	0.2	0.2	0.2	0.2	0.2				
1120-24-7	1-Decanamine, N,N-dimethyl-								0.4			
1120-36-1	1-Tetradecene											
112-05-0	Nonanoic acid						0.1					
1120-73-6	2-Cyclopenten-1-one, 2-methyl											
112-12-9	2-Undecanone											0.1
1122-82-3	Cyclohexane, isothiocyanato											
112-31-2	Decanal		0.1	0.1	0.1	0.2	0.1		0.1	0.1		0.1
112-34-5	Ethanol, 2-(2-butoxyethoxy)		0.1									
112-40-3	Dodecane		0.1	0.2	0.1	0.1	0.1					
112-41-4	1-Dodecene											
112-44-7	Undecanal			0.6		0.1	0.1	0.1			0.1	
112-54-9	Dodecanal											
112-72-1	1-Tetradeanol											
112-88-9	1-Octadecene											
112-95-8	Eicosane								0.5			
113-52-9	Phenol, 3,5-bis(1,1-dimethylethyl)-											
115-18-4	3-Buten-2-ol, 2-methyl											
119209-20-0	Decane, 5,6-dipropyl-											
1192-18-3	Cyclopentane, 1,2-dimethyl, cis						0.1			0.1		0.3
1192-33-2	Cyclobutanone, 3,3-dimethyl-											
1195-79-5	Bicyclo[2.2.1]heptan-2-one, 1,3,3-trimethyl											
1196-01-6	Bicyclo[3.1.1]hept-3-en-2-one, 4,6,6-trimethyl-, (1S)-											
119-61-9	Benzophenone (Diphenyl methanone)											
122-03-2	Benzaldehyde, 4-(1-methylethyl)											
122-05-5	Cyclopental[gl]-2-benzopyran, 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8											
122-99-6	Ethanol, 2-phenoxy											
123-05-7	Hexanal, 2-ethyl		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
123-11-5	Benzaldehyde, 4-methoxy-											
123-35-3	1,6-Octadiene,7-methyl-3-methylene (Myrcene)											
123-51-3	1-Butanol, 3-methyl											
123-72-8	Butanal		0.1	0.1	0.1	0.1						
123-73-9	2-Butenal, (E)-											
124-07-2	Octanoic Acid											
124-10-7	Methyl tetradecanoate											
124-11-8	1-Nonene		0.2	0.2	0.1	0.2	0.3	0.3		0.2	0.5	0.3
124-13-0	Octanal		0.2	0.1	0.1	0.1	0.1	0.1		0.2	0.1	
124-18-5	Decane											
124-19-6	Nonyl aldehyde (Nonanal)		0.1	0.1	0.1	0.2		0.1	0.1			

Outside VOC Data

Outside VOC Data

3839-22-3	o-Cyanobenzoic acid									
38651-65-9	Bicyclo[3.1.1]heptan-2-one, 6,6-dimethyl-, (1R)-									
39029-41-9	Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro-7-methyl-4-methyler									
39884-53-2	N-Nitroso-2-methyl-oxazolidine									
40117-45-1	Heptane, 2,2,6,6-tetramethyl									
4390-04-9	Nonane, 2,2,4,4,6,8,8-heptamethyl									
4458-32-6	1-Propanamine, N-ethyl-N-methyl									
464-48-2	Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimethyl-, (1S)									
464-49-3	Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimethyl-, (1R)									
4695-62-9	Fenchone (Bicyclo[2.2.1]heptan-2-one, 1,3,3-trimethyl-)									
469-61-4	Cedrene, à									
470-40-6	Thujopsene									
4747-07-3	Hexane, 1-methoxy									
475-20-7	Longifolene									
4810-09-7	1-Heptene, 3-methyl									
483-75-0	Naphthalene, 1,2,4a,5,6,8a-hexahydro-4,7-dimethyl-1-(1-meth									
489-40-7	1H-Cycloprop[e]azulene, 1a,2,3,4,4a,5,6,7b-octahydro-1,1a,7-									
4914-91-4	2-Pentene, 3,4-dimethyl-, (Z)-									
4942-47-6	1-Adamantanecacetic acid									
500-02-7	2-Cyclohexen-1-one, 4-(1-methylethyl)-									
50464-95-4	6-Methyl-6-(5-methylfuran-2-yl)heptan-2-one									
508-32-7	Tricyclo[2.2.1.02,6]heptane, 1,7,7-trimethyl-	0.6								0.1
5131-66-8	2-Propanol, 1-butoxy									
513-35-9	2-Butene, 2-methyl									
515-13-9	Cyclohexane, 1-ethenyl-1-methyl-2,4-bis(1-methylethenyl), [1S									
527-53-7	Benzene, 1,2,3,5-tetramethyl									
534-22-5	Furan, 2-methyl									
539-90-2	Butanoic acid, 2-methylpropyl ester									
540-97-6	Cyclohexasiloxane, dodecamethyl									
541-01-5	Heptasiloxane, hexadecamethyl									
541-02-6	Cyclopentasiloxane, decamethyl									
541-05-9	Cyclotrisiloxane, hexamethyl									
5413-60-5	4,7-Methano-1H-inden-6-ol, 3a,4,5,6,7,7a-hexahydro-, acetate									
542-28-9	2H-Pyran-2-one, tetrahydro-									
543-49-7	2-Heptanol	0.2								
5441-52-1	Cyclohexanol, 3,5-dimethyl									
544-63-8	Tetradecanoic acid		0.1							
544-76-3	Hexadecane (Cetane)	0.2		0.1					0.3	
546-28-1	1H-3a,7-Methanoazulene, octahydro-3,8,8-trimethyl-6-methyle									
55030-62-1	Tridecane, 4,8-dimethyl									
55045-07-3	Dodecane, 2-methyl-8-propyl									
555-10-2	à-Phellandrene									
556-67-2	Cyclotetrasiloxane, octamethyl	0.6		0.4						0.1
556-82-1	2-Buten-1-ol, 3-methyl									
562-49-2	Pentane, 3,3-dimethyl									
56292-65-0	Dodecane, 2,5-dimethyl	0.1								
563-80-4	2-Butanone, 3-methyl									
56539-66-3	3-Methoxy-3-methylbutanol									
5655-61-8	Bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimethyl-, acetate, (1S-endo)-									
565-59-3	Pentane, 2,3-dimethyl	0.2		0.5						0.5
565-69-5	3-Pentanone, 2-methyl									
565-75-3	Pentane, 2,3,4-trimethyl								0.1	
565-77-5	2-Pentene, 2,3,4-trimethyl									
565-80-0	3-Pentanone, 2,4-dimethyl									
57-55-6	1,2-Propanediol (Propylene glycol)									
58-08-2	Caffeine									
585-34-2	Phenol, m-tert-butyl									
5875-45-6	Phenol, 2,5-bis(1,1-dimethylethyl)									
589-34-4	Hexane, 3-methyl	0.8		2.8						1
589-35-5	1-Pentanol, 3-methyl			0.2						
589-53-7	Heptane, 4-methyl	0.1		0.4						
589-81-1	Heptane, 3-methyl	0.1		0.1						
590-35-2	Pentane, 2,2-dimethyl									
590-73-8	Hexane, 2,2-dimethyl									
591-76-4	Hexane, 2-methyl	1		2.3						
591-78-6	2-Hexanone									
592-13-2	Hexane, 2,5-dimethyl									
592-27-8	Heptane, 2-methyl	0.2		0.1						
592-41-6	1-Hexene	0.2		0.2						
592-76-7	1-Heptene	0.4		0.5						
592-77-8	2-Heptene									
592-84-7	Formic acid, butyl ester	0.1		0.1						
593-45-3	Octadecane									
598-25-4	1,2-Butadiene, 3-methyl									
598-61-8	Cyclobutane, methyl									
5911-04-6	Nonane, 3-methyl									
6094-02-6	1-Hexene, 2-methyl-							0.1		
60-12-8	Phenylethyl Alcohol									
6032-29-7	2-Pentanol		0.1							
60-35-5	Acetamide									
6044-71-9	Dodecane, 6-methyl					0.1				
61141-83-1	Cyclobutane, 1,2-diethyl									
6117-97-1	Dodecane, 4-methyl								0.1	
6131-25-5	Heptane, 3-methyl	0.1		0.1						
616-45-5	2-Pyrrolidinone									
6165-40-8	Pentadecane, 7-methyl-							0.5		
6165-40-8	Pentadecane, 7-methyl-							0.5		
617-78-7	Pentane, 3-ethyl	0.1		0.1						
617-94-7	Benzinemethanol, à,à-dimethyl-	0.3		0.6						
620-14-4	Benzene, 1-ethyl-3-methyl									
62016-14-2	Octane, 2,5,6-trimethyl									
62016-33-5	Octane, 2,3,6-trimethyl									
62016-37-9	Octane, 2,4,6-trimethyl									
62016-49-3	Butane, 2-methoxy-3-methyl									
62108-31-0	Heptane, 4-ethyl-2,2,6,6-tetramethyl				0.2					
62108-33-2	3-Octyne, 5-methyl-	0.2		0.1						
62183-55-9	Octane, 3-ethyl-2,7-dimethyl									
62199-06-8	Heptane, 5-ethyl-2,2,3-trimethyl-		0.4	0.4						
622-96-8	Benzene, 1-ethyl-4-methyl (4-Ethyltoluene)					0.1				
624-16-8	4-Decanone									
625-23-0	2-Hexanol, 2-methyl									
6259-76-3	n-Hexyl salicylate									
626-93-7	2-Hexanol									
627-21-4	2-Pentyne									
628-32-0	Propane, 1-ethoxy-									
629-15-2	1,2-Ethanediol, diformate									
629-50-5	Tridecane					0.1				
629-62-9	Pentadecane	0.1						0.1		
629-78-7	Heptadecane									
629-80-1	Hexadecanal									
629-92-5	Nonadecane		0.6							
638-04-0	Cyclohexane, c-1,3-dimethyl							0.3		
638-36-8	Hexadecane, 2,6,10,14-tetramethyl-									
638-49-3	Formic acid, pentyl ester							0.2		
6418-41-3	Tridecane, 3-methyl									
6418-43-5	Hexadecane, 3-methyl									
6418-44-6	Heptadecane, 3-methyl									
64-19-7	Acetic acid	0.7		0.6					0.1	
		0.6		0.6						0.1

Outside VOC Data

Blanks VOC Data

cas_number	chemical	16308-010AA SV0F (19.000) c_522735	16308-010AA SV1F (20.000) c_522736	16308-020AA SV0F (13.000) c_522802	16308-020AA SV1F (14.000) c_522804
		Home Identification Sample Location Location Description Start-End Times	Blank AM	Blank AM	Blank PM
	TVOC (ug/m3)		36.6	13.2	4.7
1000282-73-6	Pentanoic acid, 6-ethyl-3-octyl ester				9.6
1000-86-8	1,3-Pentadiene, 2,4-dimethyl				
1002-43-3	Undecane, 3-methyl				
100-41-4	Benzene, ethyl			0.1	0.1
100-42-5	Styrene			0.1	0.3
100-47-0	Benzonitrile				
100-52-7	Benzaldehyde		0.1	0.1	0.1
100-97-0	1,3,5,7-Tetraazatricyclo[3.3.1.13,7]decane (Methenamine)				
10105-38-1	Pentadecane, 6-methyl			0.1	
101-39-3	Methylcinnamic aldehyde (2-Propenal, 2-methyl-3-phenyl-)				
102-76-1	1,2,3-Propanetriol, triacetate (Triacetin)				
103-09-3	Acetic acid, 2-ethylhexyl ester				
103-23-1	Hexanedioic acid, bis(2-ethylhexyl) ester				0.2
104-55-2	Cinnamic aldehyde (2-Propenal, 3-phenyl-)				0.3
104-67-6	2(3H)-Furanone, 5-heptyldihydro				
10473-13-9	3-Buten-2-ol, 2,3-dimethyl-				
104-76-7	1-Hexanol, 2-ethyl		0.2		0.1
10486-19-8	Tridecanal				0.1
10496-18-1	Decyl disulfide				
105-60-2	Î-Caprolactam (2H-Azepin-2-one, hexahydro)				
106-35-4	3-Heptanone		0.1		
106-42-3	Xylene (para and/or meta)				
106-46-7	Benzene, 1,4-dichloro				
106-62-7	1-Propanol, 2-(2-hydroxypropoxy)				
107-02-8	Acrolein (2-Propenal)				0.1
107-06-2	Ethane, 1,2-dichloro				
1070-66-2	2-n-Butylacrolein				
1071-81-4	Hexane, 2,2,5,5-tetramethyl				
107-21-1	1,2-Ethanediol (Ethylene glycol)				
107-39-1	1-Pentene, 2,4,4-trimethyl				
107-83-5	Pentane, 2-methyl				
107-86-8	2-Butenal, 3-methyl				
107-87-9	2-Pentanone				
107-89-1	Butanal, 3-hydroxy				
107-92-6	Butanoic acid				
108-05-4	Acetate, vinyl (Acetic acid ethenyl ester)				
108-08-7	Pentane, 2,4-dimethyl	0.4	0.1	0.1	0.1
108-10-1	2-Pantanone, 4-methyl (Methyl isobutyl ketone, MIBK)			0.1	0.1
108-67-8	Benzene, 1,3,5-trimethyl (Mesitylene)				
108-87-2	Cyclohexane, methyl	1.1	0.3	0.2	0.2
108-88-3	Toluene (Methylbenzene)	0.1	0.1	0.1	0.1
108-95-2	Phenol	0.1	0.1		0.1
109-52-4	Pentanoic acid (Valeric acid)				
109-66-0	Pentane		0.6		
109-69-3	Butane, 1-chloro				
109-94-4	Formic acid, ethyl ester				
109-99-9	Furan, tetrahydro (THF)				
110-19-0	Acetic acid, 2-methylpropyl ester (Isobutyl acetate)				
110-27-0	Tetradecanoic acid, 1-methylethyl ester (Isopropyl Myristate)		0.1		
11028-42-5	Cedrene				
110-43-0	2-Heptanone				
110-54-3	Hexane		0.1	0.1	
110-62-3	Pentanal				
110-80-5	Ethanol, 2-ethoxy				
110-82-7	Cyclohexane		0.5	0.1	0.1
110-86-1	Pyridine				0.1
110-87-2	2H-Pyran, 3,4-dihydro				
110-93-0	5-Hepten-2-one, 6-methyl			0.1	
111-02-4	2,6,10,14,18,22-Tetracosahexaene, 2,6,10,15,19,23-hexamethyl				
111-14-8	Heptanoic acid				
111-27-3	1-Hexanol (N-Hexyl alcohol)				
111-65-9	Octane				
111-66-0	1-Octene				
111-70-6	1-Heptanol				
111-71-7	Heptanal (Heptaldehyde)			0.1	

Blanks VOC Data

111-76-2	Ethanol, 2-butoxy			
111-77-3	Ethanol, 2-(2-methoxyethoxy)			
111-84-2	Nonane			
111-87-5	1-Octanol			
1120-21-4	Undecane	0.1		
1120-24-7	1-Decanamine, N,N-dimethyl-			0.1
1120-36-1	1-Tetradecene			
112-05-0	Nonanoic acid			
1120-73-6	2-Cyclopenten-1-one, 2-methyl			
112-12-9	2-Undecanone			
1122-82-3	Cyclohexane, isothiocyanato			
112-31-2	Decanal	0.1	0.1	
112-34-5	Ethanol, 2-(2-butoxyethoxy)			0.1
112-40-3	Dodecane		0.1	
112-41-4	1-Dodecene			
112-44-7	Undecanal			
112-54-9	Dodecanal			
112-72-1	1-Tetradecanol			
112-88-9	1-Octadecene			
112-95-8	Eicosane			
1138-52-9	Phenol, 3,5-bis(1,1-dimethylethyl)-			
115-18-4	3-Buten-2-ol, 2-methyl			
119209-20-0	Decane, 5,6-dipropyl-			
1192-18-3	Cyclopentane, 1,2-dimethyl, cis			
1192-33-2	Cyclobutanone, 3,3-dimethyl-			
1195-79-5	Bicyclo[2.2.1]heptan-2-one, 1,3,3-trimethyl			
1196-01-6	Bicyclo[3.1.1]hept-3-en-2-one, 4,6,6-trimethyl-, (1S)-			
119-61-9	Benzophenone (Diphenyl methanone)			
122-03-2	Benzaldehyde, 4-(1-methylethyl)			
1222-05-5	Cyclopenta[g]-2-benzopyran, 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-			
122-99-6	Ethanol, 2-phenoxy			
123-05-7	Hexanal, 2-ethyl	0.1		
123-11-5	Benzaldehyde, 4-methoxy-			
123-35-3	1,6-Octadiene,7-methyl-3-methylene (Myrcene)			
123-51-3	1-Butanol, 3-methyl			
123-72-8	Butanal			
123-73-9	2-Butenal, (E)-			
124-07-2	Octanoic Acid			
124-10-7	Methyl tetradecanoate			
124-11-8	1-Nonene	0.1		
124-13-0	Octanal	0.1	0.1	
124-18-5	Decane	0.1	0.1	
124-19-6	Nonyl aldehyde (Nonanal)	0.1	0.1	
127-00-4	2-Propanol, 1-chloro			
127-18-4	Ethene, 1,1,2,2-tetrachloro (Tetrachloroethylene)			
127-51-5	à-Isomethyl ionone			
127-91-3	Pinene, á (6,6-Dimethyl-2-methylene-bicyclo[3.1.1]heptane)			
13150-81-7	Decane, 2,6-dimethyl			
13151-05-8	1-Heptene, 4-methyl	0.1		
13151-34-3	Decane, 3-methyl			
13151-35-4	Decane, 5-methyl			
13151-94-5	Cyclooctane, 1,2-dimethyl-			
13287-23-5	Heptadecane, 8-methyl-			
13466-78-9	3-Carene			
13475-82-6	Heptane, 2,2,4,6,6-pentamethyl			
13547-70-1	2-Butanone, 1-chloro-3,3-dimethyl-			
13674-84-5	Tris(1-chloro-2-propyl)phosphate			
137-32-6	1-Butanol, 2-methyl			
13851-11-1	Fenchyl acetate			
138-86-3	Limonene (Dipentene; 1-Methyl-4-(1-methylethyl)cyclohexene)			
140-11-4	Acetic acid, phenylmethyl ester (Benzyl acetate)			
140-67-0	Estragole (4-Allylanisole)			
141-63-9	Pentasiloxane, dodecamethyl			
141-78-6	Acetate, ethyl			
142-29-0	Cyclopentene			
142-62-1	Hexanoic acid			
142-82-5	Heptane	3.1	0.8	0.3
143-07-7	Dodecanoic acid			0.6
143-08-8	1-Nonanol			
14411-56-4	Benzene, 1-(1,1-dimethylethyl)-3-ethyl			
1462-03-9	Cyclopentanol, 1-methyl			
14686-13-6	2-Heptene, (E)			
1472-09-9	Cyclopropane, octyl			
1486-51-7	4-Benzoyloxybenzoic acid			

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1498-69-7	Anthracene, 9-butyl-			
1503-49-7	4-Cyanobenzophenone			
1560-88-9	Octadecane, 2-methyl-			
1560-89-0	Heptadecane, 2-methyl			
1560-92-5	Hexadecane, 2-methyl			
1560-93-6	Pentadecane, 2-methyl			
1560-95-8	Tetradecane, 2-methyl			
1560-96-9	Tridecane, 2-methyl			
1560-97-0	Dodecane, 2-methyl			
15798-64-8	2-Butenal, (Z)-			
15869-87-1	Octane, 2,2-dimethyl			
15869-94-0	Octane, 3,6-dimethyl			
15877-57-3	Pentanal, 3-methyl			
1632-73-1	Bicyclo[2.2.1]heptan-2-ol, 1,3,3-trimethyl			
1640-89-7	Cyclopentane, ethyl	0.4	0.1	0.1
16728-99-7	Naphthalene, 1,2,3,4,4a,7-hexahydro-1,6-dimethyl-4-(1-methylethyl)			
17302-11-3	Nonane, 3-ethyl			
17302-27-1	Nonane, 2,5-dimethyl			
17302-32-8	Nonane, 3,7-dimethyl			
17302-37-3	Decane, 2,2-dimethyl			
17312-53-7	Decane, 3,6-dimethyl			
17312-54-8	Decane, 3,7-dimethyl			
17312-57-1	Dodecane, 3-methyl			
17312-80-0	Undecane, 2,4-dimethyl			
17453-93-9	Dodecane, 5-methyl			
1757-42-2	Cyclopentanone, 3-methyl			
17603-57-5	4-Methyl-1,3-heptadiene (c,t)			
1809-10-5	Pentane, 3-bromo-			
1838-59-1	Formic acid, 2-propenyl ester			
18435-22-8	Tetradecane, 3-methyl	0.1		
18435-45-5	1-Nonadecene			
18491-15-1	2,2-Dimethyl-1-isopropyl-1,3-propanediol monoisobutyrate			
18794-77-9	Thiophene, 2-hexyl			
18968-23-5	Bicyclo[4.1.0]heptane, 3,7,7-trimethyl-, (1à, 3à, 6à)			
19095-23-9	Heptasiloxane, 1,1,3,3,5,5,7,7,9,9,11,11,13,13-tetradecamethyl			
19095-24-0	Octasiloxane, 1,1,3,3,5,5,7,7,9,9,11,11,13,13,15,15-hexadecamethyl	0.1		
1921-70-6	Pentadecane, 2,6,10,14-tetramethyl			
192823-15-7	Decane, 2,3,5,8-tetramethyl-			
2004-70-8	1,3-Pentadiene, (E)			
2021-28-5	Benzene propanoic acid, ethyl ester			
2040-96-2	Cyclopentane, propyl			
2051-30-1	Octane, 2,6-dimethyl			
20521-42-0	2-Butenal, 2-ethenyl			
20959-33-5	Heptadecane, 7-methyl-			
2116-65-6	Pyridine, 4-(phenylmethyl)-			
2142-73-6	Ethanone, 1-(2,5-dimethylphenyl)-			
21856-89-3	2-Hexanone, 6-hydroxy-			
2213-23-2	Heptane, 2,4-dimethyl			
2213-32-3	1-Pentene, 2,4-dimethyl			
2216-33-3	Octane, 3-methyl			
24081-57-0	Ketone, 1,5-dimethylbicyclo[2.1.0]pent-5-yl methyl			
2452-99-5	Cyclopentane, 1,2-dimethyl			
2453-00-1	Cyclopentane, 1,3-dimethyl			
24851-98-7	3-Oxo-2-pentylcyclopentane acetate, methyl (Methyl dihydrojasperate)			
24903-95-5	Bicyclo[3.1.1]heptan-2-one, 6,6-dimethyl-			
2497-25-8	2-Decenal, (Z)-			
25117-26-4	Hexadecane, 4-methyl-			
25117-31-1	Tridecane, 5-methyl			
25117-33-3	Pentadecane, 5-methyl			
2511-91-3	Cyclopropane, pentyl-			
2548-87-0	2-Octenal, (E)			
26730-20-1	Hexadecane, 7-methyl-			
2755-07-9	Undecane, 5-ethyl-5-propyl			
2758-18-1	2-Cyclopenten-1-one, 3-methyl			
2792-39-4	2,6-Octadiene, 2,6-dimethyl-			
2801-87-8	Pentadecane, 4-methyl			
28634-89-1	Bicyclo[3.1.0]hex-2-ene, 4-methyl-1-(1-methylethyl)-			
287-92-3	Cyclopentane	0.2	0.1	0.1
2882-96-4	Pentadecane, 3-methyl			
290-37-9	Pyrazine			
29066-34-0	Menthyl acetate			
291-64-5	Cycloheptane			
292-64-8	Cyclooctane			
295-17-0	Cyclotetradecane			

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2980-69-0	Undecane, 4-methyl				
3074-78-0	1-Heptene, 2,6-dimethyl-				
3208-16-0	Furan, 2-ethyl				
32210-23-4	4-tert-Butylcyclohexyl acetate (Vertenex)				
334-48-5	Decanoic acid				
3391-86-4	1-Octen-3-ol				
3404-61-3	1-Hexene, 3-methyl	0.3	0.1	0.1	
3452-07-1	1-Eicosene				
35953-53-8	2-Tetradecene, (E)-				
36653-82-4	1-Hexadecanol				
3741-00-2	Cyclopentane, pentyl				
37617-26-8	Cyclopropane, 1-methyl-2-octyl				
3796-70-1	5,9-Undecadien-2-one, 6,10-dimethyl-, (E)-				
3839-22-3	o-Cyanobenzoic acid				
38651-65-9	Bicyclo[3.1.1]heptan-2-one, 6,6-dimethyl-, (1R)-				
39029-41-9	Naphthalene, 1,2,3,4,4a,5,6,8a-octahydro-7-methyl-4-methylene				
39884-53-2	N-Nitroso-2-methyl-oxazolidine				
40117-45-1	Heptane, 2,2,6,6-tetramethyl				
4390-04-9	Nonane, 2,2,4,4,6,8,8-heptamethyl				
4458-32-6	1-Propanamine, N-ethyl-N-methyl				
464-48-2	Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimethyl-, (1S)				
464-49-3	Bicyclo[2.2.1]heptan-2-one, 1,7,7-trimethyl-, (1R)				
4695-62-9	Fenchone (Bicyclo[2.2.1]heptan-2-one, 1,3,3-trimethyl-)				
469-61-4	Cedrene, à				
470-40-6	Thujopsene				
4747-07-3	Hexane, 1-methoxy				
475-20-7	Longifolene				
4810-09-7	1-Heptene, 3-methyl				
483-75-0	Naphthalene, 1,2,4a,5,6,8a-hexahydro-4,7-dimethyl-1-(1-methyl				
489-40-7	1H-Cycloprop[e]azulene, 1a,2,3,4,4a,5,6,7b-octahydro-1,1,4,7-tetrahydro-				
4914-91-4	2-Pentene, 3,4-dimethyl-, (Z)-				
4942-47-6	1-Adamantaneacetic acid				
500-02-7	2-Cyclohexen-1-one, 4-(1-methylethyl)-				
50464-95-4	6-Methyl-6-(5-methylfuran-2-yl)heptan-2-one				
508-32-7	Tricyclo[2.2.1.02,6]heptane, 1,7,7-trimethyl-				
5131-66-8	2-Propanol, 1-butoxy				
513-35-9	2-Butene, 2-methyl				
515-13-9	Cyclohexane, 1-ethenyl-1-methyl-2,4-bis(1-methylethenyl), [1S-(
527-53-7	Benzene, 1,2,3,5-tetramethyl				
534-22-5	Furan, 2-methyl				
539-90-2	Butanoic acid, 2-methylpropyl ester				
540-97-6	Cyclohexasiloxane, dodecamethyl				
541-01-5	Heptasiloxane, hexadecamethyl	0.1	0.1	0.1	
541-02-6	Cyclopentasiloxane, decamethyl				
541-05-9	Cyclotrisiloxane, hexamethyl				
5413-60-5	4,7-Methano-1H-inden-6-ol, 3a,4,5,6,7,7a-hexahydro-, acetate				
542-28-9	2H-Pyran-2-one, tetrahydro-				
543-49-7	2-Heptanol				
5441-52-1	Cyclohexanol, 3,5-dimethyl				
544-63-8	Tetradecanoic acid				
544-76-3	Hexadecane (Cetane)	0.2	0.2	0.2	
546-28-1	1H-3a,7-Methanoazulene, octahydro-3,8,8-trimethyl-6-methylen-				
55030-62-1	Tridecane, 4,8-dimethyl				
55045-07-3	Dodecane, 2-methyl-8-propyl				
555-10-2	á-Phellandrene				
556-67-2	Cyclotetrasiloxane, octamethyl				
556-82-1	2-Buten-1-ol, 3-methyl				
562-49-2	Pentane, 3,3-dimethyl	0.2	0.1	0.1	0.1
56292-65-0	Dodecane, 2,5-dimethyl				
563-80-4	2-Butanone, 3-methyl				
56539-66-3	3-Methoxy-3-methylbutanol				
5655-61-8	Bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimethyl-, acetate, (1S-endo)-				
565-59-3	Pentane, 2,3-dimethyl	2.6	0.9	0.4	0.7
565-69-5	3-Pentanone, 2-methyl				
565-75-3	Pentane, 2,3,4-trimethyl				
565-77-5	2-Pentene, 2,3,4-trimethyl				
565-80-0	3-Pantanone, 2,4-dimethyl	0.1	0.1	0.1	
57-55-6	1,2-Propanediol (Propylene glycol)				
58-08-2	Caffeine				
585-34-2	Phenol, m-tert-butyl				
5875-45-6	Phenol, 2,5-bis(1,1-dimethylethyl)				
589-34-4	Hexane, 3-methyl	12.3	3.5	1.3	2.8
589-35-5	1-Pentanol, 3-methyl				
589-53-7	Heptane, 4-methyl				

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589-81-1	Heptane, 3-methyl	0.1			
590-35-2	Pentane, 2,2-dimethyl		0.1		0.1
590-73-8	Hexane, 2,2-dimethyl				
591-76-4	Hexane, 2-methyl	7.9	2.2	0.8	1.8
591-78-6	2-Hexanone				
592-13-2	Hexane, 2,5-dimethyl	0.1			
592-27-8	Heptane, 2-methyl				
592-41-6	1-Hexene				
592-76-7	1-Heptene	0.7	0.2	0.1	0.2
592-77-8	2-Heptene				
592-84-7	Formic acid, butyl ester				
593-45-3	Octadecane				
598-25-4	1,2-Butadiene, 3-methyl				
598-61-8	Cyclobutane, methyl		0.4		
5911-04-6	Nonane, 3-methyl				
6094-02-6	1-Hexene, 2-methyl-				
60-12-8	Phenylethyl Alcohol				
6032-29-7	2-Pentanol				
60-35-5	Acetamide				
6044-71-9	Dodecane, 6-methyl				
61141-83-1	Cyclobutane, 1,2-diethyl				
6117-97-1	Dodecane, 4-methyl				
6131-25-5	Heptane, 3-methyl	0.1			
616-45-5	2-Pyrrolidinone				
6165-40-8	Pentadecane, 7-methyl-		0.2		
6165-40-8-	Pentadecane, 7-methyl-		0.2		
617-78-7	Pentane, 3-ethyl	2.3	0.7	0.3	0.5
617-94-7	Benzinemethanol, à,à-dimethyl-				
620-14-4	Benzene, 1-ethyl-3-methyl				
62016-14-2	Octane, 2,5,6-trimethyl				
62016-33-5	Octane, 2,3,6-trimethyl				
62016-37-9	Octane, 2,4,6-trimethyl				
62016-49-3	Butane, 2-methoxy-3-methyl				
62108-31-0	Heptane, 4-ethyl-2,2,6,6-tetramethyl				
62108-33-2	3-Octyne, 5-methyl-				
62183-55-5	Octane, 3-ethyl-2,7-dimethyl				
62199-06-8	Heptane, 5-ethyl-2,2,3-trimethyl-				
622-96-8	Benzene, 1-ethyl-4-methyl (4-Ethyltoluene)				
624-16-8	4-Decanone				
625-23-0	2-Hexanol, 2-methyl				
6259-76-3	n-Hexyl salicylate				
626-93-7	2-Hexanol				
627-21-4	2-Pentyne				
628-32-0	Propane, 1-ethoxy-				
629-15-2	1,2-Ethanediol, diformate				
629-50-5	Tridecane				
629-62-9	Pentadecane	0.3			
629-78-7	Heptadecane				
629-80-1	Hexadecanal				
629-92-5	Nonadecane	0.2			
638-04-0	Cyclohexane, c-1,3-dimethyl				
638-36-8	Hexadecane, 2,6,10,14-tetramethyl-				
638-49-3	Formic acid, pentyl ester				
6418-41-3	Tridecane, 3-methyl				
6418-43-5	Hexadecane, 3-methyl				
6418-44-6	Heptadecane, 3-methyl				
64-19-7	Acetic acid	0.1			
645-13-6	Ethanone, 1-[4-(1-methylethyl)phenyl]-				
6508-77-6	6-Tridecene, (Z)-				
65-85-0	Benzoic Acid				
66-25-1	Hexanal		0.1		
67-63-0	2-Propanol (Isopropanol)				
67-64-1	Acetone		0.4	0.4	0.8
6765-39-5	1-Heptadecene				
6795-87-5	Butane, 2-methoxy				
68-12-2	Formamide, N,N-dimethyl				
6846-50-0	TXIB (2,2,4-Trimethyl-1,3-pentanediol diisobutyrate)				
6876-23-9	Cyclohexane, t-1,2-dimethyl				
689-67-8	5,9-Undecadien-2-one, 6,10-dimethyl-	0.1			
690-08-4	2-Pentene, 4,4-dimethyl, (E)				
693-54-9	2-Decanone				
6938-94-9	Hexanedioic acid, bis(1-methylethyl) ester				
6975-92-4	1-Hexene, 2,5-dimethyl				
6975-98-0	Decane, 2-methyl				

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7045-71-8	Undecane, 2-methyl			
71-23-8	1-Propanol (Propyl alcohol)	0.1	0.2	
71-36-3	1-Butanol (N-Butyl alcohol)			
71-41-0	1-Pentanol (N-Pentyl alcohol)			
7146-60-3	Octane, 2,3-dimethyl			
71579-69-6	3-Isopropoxy-1,1,1,7,7,7-hexamethyl-3,5,5-tris(trimethylsiloxy)te			
719-22-2	2,5-Cyclohexadiene-1,4-dione, 2,6-bis(1,1-dimethylethyl)	0.1	0.1	
7206-13-5	2-Dodecene, (E)			
7206-26-0	2-Dodecene, (Z)-			
7364-19-4	Benzene, 1-(1,1-dimethylethyl)-4-ethyl			
7446-09-5	Sulfur dioxide			
75-12-7	Formamide (Methanamide)			
75-18-3	Methyl sulfide (Methane, thiobis)			
756-02-5	1,4-Pentadiene, 2,3,3-trimethyl			
761-65-9	Formamide, N,N-dibutyl			
762-63-0	2-Pentene, 4,4-dimethyl-, (Z)-			
76-49-3	Bicyclo[2.2.1]Heptan-2-o-l,1,7,7-trimethyl,acetate,endo(bornyl ac			
766-94-9	Benzene, (ethenyl)oxy-			
77-53-2	1H-3a,7-Methanoazulen-6-ol, octahydro-3,6,8,8-tetramethyl-, [3f]			
77-68-9	2,2,4-Trimethyl-1,3-pentanediol monoisobutyrate			
77-73-6	4,7-Methano-1H-indene, 3a,4,7,7a-tetrahydro			
78-78-4	Butane, 2-methyl (Isopentane)	0.7	0.2	0.1
78-79-5	1,3-Butadiene, 2-methyl			
78-83-1	1-Propanol, 2-methyl (Isobutyl alcohol)			
78-84-2	Propanal, 2-methyl (Isobutanal)			
78-85-3	2-Propenal, 2-methyl			
78-89-7	1-Propanol, 2-chloro-			
78-93-3	2-Butanone (Methyl ethyl ketone, MEK)			
79-09-4	Propanoic acid			
79-10-7	2-Propenoic acid			
79-20-9	Acetate, methyl (Acetic acid, methyl ester)			
79-31-2	Propanoic acid, 2-methyl			
79-33-4	(S)-2-Hydroxypropanoic acid			
80-54-6	Lilial			
80-56-8	Pinene, à (2,6,6-Trimethyl-bicyclo[3.1.1]hept-2-ene)	0.1		
80-62-6	Methyl methacrylate (2-Propenoic acid, 2-methyl-, methyl ester)			
80655-44-3	Decahydro-4,4,8,9,10-pentamethylnaphthalene			
821-95-4	1-Undecene			
822-50-4	Cyclopentane, 1,2-dimethyl, trans			
85-41-6	1H-Isoindole-1,3(2H)-dione			
85-44-9	Phthalic anhydride (1,3-Isobenzofurandione)	0.2	0.2	
871-83-0	Nonane, 2-methyl			
872-05-9	1-Decene			
872-50-4	2-Pyrrolidinone, 1-methyl			
89-48-5	Menthyl acetate			
90346-45-5	Cyclobutene, 1,2,3,4-tetramethyl-			
91-20-3	Naphthalene			
91-64-5	Coumarin (2H-1-Benzopyran-2-one)			
922-63-4	2-Ethylacrolein			
92-51-3	1,1'-Bicyclohexyl			
930-27-8	Furan, 3-methyl			
930-60-9	4-Cyclopentene-1,3-dione			
93-58-3	Benzoic acid, methyl ester			
95-16-9	Benzothiazole	0.1	0.1	0.1
95-47-6	Xylene, ortho			
95-93-2	Benzene, 1,2,4,5-tetramethyl			
96-14-0	Pentane, 3-methyl	0.1		
96-37-7	Cyclopentane, methyl	0.9	0.3	0.1
96-48-0	2(3H)-Furanone,dihydro (Butyrolactone)			0.2
96-76-4	Phenol, 2,4-bis(1,1-dimethylethyl)-			
97-64-3	Propanoic acid, 2-hydroxy-, ethyl ester			
97-95-0	1-Butanol, 2-ethyl			
97-96-1	Butanal, 2-ethyl-			
98-01-1	Furfural (2-Furaldehyde)			
98-19-1	Benzene, 1-(1,1-dimethylethyl)-3,5-dimethyl			
98-56-6	Benzene, 1-chloro-4-(trifluoromethyl)-			
98-83-9	à-Methylstyrene (iso-Propenylbenzene; (1-Methylethenyl)benze			
98-86-2	Acetophenone (Ethanone, 1-phenyl)	0.1		
995-82-4	Hexasiloxane, 1,1,3,3,5,5,7,7,9,9,11,11-dodecamethyl-			
99-62-7	Benzene, 1,3-diisopropyl			

Appendix F

Units 90 & 91 Volatile Organic Compound Results

Unit 90 VOC Data

cas_number	chemical	510	16339-03AA SV1 (1.000) c 526156	16339-03AA SV2 (2.000) c 526157	16339-03AA SV3 (3.000) c 526158	16339-03AA SV4 (4.000) c 526159	16339-03AA SV5 (5.000) c 526160	16339-03AA SV6 (6.000) c 526161	16339-04AA SV1 (1.000) c 526167	16339-04AA SV2 (2.000) c 526168	16339-04AA SV3 (3.000) c 526169	16339-04AA SV4 (4.000) c 526170	16339-04AA SV5 (5.000) c 526171	16339-04AA SV6 (6.000) c 526172			
			Home Identification	Sample Location	Location Description	Start-End Times	Unit 90 Loc 1 2nd FLLR	Unit 90 Loc 2 1st FL BR	Unit 90 Loc 2 1st FL BR	Unit 90 Loc 2 1st FL BR	Unit 90 Loc 2 1st FL BR	Unit 90 Loc 2 1st FL BR	Test Home				
						11:35-15:35	15:35-19:30	19:30-23:45	23:45-03:50	03:50-07:35	07:35-12:40	11:35-15:35	15:35-19:25	19:25-23:45	23:45-03:30	03:30-07:35	07:35-12:15
	T VOC (ug/m3)		348	330	343	338	354	389	414	404	417	414	376	421			
100-18-5	Benzene, 1,4-bis(1-methylethyl)-																
100-41-4	Benzene, ethyl		2.7	2.4	2.7	2.2	2.8	2.8	3	2.5	2.7	2.8	3.3	3.6			
100-42-5	Styrene		4.9	4.1	4.7	4	4.5	4.4	5	4.4	4.6	4.4	4.5	4.7			
100-52-7	Benzaldehyde		4.2	4	3.4	2.8	3.2	3.2	3.6	3.4	3.5	3.4	4.5	3.7			
100131-87-	Propanal, 2-methyl-3-phenyl-																
100131-87-6	Propanal, 2-methyl-3-phenyl-																
100299-11-8	Butanoic acid, 3-methylbut-2-enyl ester		0.4	0.5	0.4		0.4	0.9	0.7	0.6	0.8	0.7	0.6	0.6			
100350-93-6	1,3,5-Triazine-2(1H)-thione, tetrahydro-5-(4-methoxyphenyl)																
1003-19-4	Cyclopropane, 1,1-diythyl-																
101-84-8	Benzene, 1,1'-oxibis- (Diphenyl ether)																
103-11-7	2-Propenoic acid, 2-ethylhexyl ester (Octyl acrylate)																
103-23-1	Hexanedioic acid, bis(2-hexylhexyl) ester																
103-65-1	Benzene, propyl																
103-70-8	Formamide, N-phenyl-																
104-55-2	Cinnamic aldehyde (2-Propenal, 3-phenyl-)																
104-76-7	1-Hexanol, 2-ethyl		8	7.2	8.1	6.7	7.8	7.9	9.1	8.3	8.6	8.4	8.5	9.1			
105-82-8	Propane, 1,1-lethynediene(bis oxy)bis																
10574-36-4	2-Hexene, 3-methyl-, (Z)																
10574-37-5	2-Pentene, 2,3-dimethyl		0.2	0.3													
106-42-3	Xylene (para and/or meta)		4.7		4.7	4.3	5.2	5.3	5.4	4.8	5.2	5.4	5.8	6.8			
106-46-7	Benzene, 1,4-dichloro		0.8	0.7	0.8	0.6	0.8	0.8	0.8	0.7	0.8	0.8	0.8	0.9			
107-02-8	Acrolein (2-Propenal)																
107-06-2	Ethane, 1,2-dichloro		0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1			
107-13-1	2-Propenenitrile (Acrylonitrile)																
107-21-1	1,2-Ethanediol (Ethylene glycol)		2.1			0.4	3	1.4		1.1	1.3	1.4	1				
107-83-5	Pentane, 2-methyl		0.3	0.3	0.3	0.2	0.4	0.3					0.3	0.4			
107-87-9	2-Pentanone		0.8	0.7	0.7	0.7	0.9	0.8	0.8	0.7	0.7	0.8	0.9	0.8			
107-92-6	Butanoic acid					0.2		0.3					0.3	0.3			
1070-66-2	2-n-Butylacrolein		0.5	0.4	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5			
1071-81-4	Hexane, 2,2,5,5-tetramethyl																
1072-05-5	Heptane, 2,6-dimethyl																
1074-17-5	Benzene, 1-methyl-2-propyl			1.6			1.5	1.6									
1074-43-7	Benzene, 1-methyl-3-propyl																
1074-55-1	Benzene, 1-methyl-4-propyl																
1075-22-5	1H-Indene, 2,3-dihydro-5,6-dimethyl																
108-08-7	Pentane, 2,4-dimethyl		0.3	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.3	0.3	1.4			
108-10-1	2-Pentanone, 4-methyl (Methyl isobutyl ketone, MIBK)		1.5	1.4	1.5	1.3	1.6	3.5	1.5	1.5	1.5	2.3	1.7	4			
108-38-3	Xylene (meta and/or para)																
108-65-6	1-Methoxy-2-propyl acetate		3.9	3.6	2.3	1.9	2.2	2.2	2.8	2.7	3	2.8	2.9	3			
108-67-8	Benzene, 1,3,5-trimethyl (Mesitylene)																
108-87-2	Cyclohexane, methyl		3.4	3.3	3.5	3	3.1	2.6	4.4	2.9	2.6	2.8	3	2.9			
108-88-3	Toluene (Methylbenzene)		6.5	5.3	6	5.5	7	6.4	7.2	5.8	6.1	6.2	6.9	7.6			
109-08-0	Pyrazine, methyl		0.4	0.3	0.4	0.3	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.5			
109-60-4	Acetic acid, propyl ester (Propyl acetate)		0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3			
109-66-0	Pentane		1.1	0.1													
109-68-2	2-Pentene																
110-43-0	2-Heptanone		2.1	1.9	2.2	1.8	2.1	2.1	2.4	2.3	2.3	2.3	2.4	2.5			
110-54-3	Hexane																
110-62-3	Pentanal		6.8	5.4	6.2	5.6	7.2	5.9	7.7	6.3	6.4	6.6	7.4	7			
110-80-5	Ethanol, 2-ethoxy		0.4	0.3	0.4	0.3	0.5	0.4	0.3	0.3	0.4	0.4	0.4	0.4			
110-82-7	Cyclohexane			1.2	0.9	1.4	1.5					1.2					
110-83-8	Cyclohexene																
110-86-1	Pyridine																
110-93-0	5-Hepten-2-one, 6-methyl																
111-15-9	Ethanol, 2-ethoxy, acetate (2-Ethoxyethyl acetate)		1	0.9	1	0.9	1	1	1	0.9	0.9	0.9	0.9	1.1			
111-27-3	1-Hexanol (N-Hexyl alcohol)																
111-46-6	Diethylene glycol (2,2'-oxybisethanol)																
111-65-9	Octane																
111-66-0	1-Octene																
111-70-6	1-Heptanol		2.7	2.5	2.7	2.3	2.5	2.5	2.7	2.6	2.7	2.6	2.6	2.6			
111-71-7	Heptanal (Heptaldehyde)																
111-76-2	Ethanol, 2-butoxy		6.6	6.2	7.1	5.7	6.6	6.5	7	6.8	7.5	7					
111-84-2	Nonane																
111-87-5	1-Octanol		3.1	3.2	3.5	3	3.3	3.5	3.8	3.6	3.8	3.7	3.6	4			
112-30-1	1-Decanol (N-Decyl alcohol)																
112-31-2	Decanal		0.8	0.9	0.9	1.1	0.8	0.9	1.1	1.2	1.1	1.1	0.8	1.1			
112-40-3	Dodecane																
112-21-4	Undecane		1.2	1.4	1	0.9	0.8	0.9	1.2	1.1	1.2	1.1	1.1	1.3			
112-41-4	1-Dodecene			3.2	3.9	4	3.5	3.4	4	4.3	4.3	4.5	4.2	3.8	4.5		
113-72-4	1,2,4-Methenoazulene, decahydro-1,5,5,8a-tetramethyl-, [1S-(1a,2a,3a,4a,5a,6a,7a,8a)]																
119-91-9	Furan, 2,3-dihydro																
1196-01-6	Bicyclo[3.1.1]hept-3-en-2-one, 4,6,6-trimethyl-, (1S)-		0.7	0.8	0.9	0.8	0.7										
122-02-3	Benzaldehyde, 4-(1-methylethyl)																
123-05-7	Hexanal, 2-ethyl																
123-11-5	Benzaldehyde, 4-methoxy-																
123-19-3	4-Heptanone																
123-35-3	1,6-Octadiene, 7-methyl-3-methylene (Myrcene)		1.8	1.9	2.1	1.8	2	2.1	2.3	2.2	2.1	2.1	2.2	2.6			
123-42-2	2-Pentanone, 4-hydroxy-4-methyl-																
123-51-3	1-Butanol, 3-methyl																
123-75-1	Pyrrolidine																
123-86-4	Acetate, butyl																
124-11-8	1-Nonene																
124-13-0	Octanal		5.5	5.1	5.8	4.7	5.2	5.2	6.6	6.1	6.3	5.9	6	6.5			
124-18-5	Decane																
124-19-6	Nonyl aldehyde (Nonanal)		10.4	9.9	10.9	8.5	9.2	10.2	11.8	11.3	11.8	10.6	10.2	11.6			
127-18-4	Ethene, 1,1,2,2-tetrachloro (Tetrachloroethylene)																
127-51-5	á-Isomethyl ionone																
127-91-3	Pinene, á (6,6-Dimethyl-2-methylene-bicyclo[3.1.1]heptane)		18.4	15.8	17.6	15.5	18.1	17.5	19.1	17	17.8	17	18	19.7			
128-37-0	Phenol, 2,6-bis(1,1-dimethylethyl)																
13151-04-7	1-Heptene, 5-methyl																
13151-34-3	Decane, 3-methyl		1.9	2	2.1	1.8	1.9	2	2.3	2.1	2.1	2	2	2.3			
13231-81-7	1-Heptanol, 3-methyl																
13287-23-5	Heptadecane, 8-methyl-																
13466-78-9	3-Carene																
13491-79-7	Cyclohexanol, 2-(1,1-dimethylethyl)																
135-01-3	Benzene, 1,2-diethyl																
138-86-3	Limonene (Dipentene; 1-Methyl-4-(1-methylethyl)cyclohexene)		13.7	14.6	15	14.9	13.1	16.8	20.1	19.2	20.3	18	16.7	18.7			
140-11-4	Acetoic acid, phenylmethyl ester (Benzyl acetate)		0.8		0.9	0.8	0.9	0.9	0.9	0.9	0.9	0					

Unit 90 VOC Data

Unit 09 VOC Data

Unit 91 VOC Data

cas number	chemical	510	16339-010AA SV1 (1.000) c 526137	16339-010AA SV2 (2.000) c 526138	16339-010AA SV3 (3.000) c 526139	16339-010AA SV4 (4.000) c 526140	16339-010AA SV5 (5.000) c 526141	16339-010AA SV6 (6.000) c 526142	16339-020AA SV1 (1.000) c 526144	16339-020AA SV2 (2.000) c 526145	16339-020AA SV3 (3.000) c 526146	16339-020AA SV4 (4.000) c 526147	16339-020AA SV5 (5.000) c 526148	16339-020AA SV6 (6.000) c 526149				
			Control Home															
			Home Identification	Sample Location	Location Description	Start-End Times	Unit 91 Loc 1	Unit 91 Loc 2	Unit 91 Loc 2	Unit 91 Loc 2	Unit 91 Loc 2	Unit 91 Loc 2	Unit 91 Loc 2					
						12:20-16:45	16:45-21:10	21:10-00:35	03:54-04:30	04:30-08:30	08:30-13:25	12:20-16:40	16:40-21:05	21:05-00:50	00:50-04:35	04:35-08:35	08:35-13:35	
	TVOC (ug/m3)		522	456	480	466	487	547	502	488	513	545	559	553				
100-18-5	Benzene, 1,4-bis(1-methylethyl)-							0.4							0.8			
100-41-4	Benzene, ethyl		16.2	14.7	15.8	19.4	22.6	22.9	16	13.8	13.7	17.6	20.4	20.3				
100-42-5	Styrene		2.8		3	2.8	2.8	2.9	2.5			2.5		2.5				
100-52-7	Benzaldehyde		4.9	4.6	4.9	4.6	4.9	5.3	5.3	4.8	4.6	5	5	5				
1000131-87-	Propanal, 2-methyl-3-phenyl-				0.1							0.6						
1000131-87-6	Propanal, 2-methyl-3-phenyl-				0.1							0.6						
1000299-11-6	Butanoic acid, 3-methylbut-2-enyl ester																	
1000350-93-6	1,3,5-Triazine-2(1H)-thione, tetrahydro-5-((4-methoxyphenyl)		0.2															
1003-19-6	Cyclopropane, 1,1-diethyl							0.4										
101-84-8	Benzene, 1,1'-oxybis-(Diphenyl ether)		0.2	0.1	0.1		0.1	0.2	0.2	0.2	0.4	0.3	0.4	0.3				
103-11-7	Propenoic acid, 2-ethylhexyl ester (Octyl acrylate)																	
103-23-1	Hexanedioic acid, bis(2-ethylhexyl) ester																	
103-65-1	Benzene, propyl		3	3	3.2	3.3	3.4	3.4	3.2	3	3	3.4	3.3	3.1				
103-70-8	Formamide, N-phenyl-											0.2	0.1	0.2				
104-55-2	Cinnamic aldehyde (2-Propenal, 3-phenyl-)							0.5										
104-76-7	1-Hexanol, 2-ethyl		5.3	5.1	5.3	5.2	5.2	5.9	5.5	5.2	5	5.4	5.6	5.6				
105-82-8	Propane, 1,1'-(ethylenedioxyl)bis				0.4	0.3	0.3	0.2	0.4		0.3	0.3	0.4					
10574-36-4	2-Hexene, 3-methyl-, (Z)																	
10574-37-5	2-Pentene, 2,3-dimethyl																	
106-42-3	Xylene (para and/or meta)		49.3	45.9	52.6	51	51.8	48.1	50.4	45.5	46.8	51.3	51	45.7				
106-46-7	Benzene, 1,4-dichloro		0.9	0.9	1	0.9	1	1.1	1.1	0.9	0.9	1	1	1				
107-02-8	Acrolein (2-Propenal)																	
107-06-2	Ethane, 1,2-dichloro																	
107-13-1	2-Propenenitrile (Acrylonitrile)																	
107-21-1	1,2-Ethanediol (Ethylene glycol)						1.8											
107-83-5	Pentane, 2-methyl		2.9	2.4	2.9	3.4	3.5	3.2	3	2.5	2.6	3.1	3.3	3				
107-87-9	2-Pentanone		1	0.9	1.1	1.1	1.1	1	1	0.9	1		1					
107-92-6	Butanoic acid																	
1070-66-2	2-n-Butylacrolein																	
1071-81-4	Hexane, 2,2,5,5-tetramethyl																	
1072-05-5	Heptane, 2,6-dimethyl						0.6	0.6	0.6			0.6						
1074-17-5	Benzene, 1-methyl-2-propyl		0.8			1.8	2.1		0.9	0.8	0.8	0.9	0.9	0.9				
1074-43-7	Benzene, 1-methyl-3-propyl		2.1		2	2.9	2.9	3.2	2.2	2.1		2.2		2.2				
1074-55-1	Benzene, 1-methyl-4-propyl		2.5	3.7	2.4	0.8												
1075-22-5	1H-Indene, 2,3-dihydro-5,6-dimethyl																	
108-08-7	Pentane, 2,4-dimethyl												1					
108-10-1	2-Pentanone, 4-methyl (Methyl isobutyl ketone, MIBK)		2.2	1.9	1.7	1.8	1.8	4.5	1.8	2	1.9	1.9	2	3.9				
108-38-3	Xylene (meta and/or para)																	
108-65-6	1-Methoxy-2-propyl acetate																	
108-67-8	Benzene, 1,3,5-trimethyl (Mesitylene)		3.6	3.4	3.6	3.7	3.6	3.9	3.7	3.4	3.3	3.7	3.7	3.6				
108-87-2	Cyclohexane, methyl		1	0.9	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.2	1.6	1.2				
108-88-3	Toluene (Methylbenzene)		42.8	38.7	45.2	43	44.5	39.5	43.4	38.1	39.9	43.1	42.5	37.5				
109-08-0	Pyrazine, methyl																	
109-60-4	Acetic acid, propyl ester (Propyl acetate)																	
109-66-0	Pentane		1.9	1.9	2.9	3.5	2.2	2	1.6	1.7	2.1	2.9	2.7	1.7				
109-68-2	2-Pentene		0.4			0.4	0.8	0.7	0.5	0.4	0.4		0.3	0.4				
110-43-0	2-Heptanone		1.9	1.9	2.1	2.1	2.1	2.2	2.1	2	2	2.1		2.1				
110-54-3	Hexane		8.1	5.4	5	9.3	8.6	7.7	5.5	6.4	4	5	7	8.6				
110-62-3	Pentanal		6.9	6.2	7.2	7.1	7.4	7.7	7.4	6.8	6.5	7.2	8.7	7.2				
110-80-5	Ethanol, 2-ethoxy					0.3												
110-82-7	Cyclohexane																	
110-83-8	Cyclohexene				0.1	0.2		0.3	0.2	0.1	0.1		0.2					
110-86-1	Pyridine				0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.2						
110-93-0	5-Hepten-2-one, 6-methyl																	
111-15-9	Ethanol, 2-ethoxy-, acetate (2-Ethoxyethyl acetate)																	
111-27-3	1-Hexanol (N-Hexyl alcohol)		4.7	4.5	5.1	4.9	4.9	5	5.1	4.8	4.7	5.1	5.2	4.9				
111-46-6	Diethylene glycol (2,2'-oxibisethanol)																	
111-65-9	Octane																	
111-66-0	1-Octene																	
111-70-6	1-Heptanol		3.2	3.1	3.3	3.2	3.2	3.5	3.8	3.7	3.5	3.8	3.9	3.9				
111-71-7	Heptanal (Heptaldehyde)																	
111-76-2	Ethanol, 2-butoxy		6.7	9	6.2	6.4	6.3	6.6	6.3	8.8	6	9.1	9.3	6.6				
111-84-2	Nonane		1.9	1.8	2.1	2.1	2.2	2.2	1.9	1.8	1.9	2.1		2				
111-87-5	1-Octanol																	
112-30-1	1-Decanol (N-Decyl alcohol)				2.2	0.3												
112-31-2	Decanal		0.9	0.7	0.5	0.4	0.6	0.8	0.7	0.9	0.9	0.9	0.9	1.1				
112-40-3	Dodecane				0.9					3.4	3.4	3.4	3.4	3.9				
112-41-4	1-Dodecene																	
112-21-4	Undecane		4.4	3.4	3.3	2.6	3.4	4.3	3.7	4	4.2	4.1	4.1	4.6				
113-72-8	1,2,4-Methenoazulene, decahydro-1,5,5,8a-tetramethyl-, [1S-(1a,2a,5a,8a)]-																	
111-99-7	Furan, 2,3-dihydro																	
1196-01-6	Bicyclo[3.1.1]hept-3-en-2-one, 4,6,6-trimethyl-, (1S)-																	
122-02-2	Benzaldehyde, 4-(1-methylethyl)																	
123-05-7	Hexanal, 2-ethyl																	
123-11-3	Benzaldehyde, 4-methoxy-																	
123-19-3	4-Heptanone																	
123-35-3	1,6-Octadiene,7-methyl-3-methylene (Myrcene)																	
123-42-2	2-Pentanone, 4-hydroxy-4-methyl-																	
123-51-3	1-Butanol, 3-methyl				0.2	0.2	0.2	0.2	0.2		0.2	0.2	0.2	0.2				
123-75-1	Pyridine																	
123-86-4	Acetate, butyl																	
124-11-8	1-Nonene																	
124-13-0	Octanal				5.1	5.1	5.4	4.9	5.1	5.4	5.8	5.3	5.5	5.4				
124-18-5	Decane																	
124-19-6	Nonyl aldehyde (Nonanal)				9.8	8.6	8	7.1	8.1	9.4	9.8	10.1	9.5	9.8				
127-18-4	Ethene, 1,1,2,2-tetrachloro (Tetrachloroethylene)					0.4				0.5	0.5	0.5	0.6					
127-51-5	á-Ethylene, á-Isomethyl ionone				0.5	0.3	0.2	0.1	0.2	0.4	0.2	0.4	0.7	0.6				
127-91-3	Pinenes, á, á-Dimethyl-2-methylene-bicyclo[3.1.1]heptane				15.7	14.2	15.3	15.5	16.2	17.3	16.3	14.8	16.4	16.9				
128-37-0	2,6-Di-tert-butyl-4-methylphenol (BHT)				0.1									0.1				
128-39-2	Phenol, 2-bis(1,1-dimethylethyl)																	
13151-04-7	1-Heptene, 5-methyl																	

Unit 91 VOC Data

Unit 91 VOC Data

620-14-4	Benzene, 1-ethyl-3-methyl	8.6	8	8.2	8.1	8.4	9.2	8.6	7.5	7.2	8	8.1	8.1
622-96-8	Benzene, 1-ethyl-4-methyl (4-Ethyltoluene)	6.4	5.8	6.2	6.2	6.4	6.9	6.4	5.8	5.6	6.2	6.3	6.3
62238-33-9	Cyclohexane, 1-ethyl-2-propyl												
6236-88-0	Cyclohexane, t-1-ethyl-4-methyl												
624-16-8	4-Decanone												
624-29-3	Cyclohexane, 1,4-dimethyl, cis	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.9	0.9	0.9	1	1.1
625-27-4	2-Pentene, 2-methyl	0.7	0.5	0.7	0.8	0.8	0.7						
626-38-0	2-Pentanol, acetate												
629-50-5	Tridecane	0.4	0.3	0.3	0.2		0.4	0.2	0.3	0.5	0.5	0.4	0.5
629-59-4	Tetradecane	0.1	0.2										
629-62-9	Pentadecane	0.2	0.1										
629-78-7	Heptadecane	0.1	0.1										
629-82-3	Octane, 1,1'-oxybis	0.2	0.3										
629-92-5	Nonadecane	0.1											
638-04-0	Cyclohexane, c-1,3-dimethyl												
641-17-5	Ethanol							0.1	0.3	0.3	0.3	0.3	0.3
641-18-6	Formic acid (Methanoic acid)												0.1
641-19-7	Acetic acid	1.7	1.7	2.1	3.3	4	3.5	3.6	3.5	4.9	4.8	2.1	3.6
6418-43-5	Hexadecane, 3-methyl												
646-04-8	2-Pentene, (E)-		0.4	0.3									
66-25-1	Hexanal	22.4	21.4	23.7	21.7	22.4	21.4	23.4	22.1	22.4	23.9	22.8	21.2
6682-71-9	1H-Indene, 2,3-dihydro-4,7-dimethyl			0.2	0.2	0.3	0.4	0.3	0.4	0.4			
67-63-0	2-Propanol (Isopropanol)						2						
67-64-1	Acetone												
68284-24-2	Cycloheptane, 1,3,5-tris(methylene)-	3											
6846-50-0	TXB (2,2,4-Trimethyl-1,3-pentanediol diisobutyrate)	0.6	0.3	0.4	0.2	0.3	0.6	0.3	0.5	0.9	0.8	0.7	0.6
6876-23-9	Cyclohexane, t-1,2-dimethyl							1.1	1.1	1	1.1	1.3	1.1
690-08-4	2-Pentene, 4,4-dimethyl, (E)												
691-38-3	2-Pentene, 4-methyl, (Z)												
693-89-0	Cyclopentene, 1-methyl												
6975-98-0	Decane, 2-methyl	0.7	0.6	0.7	0.8	0.8	0.9	0.8	0.6	0.6	0.7	0.8	0.7
71-36-3	1-Butanol (N-Butyl alcohol)	3.1	3.5	4.4	5	3.4	3	2.4	3.1	2.9	3.9	4.7	3
71-41-0	1-Pentanol (N-Pentyl alcohol)	4.1	4	4.5	4.3	4.3	4.4	4.5	4.4	4.3	4.6	4.7	4.3
71-43-2	Benzene	6.9	5.5	6.7	6.7	6.9	6.9	7	6	5.7	6.3	9.5	6.2
7146-60-3	Octane, 2,3-dimethyl								0.6	0.6	0.6	0.7	0.7
719-22-2	2,5-Cyclohexadiene-1,4-dione, 2,6-bis(1,1-dimethyl ethyl)												
7319-23-5	3-Hexen-2,5-diol												
7364-19-4	Benzene, 1-(1,1-dimethylethyl)-4-ethyl	0.6			0.2				0.7				
7379-12-6	3-Hexanone, 2-methyl												
7452-79-1	Butanoic acid, 2-methyl-, ethyl ester	0.8	0.8	1									
75-15-0	Carbon disulfide												
76-49-3	Bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimethyl-, acetate, endo (Bornyl acetate)					0.1							
763-93-9	3-Hexen-2-one												
764-13-6	2,4-Hexadiene, 2,5-dimethyl												
768-49-0	1-Phenyl-1-propene, 2-methyl	1.7	1.5	0.8			1.8	0.9	1.6	1.6	1.7	1.7	1.7
7688-21-3	2-Hexene, (Z)	0.7	0.6	0.7	0.6	0.8	0.8	0.7	0.6	0.6	0.7	0.7	0.6
77-68-9	2,2,4-Trimethyl-1,3-pentanediol monoisobutyrate	0.8	0.6	0.3	0.2	0.3	0.7	0.4	0.5	1.6	1.3	1.3	1.4
77-73-6	4,7-Methano-1H-indene, 3a,4,7-tetrahydro												
7779-30-8	1-Penten-3-one, 1-(2,6,6-trimethyl-2-cyclohexen-1-yl)-												0.1
78-59-1	2-Cyclohexen-1-one, 3,5,5-trimethyl-												
78-78-4	Butane, 2-methyl (Isopentane)	1	0.9	1.3	1.4	0.7	0.9	0.9	0.8	0.8	1.1	0.9	0.8
78-79-5	1,3-Butadiene, 2-methyl	0.9	1	1.4	0.6	0.7	1.1	0.8	0.6	0.8	0.9	0.6	
78-83-1	1-Propanol, 2-methyl (Isobutyl alcohol)	0.5	0.6	0.8	1.1	0.5	0.4	0.3	0.5	0.4	0.6	0.7	0.4
78-84-2	Propanal, 2-methyl (Isobutanal)	2.1	2	2.4	2.5	2.5	2.3	2.3	2.4	2	2.1	2.3	2.2
78-85-3	2-Propenal, 2-methyl												
78-93-3	2-Butanone (Methyl ethyl ketone, MEK)	1.5	1.8	2	2.2							2.1	
78-94-4	Methyl vinyl ketone (3-Buten-2-one)						0.3						
79-09-4	Propanoic acid	0.2							0.2	0.3	0.4		0.3
79-20-9	Acetate, methyl (Acetic acid, methyl ester)												
79-31-2	Propanoic acid, 2-methyl												
80-54-6	Lilac												
80-56-8	Pinen, a (2,6,6-trimethyl-bicyclo[3.1.1]hept-2-ene)	46.8	44.8	52.4	51.6	53.3	47.9	49.9	47.2	50.1	54	54.3	47.9
80-62-6	Methyl methacrylate (2-Propenoic acid, 2-methyl-, methyl ester)	0.3	0.4	0.4	0.4	0.4	36.4		0.3	0.4	0.4	0.4	29.2
81-95-4	1-Undecene												
824-90-8	1-Phenyl-1-butene	1.5	1.2	1.2	1.1	1.3	1.5						
85-44-9	Phthalic anhydride (1,3-Isobenzofuranone)	0.3	0.2	0.2		0.2	0.2	0.2					
870-82-6	Eucalyptol												
871-83-0	Nonane, 2-methyl				0.6								
874-35-1	1H-Indene, 2,3-dihydro-5-methyl												
89-74-7	Ethanone, 1-(2,4-dimethylphenyl)-												
90-12-0	Naphthalene, 1-methyl	0.6							0.1				
91-17-8	Naphthalene, decahydro-	2.4	1.4	1.6		1.6	2.7						
91-20-3	Naphthalene	1.9	1.6	1.4	1.1	1.5	1.9	1.6	1.8	1.7	1.9	2	2
91-57-6	Naphthalene, 2-methyl	0.2	0.1			0.1	0.2	0.5	0.1	1.1	0.9	1	
92-52-4	1,1-Biphenyl												
922-62-3	2-Pentene, 3-methyl, cis			0.3	0.4	0.5	0.5	0.5	1.1	0.9	0.9	1.2	1.2
922-63-4	2-Ethylacrolein	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
92618-89-8	Acetic acid, 1,7,7-trimethyl-bicyclo[2.2.1]hept-2-yl ester												
930-18-7	Cyclop propane, 1,2-dimethyl, cis	0.6	0.6	1	1.6	0.2					1	1	
930-27-8	Furan, 3-methyl												
933-12-0	Cyclohexene, 3,3,5-trimethyl												
934-80-5	Benzene, 4-ethyl-1,2-dimethyl	1.3	1.2	1.8	0.9	1.8	1.4	1.3	1.3	1.3	1.3	1.3	1.5
95-16-9	Benzothiazole	0.9	0.7	0.6	0.7	0.8	0.7	0.9	0.8	0.8	0.8	0.8	0.8
95-47-6	Xylene, ortho	13.4	11.9	12.6	12.8	13.2	13.8	13.1	11.3	11	12.3	12.4	12.2
95-93-2	Benzene, 1,2,4,5-tetramethyl	2.9	2.5	2.6	2.4	2.6	2.9	0.7	2.6	2.6	2.9	2.9	2.9
96-14-0	Pentane, 3-methyl	1.9	1.7	2.1	2.1	2.3	2.1	2	1.7	1.9	2.2	2.2	2
96-29-7	2-Butanone, oxime	0.4											
96-37-7	Cyclopropane, methyl	1.3	1.2	1.5	1.6	1.7	1.6	1.3	1.2	1.2	1.5	1.8	1.4
96-48-0	2(3H)-Furanone, dihydro (Butyrolactone)												
97-72-3	Propanoic acid, 2-methyl-, anhydride												
98-00-0	2-Furamethanol												
98-01-1	Furfural (2-Furaldehyde)	2.3	2.1	2.2	2.6	2.5	2.6	2.2	2.4	3.3	2.6	2.7	2.5
98-55-3	3-Cyclohexene-1-methanol, a,4-trimethyl												
98-82-8	Benzene, 1-methylethyl (Cumene)												
99-71-8	Phenol, 4-(1-methylpropyl)-												
995-82-4	Hexa siloxane, 1,1,3,3,5,5,7,7,9,9,11,11-dodecamethyl-							0.2					

Outside VOC Data

cas_number	chemical	510 SV1 (1.000) c_526174	16339-050AA SV2 (2.000) c_526175	16339-050AA SV3 (3.000) c_526176	16339-050AA SV4 (4.000) c_526177	16339-050AA SV5 (5.000) c_526178	16339-050AA SV6 (6.000) c_526179
Outside Air							
	Home Identification Sample Location Location Description Start-End Times	Unit 90 Loc 3 Outside 11:35-15:35	Unit 90 Loc 3 Outside 15:35-19:35	Unit 90 Loc 3 Outside 19:35-23:55	Unit 90 Loc 3 Outside 23:55-03:45	Unit 90 Loc 3 Outside 03:45-07:45	Unit 90 Loc 3 Outside 07:45-12:45
	TVOC (ug/m3)						
100-18-5	Benzene, 1,4-bis(1-methylethyl)-		8.1	6.6	9.2	14.7	11.6
100-41-4	Benzene, ethyl		0.1	0.1	0.1	0.2	0.3
100-42-5	Styrene		0.1		0.1		0.1
100-52-7	Benzaldehyde		0.1	0.3	0.1	0.2	0.1
1000131-87-	Propanal, 2-methyl-3-phenyl-						
1000131-87-6	Propanal, 2-methyl-3-phenyl-						
1000299-11-8	Butanoic acid, 3-methylbut-2-enyl ester						
1000350-93-6	1,3,5-Triazine-2(1H)-thione, tetrahydro-5-[(4-methoxyphenyl)						
1003-19-6	Cyclopropane, 1,1-diethyl						
101-84-8	Benzene, 1,1'-oxybis- (Diphenyl ether)						
103-11-7	2-Propenoic acid, 2-ethylhexyl ester (Octyl acrylate)						
103-23-1	Hexanedioic acid, bis(2-ethylhexyl) ester						
103-65-1	Benzene, propyl		0.1			0.1	0.2
103-70-8	Formamide, N-phenyl-						
104-55-2	Cinnamic aldehyde (2-Propenal, 3-phenyl-)						
104-76-7	1-Hexanol, 2-ethyl				0.2		
105-82-8	Propane, 1,1'-(Ethylenesubstitutedoxy)bis						
10574-36-4	2-Hexene, 3-methyl-, (Z)						
10574-37-5	2-Pentene, 2,3-dimethyl						
106-42-3	Xylene (para and/or meta)		0.2	0.1		0.6	0.8
106-46-7	Benzene, 1,4-dichloro					0.1	0.1
107-02-8	Acrolein (2-Propenal)					0.1	
107-06-2	Ethane, 1,2-dichloro						
107-13-1	2-Propenenitrile (Acrylonitrile)						0.1
107-21-1	1,2-Ethanediol (Ethylene glycol)						
107-83-5	Pentane, 2-methyl					0.4	0.5
107-87-9	2-Pentanone						
107-92-6	Butanoic acid						
1070-66-2	2-n-Butylacrolein						
1071-81-4	Hexane, 2,2,5,5-tetramethyl						
1072-05-5	Heptane, 2,6-dimethyl						
1074-17-5	Benzene, 1-methyl-2-propyl						
1074-43-7	Benzene, 1-methyl-3-propyl						
1074-55-1	Benzene, 1-methyl-4-propyl						
1075-22-5	1H-Indene, 2,3-dihydro-5,6-dimethyl						
108-08-7	Pentane, 2,4-dimethyl						
108-10-1	2-Pentanone, 4-methyl (Methyl isobutyl ketone, MIBK)				0.1		1.9
108-38-3	Xylene (meta and/or para)						
108-65-6	1-Methoxy-2-propyl acetate				0.1		
108-67-8	Benzene, 1,3,5-trimethyl (Mesitylene)					0.3	0.4
108-87-2	Cyclohexane, methyl		0.1		0.1	0.3	0.1
108-88-3	Toluene (Methylbenzene)		0.6	0.4	0.7	1.2	1.9
109-08-0	Pyrazine, methyl						
109-60-4	Acetic acid, propyl ester (Propyl acetate)						
109-66-0	Pentane					0.6	0.9
109-68-2	2-Pentene						
110-43-0	2-Heptanone				0.1		
110-54-3	Hexane		0.2	0.1	0.2	0.3	0.4
110-62-3	Pentanal				0.2		
110-80-5	Ethanol, 2-ethoxy						
110-82-7	Cyclohexane					0.1	
110-83-8	Cyclohexene						
110-86-1	Pyridine						
110-93-0	5-Hepten-2-one, 6-methyl				0.2	0.6	
111-15-9	Ethanol, 2-ethoxy-, acetate (2-Ethoxyethyl acetate)						
111-27-3	1-Hexanol (N-Hexyl alcohol)						
111-46-6	Diethylene glycol (2,2'-oxybisethanol)						
111-65-9	Octane					0.1	0.1
111-66-0	1-Octene				0.2	0.1	0.1
111-70-6	1-Heptanol						0.2
111-71-7	Heptanal (Heptaldehyde)				0.1	0.2	0.1
111-76-2	Ethanol, 2-butoxy						
111-84-2	Nonane					0.1	0.1
111-87-5	1-Octanol						
112-30-1	1-Decanol (N-Decyl alcohol)						
112-31-2	Decanal					0.1	0.1
112-40-3	Dodecane						
112-41-4	1-Dodecene						
1120-21-4	Undecane					0.1	
1137-12-8	1,2,4-Methenoazulene, decahydro-1,5,5,8a-tetramethyl-, [1S-(1						
1191-99-7	Furan, 2,3-dihydro						
1196-01-6	Bicyclo[3.1.1]hept-3-en-2-one, 4,6,6-trimethyl-, (1S)-						
122-03-2	Benzaldehyde, 4-(1-methylethyl)						
123-05-7	Hexanal, 2-ethyl					0.1	0.1
123-11-5	Benzaldehyde, 4-methoxy-						
123-19-3	4-Heptanone						
123-35-3	1,6-Octadiene,7-methyl-3-methylene (Myrcene)						
123-42-2	2-Pentanone, 4-hydroxy-4-methyl-						

Outside VOC Data

123-51-3	1-Butanol, 3-methyl					
123-75-1	Pyrrolidine					
123-86-4	Acetate, butyl	0.1	0.1			
124-11-8	1-Nonene	0.4	0.2	0.2		
124-13-0	Octanal		0.1	0.3	0.2	0.2
124-18-5	Decane					
124-19-6	Nonyl aldehyde (Nonanal)		0.1	0.4	0.2	
127-18-4	Ethene, 1,1,2,2-tetrachloro (Tetrachloroethylene)	0.1			0.1	0.1
127-51-5	à-Isomethyl ionone					
127-91-3	Pinene, á (6,6-Dimethyl-2-methylene-bicyclo[3.1.1]heptane)		0.1	0.2	0.2	0.1
128-37-0	2,6-Di-tert-butyl-4-methylphenol (BHT)					
128-39-2	Phenol, 2,6-bis(1,1-dimethylethyl)					
13151-04-7	1-Heptene, 5-methyl			0.1		0.1
13151-34-3	Decane, 3-methyl					
13231-81-7	1-Hexanol, 3-methyl					
13287-23-5	Heptadecane, 8-methyl-					
13466-78-9	3-Carene					
13491-79-7	Cyclohexanol, 2-(1,1-dimethylethyl)					
135-01-3	Benzene, 1,2-diethyl					
138-86-3	Limonene (Dipentene; 1-Methyl-4-(1-methylethyl)cyclohexene)	0.1	0.3	0.2	0.2	0.1
140-11-4	Acetic acid, phenylmethyl ester (Benzyl acetate)					
140-67-0	Estragole (4-Allylanisole)					
141-63-9	Pentasiloxane, dodecamethyl					
141-78-6	Acetate, ethyl					
141-79-7	3-Penten-2-one, 4-methyl		0.1	0.1		
141-93-5	Benzene, 1,3-diethyl					
142-62-1	Hexanoic acid					
142-82-5	Heptane	0.3	0.2		0.9	0.3
143-08-8	1-Nonanol					0.2
14411-56-4	Benzene, 1-(1,1-dimethylethyl)-3-ethyl					
1455-20-5	Thiophene, 2-butyl					
14686-13-6	2-Heptene, (E)					
1515-79-3	5,5-Dimethyl-1,3-hexadiene					
1528-25-2	4-Heptanone, 3-ethyl					
15356-70-4	Cyclohexanol, 5-methyl-2-(1-methylethyl)-, (1à,2á,5à)-(+/-) (Me)					
1576-87-0	t-2-Pentenal					
15869-92-8	Octane, 3,4-dimethyl					
15870-10-7	1-Heptene, 2-methyl					
1595-16-0	Benzene, 1-methyl-4-(1-methylpropyl)-					
1632-73-1	Bicyclo[2.2.1]heptan-2-ol, 1,3,3-trimethyl					
16325-63-6	2,4,4-Trimethyl-1-pentanol	0.1			0.2	
1640-89-7	Cyclopentane, ethyl					
16491-15-9	Cyclopentene, 1,5-dimethyl					
16746-86-4	2,3-Dimethyl-1-hexene					
1678-97-3	Cyclohexane, 1,2,3-trimethyl					
16982-00-6	Benzene, 1-methyl-4-(1,2,2-trimethylcyclopentyl)-, (R)-					
17066-67-0	Naphthalene, decahydro-4a-methyl-1-methylene-7-(1-methylethyl)					
17081-21-9	Propane, 1,3-dimethoxy-					
17302-32-8	Nonane, 3,7-dimethyl					
17312-57-1	Dodecane, 3-methyl					
17374-18-4	Tetrahydro-1,3-oxazine-2-thione					
17498-71-4	Benzene, (2-methyl-1-methylenepropyl)-					
1750-51-2	Naphthalene, decahydro-1,6-dimethyl-					
1758-88-9	Benzene, 2-ethyl-1,4-dimethyl					
17851-27-3	Benzene, 1-ethyl-2,4,5-trimethyl					
1795-15-9	Cyclohexane, octyl					
18479-58-8	7-Octen-2-ol, 2,6-dimethyl					
18491-15-1	2,2-Dimethyl-1-isopropyl-1,3-propanediol monoisobutyrate					
18669-52-8	1,4-Hexadiene, 2,3-dimethyl			0.1		
18794-77-9	Thiophene, 2-hexyl					
19037-72-0	Cyclopentene, 4,4-dimethyl-					
19549-87-2	1-Heptene, 2,4-dimethyl					
20027-77-4	Naphthalene, 1,2,3,4-tetrahydro-5,6-dimethyl-					
20279-29-2	Phenyl isobutyrate					
203-65-6	5H-Benz[def]carbazole					
2039-89-6	Styrene, 2,5-dimethyl					
2142-73-6	Ethanone, 1-(2,5-dimethylphenyl)-					
21693-51-6	Naphthalene, 1,2,3,4-tetrahydro-1,5,8-trimethyl-					
2207-03-6	Cyclohexane, 1,3-dimethyl, trans					
2207-04-7	Cyclohexane, 1,4-dimethyl, trans					
2213-23-2	Heptane, 2,4-dimethyl					
2213-32-3	1-Pentene, 2,4-dimethyl					
2216-30-0	Heptane, 2,5-dimethyl					
2234-20-0	Styrene, 2,4-dimethyl					
2402-06-4	Cyclopropane, t-1,2-dimethyl					
2437-56-1	1-Tridecene					
2452-99-5	Cyclopentane, 1,2-dimethyl			0.1		
2453-00-1	Cyclopentane, 1,3-dimethyl					
24720-09-0	á-Damascene (2-Buten-1-one, 1-(2,6,6-trimethyl-2-cyclohexen-					
2532-58-3	Cyclopentane, 1,3-dimethyl, cis					
27522-11-8	1-Pentanol, 2-ethyl					
2809-64-5	Naphthalene, 1,2,3,4-tetrahydro-5-methyl					
287-92-3	Cyclopentane	0.6	0.4	0.2		0.3
292-64-8	Cyclooctane	0.3				
2958-76-1	Naphthalene, decahydro-2-methyl					
3208-16-0	Furan, 2-ethyl					
3221-61-2	Octane, 2-methyl					
32210-23-4	4-tert-Butylcyclohexyl acetate (Vertenex)					

Outside VOC Data

3333-13-9	Benzene, 1-methyl-4-(2-propenyl)					
3404-65-7	3-Methyl-3-hexene,c&t					
3522-94-9	Hexane, 2,2,5-trimethyl					
3524-73-0	1-Hexene, 5-methyl					
35507-09-6	7-Hexadecene, (Z)-					
3853-83-6	1H-Benzocycloheptene, 2,4a,5,6,7,8,9,9a-octahydro-3,5,5-trime					
3856-25-5	Copaene					
3944-36-3	2-Propanol, 1-(1-methylethoxy)					
40117-45-1	Heptane, 2,2,6,6-tetramethyl					
4050-45-7	2-Hexene, (E)					
41436-42-4	2-Buten-1-one, 1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-					
4175-54-6	Naphthalene, 1,2,3,4-tetrahydro-1,4-dimethyl					
4218-48-8	Benzene, 1-ethyl-4-(1-methylethyl)					
4390-04-9	Nonane, 2,2,4,4,6,8,8-heptamethyl					
464-17-5	Bicyclo[2.2.1]hept-2-ene, 1,7,7-trimethyl					
464-45-9	L-borneol (Bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimethyl-, (1S-endo)-					
469-61-4	Cedrene, à					
470-40-6	Thujopsene					
470-82-6	Eucalyptol					
4706-90-5	Benzene, 1,3-dimethyl-5-(1-methylethyl)					
475-20-7	Longifolene					
4798-45-2	1-Penten-3-ol, 4-methyl-					
488-23-3	Benzene, 1,2,3,4-tetramethyl					0.1
491-01-0	Cyclohexanol, 5-methyl-2-(1-methylethyl)-, (1à,2à,5á)-					
491-02-1	Cyclohexanol, 5-methyl-2-(1-methylethyl)-, (1à,2à,5á)-					
4923-78-8	Cyclohexane, 1-ethyl-2-methyl, trans					
4926-78-7	Cyclohexane, c-1-ethyl-4-methyl					
493-02-7	t-Decahydronaphthalene					
496-11-7	Indane					0.1
4994-16-5	4-Phenylcyclohexene					
50464-95-4	6-Methyl-6-(5-methylfuran-2-yl)heptan-2-one					
513-35-9	2-Butene, 2-methyl					
5131-66-8	2-Propanol, 1-butoxy					
51655-64-2	Nonane, 3-methylene					
52253-93-7	Homomenthyl salicylate					
527-53-7	Benzene, 1,2,3,5-tetramethyl					0.1
540-97-6	Cyclohexasiloxane, dodecamethyl					
541-02-6	Cyclopentasiloxane, decamethyl					
5413-60-5	4,7-Methano-1H-inden-6-ol, 3a,4,5,6,7,7a-hexahydro-, acetate					
542-28-9	2H-Pyran-2-one, tetrahydro-				0.1	
544-76-3	Hexadecane (Cetane)					
554-12-1	Propanoic acid, methyl ester					0.1
555-10-2	à-Phellandrene					
556-67-2	Cyclotetrasiloxane, octamethyl			0.1		0.1
560-21-4	Pentane, 2,3,3-trimethyl	0.1	0.1	0.1	0.3	0.2
563-46-2	1-Butene, 2-methyl					
563-79-1	2-Butene, 2,3-dimethyl					
565-59-3	Pentane, 2,3-dimethyl				0.3	
565-69-5	3-Pentanone, 2-methyl					
565-75-3	Pentane, 2,3,4-trimethyl	0.1			0.2	0.1
565-80-0	3-Pentanone, 2,4-dimethyl			0.1		0.1
5655-61-8	Bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimethyl-, acetate, (1S-endo)-					
57-55-6	1,2-Propanediol (Propylene glycol)					
5794-03-6	(+)-Camphene			0.1		
585-34-2	Phenol, m-tert-butyl					
586-62-9	Cyclohexene, 1-methyl-4-(1-methylethylidene)					
5875-45-6	Phenol, 2,5-bis(1,1-dimethylethyl)					
589-34-4	Hexane, 3-methyl	0.4	0.3	0.1	2	0.4
589-38-8	3-Hexanone (Ethyl propyl ketone)					0.3
589-43-5	Hexane, 2,4-dimethyl					0.1
589-81-1	Heptane, 3-methyl				0.1	0.1
591-76-4	Hexane, 2-methyl	0.7	0.5		1.7	0.5
591-78-6	2-Hexanone					
591-93-5	1,4-Pentadiene					
5911-04-6	Nonane, 3-methyl					
592-13-2	Hexane, 2,5-dimethyl				0.1	
592-27-8	Heptane, 2-methyl					0.1
592-76-7	1-Heptene	0.2	0.1		0.2	0.2
592-77-8	2-Heptene					
593-45-3	Octadecane					
5989-08-2	Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6,9-tetramethyl-					
6004-38-2	4,7-Methano-1H-indene, octahydro					
6094-02-6	1-Hexene, 2-methyl-					
611-14-3	Benzene, 1-ethyl-2-methyl (2-Ethyltoluene)					0.1
6131-25-5	Heptane, 3-methyl				0.1	0.1
616-12-6	2-Pentene, 3-methyl, (E)				0.3	
617-78-7	Pentane, 3-ethyl					
617-94-7	Benzinemethanol, à,à-dimethyl-					
620-14-4	Benzene, 1-ethyl-3-methyl	0.1		0.1	0.2	0.4
622-96-8	Benzene, 1-ethyl-4-methyl (4-Ethyltoluene)	0.1		0.1	0.2	0.3
62238-33-9	Cyclohexane, 1-ethyl-2-propyl					
6236-88-0	Cyclohexane, t-1-ethyl-4-methyl					
624-16-8	4-Decanone					
624-29-3	Cyclohexane, 1,4-dimethyl, cis					
625-27-4	2-Pentene, 2-methyl					
626-38-0	2-Pentanol, acetate					
629-50-5	Tridecane					
629-59-4	Tetradecane					

Outside VOC Data

629-62-9	Pentadecane						
629-78-7	Heptadecane						
629-82-3	Octane, 1,1'-oxybis						
629-92-5	Nonadecane						
638-04-0	Cyclohexane, c-1,3-dimethyl						
64-17-5	Ethanol	0.1					0.1
64-18-6	Formic acid (Methanoic acid)		0.1				
64-19-7	Acetic acid	0.3	0.7	0.7	0.2		0.3
6418-43-5	Hexadecane, 3-methyl						
646-04-8	2-Pentene, (E)-						
66-25-1	Hexanal	0.2	0.2	0.4	0.1	0.1	0.2
6682-71-9	1H-Indene, 2,3-dihydro-4,7-dimethyl						
67-63-0	2-Propanol (Isopropanol)						1.4
67-64-1	Acetone	1.3	0.8	0.7			2.4
68284-24-2	Cycloheptane, 1,3,5-tris(methylene)-						
6846-50-0	TXIB (2,2,4-Trimethyl-1,3-pantanediol diisobutyrate)						
6876-23-9	Cyclohexane, t-1,2-dimethyl						
690-08-4	2-Pentene, 4,4-dimethyl, (E)						
691-38-3	2-Pentene, 4-methyl, (Z)						
693-89-0	Cyclopentene, 1-methyl						
6975-98-0	Decane, 2-methyl						
71-36-3	1-Butanol (N-Butyl alcohol)	0.1		0.2			0.1
71-41-0	1-Pentanol (N-Pentyl alcohol)						
71-43-2	Benzene			0.4		0.9	
7146-60-3	Octane, 2,3-dimethyl						
719-22-2	2,5-Cyclohexadiene-1,4-dione, 2,6-bis(1,1-dimethylethyl)						
7319-23-5	3-Hexen-2,5-diol			0.1			
7364-19-4	Benzene, 1-(1,1-dimethylethyl)-4-ethyl						
7379-12-6	3-Hexanone, 2-methyl						
7452-79-1	Butanoic acid, 2-methyl-, ethyl ester						
75-15-0	Carbon disulfide						0.1
76-49-3	Bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimethyl-, acetate, endo (Borny)						
763-93-9	3-Hexen-2-one						
764-13-6	2,4-Hexadiene, 2,5-dimethyl						
768-49-0	1-Phenyl-1-propene, 2-methyl						
7688-21-3	2-Hexene, (Z)						
77-68-9	2,2,4-Trimethyl-1,3-pantanediol monoisobutyrate						
77-73-6	4,7-Methano-1H-indene, 3a,4,7,7a-tetrahydro						
7779-30-8	1-Penten-3-one, 1-(2,6,6-trimethyl-2-cyclohexen-1-yl)-						
78-59-1	2-Cyclohexen-1-one, 3,5,5-trimethyl-						
78-78-4	Butane, 2-methyl (Isopentane)	0.2		0.1	0.1	0.1	0.1
78-79-5	1,3-Butadiene, 2-methyl	0.5	0.1	0.1	0.1	0.1	0.3
78-83-1	1-Propanol, 2-methyl (Isobutyl alcohol)						
78-84-2	Propanal, 2-methyl (Isobutanal)				0.1		
78-85-3	2-Propenal, 2-methyl						
78-93-3	2-Butanone (Methyl ethyl ketone, MEK)				0.1		0.2
78-94-4	Methyl vinyl ketone (3-Buten-2-one)	0.2	0.2	0.2			0.2
79-09-4	Propanoic acid						
79-20-9	Acetate, methyl (Acetic acid, methyl ester)						
79-31-2	Propanoic acid, 2-methyl						
80-54-6	Lilial						
80-56-8	Pinene, à (2,6,6-Trimethyl-bicyclo[3.1.1]hept-2-ene)	0.2	0.2	0.6	0.4	0.4	0.2
80-62-6	Methyl methacrylate (2-Propenoic acid, 2-methyl-, methyl ester)						28.3
821-95-4	1-Undecene						
824-90-8	1-Phenyl-1-butene						
85-44-9	Phthalic anhydride (1,3-Isobenzofurandione)						
870-82-6	Eucalyptol				0.2	0.1	0.1
871-83-0	Nonane, 2-methyl						
874-35-1	1H-Indene, 2,3-dihydro-5-methyl						
89-74-7	Ethanone, 1-(2,4-dimethylphenyl)-						
90-12-0	Naphthalene, 1-methyl						
91-17-8	Naphthalene, decahydro-						
91-20-3	Naphthalene						
91-57-6	Naphthalene, 2-methyl						
92-52-4	1,1'-Biphenyl						
922-62-3	2-Pentene, 3-methyl, cis						
922-63-4	2-Ethylacrolein						
92618-89-8	Acetic acid, 1,7,7-trimethyl-bicyclo[2.2.1]hept-2-yl ester						
930-18-7	Cyclopropane, 1,2-dimethyl, cis						
930-27-8	Furan, 3-methyl						
933-12-0	Cyclohexene, 3,3,5-trimethyl						
934-80-5	Benzene, 4-ethyl-1,2-dimethyl						
95-16-9	Benzothiazole						
95-47-6	Xylene, ortho	0.1	0.1	0.4	0.2	0.2	0.1
95-93-2	Benzene, 1,2,4,5-tetramethyl					0.2	
96-14-0	Pentane, 3-methyl					0.1	0.2
96-29-7	2-Butanone, oxime						
96-37-7	Cyclopentane, methyl					0.3	0.2
96-48-0	2(3H)-Furanone dihydro (Butyrolactone)						
97-72-3	Propanoic acid, 2-methyl-, anhydride						
98-00-0	2-Furanmethanol						
98-01-1	Furfural (2-Furaldehyde)		0.1	0.1			
98-55-5	3-Cyclohexene-1-methanol, à,à,4-trimethyl						0.3
98-82-8	Benzene, 1-methylethyl (Cumene)						
99-71-8	Phenol, 4-(1-methylpropyl)-						
995-82-4	Hexasiloxane, 1,1,3,3,5,5,7,7,9,9,11,11-dodecamethyl-						

Blanks VOC Data

cas_number	chemical	510 SVOF (7.000) c_526136	16339-010AA SVOF (7.000) c_526143	16339-020AA SVOF (7.000) c_526143	16339-030AA SVOF (7.000) c_526155	16339-040AA SVOF (7.000) c_526166	16339-050AA SVOF (7.000) c_526173
	Home Identification Sample Location Location Description Start-End Times	Unit 91 Blank 1st FL LR	Unit 91 Blank 2nd FL BR	Unit 90 Blank 2nd FL LR	Unit 90 Blank 1st FL BR	Unit 90 Blank Outside	
	TVOC (ug/m3)	3.0	7.3	0.1	0.1	1.2	
100-18-5	Benzene, 1,4-bis(1-methylethyl)-						
100-41-4	Benzene, ethyl						
100-42-5	Styrene						
100-52-7	Benzaldehyde						
1000131-87-	Propanal, 2-methyl-3-phenyl-						
1000131-87-6	Propanal, 2-methyl-3-phenyl-						
1000299-11-8	Butanoic acid, 3-methylbut-2-enyl ester						
1000350-93-6	1,3,5-Triazine-2(1H)-thione, tetrahydro-5-[(4-methoxyphenyl)						
1003-19-6	Cyclopropane, 1,1-diethyl						
101-84-8	Benzene, 1,1'-oxybis- (Diphenyl ether)						
103-11-7	2-Propenoic acid, 2-ethylhexyl ester (Octyl acrylate)						
103-23-1	Hexanedioic acid, bis(2-ethylhexyl) ester						
103-65-1	Benzene, propyl						
103-70-8	Formamide, N-phenyl-						
104-55-2	Cinnamic aldehyde (2-Propenal, 3-phenyl-)						
104-76-7	1-Hexanol, 2-ethyl						
105-82-8	Propane, 1,1'-[ethylidenebis(oxy)]bis						
10574-36-4	2-Hexene, 3-methyl-, (Z)						
10574-37-5	2-Pentene, 2,3-dimethyl						
106-42-3	Xylene (para and/or meta)			0.1			
106-46-7	Benzene, 1,4-dichloro						
107-02-8	Acrolein (2-Propenal)					0.1	
107-06-2	Ethane, 1,2-dichloro						
107-13-1	2-Propenenitrile (Acrylonitrile)						
107-21-1	1,2-Ethanediol (Ethylene glycol)						
107-83-5	Pentane, 2-methyl						
107-87-9	2-Pantanone						
107-92-6	Butanoic acid						
1070-66-2	2-n-Butylacrolein						
1071-81-4	Hexane, 2,2,5,5-tetramethyl			0.1			
1072-05-5	Heptane, 2,6-dimethyl						
1074-17-5	Benzene, 1-methyl-2-propyl						
1074-43-7	Benzene, 1-methyl-3-propyl						
1074-55-1	Benzene, 1-methyl-4-propyl						
1075-22-5	1H-Indene, 2,3-dihydro-5,6-dimethyl						
108-08-7	Pentane, 2,4-dimethyl						
108-10-1	2-Pantanone, 4-methyl (Methyl isobutyl ketone, MIBK)						
108-38-3	Xylene (meta and/or para)						
108-65-6	1-Methoxy-2-propyl acetate						
108-67-8	Benzene, 1,3,5-trimethyl (Mesitylene)						
108-87-2	Cyclohexane, methyl	0.1		0.2			
108-88-3	Toluene (Methylbenzene)	0.1		0.2			
109-08-0	Pyrazine, methyl						
109-60-4	Acetic acid, propyl ester (Propyl acetate)						
109-66-0	Pentane	0.5		0.8			
109-68-2	2-Pentene						
110-43-0	2-Heptanone						
110-54-3	Hexane						
110-62-3	Pentanal						
110-80-5	Ethanol, 2-ethoxy						
110-82-7	Cyclohexane			0.1			
110-83-8	Cyclohexene						
110-86-1	Pyridine						
110-93-0	5-Hepten-2-one, 6-methyl						
111-15-9	Ethanol, 2-ethoxy-, acetate (2-Ethoxyethyl acetate)						
111-27-3	1-Hexanol (N-Hexyl alcohol)						
111-46-6	Diethylene glycol (2,2'-oxybisethanol)						
111-65-9	Octane						
111-66-0	1-Octene						
111-70-6	1-Heptanol						
111-71-7	Heptanal (Heptaldehyde)						
111-76-2	Ethanol, 2-butoxy						
111-84-2	Nonane						
111-87-5	1-Octanol						
112-30-1	1-Decanol (N-Decyl alcohol)						
112-31-2	Decanal						
112-40-3	Dodecane						
112-41-4	1-Dodecene						
1120-21-4	Undecane						0.1
1137-12-8	1,2,4-Methenoazulene, decahydro-1,5,5,8a-tetramethyl-, [1S-(1:						

Blanks VOC Data

1191-99-7	Furan, 2,3-dihydro		
1196-01-6	Bicyclo[3.1.1]hept-3-en-2-one, 4,6,6-trimethyl-, (1S)-		
122-03-2	Benzaldehyde, 4-(1-methylethyl)		
123-05-7	Hexanal, 2-ethyl		
123-11-5	Benzaldehyde, 4-methoxy-		
123-19-3	4-Heptanone		
123-35-3	1,6-Octadiene,7-methyl-3-methylene (Myrcene)		
123-42-2	2-Pantanone, 4-hydroxy-4-methyl-		
123-51-3	1-Butanol, 3-methyl		
123-75-1	Pyrrolidine		
123-86-4	Acetate, butyl		
124-11-8	1-Nonene		
124-13-0	Octanal		
124-18-5	Decane	0.1	
124-19-6	Nonyl aldehyde (Nonanal)		
127-18-4	Ethene, 1,1,2,2-tetrachloro (Tetrachloroethylene)		
127-51-5	á-Isomethyl ionone		
127-91-3	Pinene, á (6,6-Dimethyl-2-methylene-bicyclo[3.1.1]heptane)		
128-37-0	2,6-Di-tert-butyl-4-methylphenol (BHT)		
128-39-2	Phenol, 2,6-bis(1,1-dimethylethyl)		
13151-04-7	1-Heptene, 5-methyl		
13151-34-3	Decane, 3-methyl		
13231-81-7	1-Hexanol, 3-methyl		
13287-23-5	Heptadecane, 8-methyl-		
13466-78-9	3-Carene		
13491-79-7	Cyclohexanol, 2-(1,1-dimethylethyl)		
135-01-3	Benzene, 1,2-diethyl		
138-86-3	Limonene (Dipentene; 1-Methyl-4-(1-methylethyl)cyclohexene)		
140-11-4	Acetic acid, phenylmethyl ester (Benzyl acetate)		
140-67-0	Estragole (4-Allylanisole)		
141-63-9	Pentasiloxane, dodecamethyl		
141-78-6	Acetate, ethyl		
141-79-7	3-Penten-2-one, 4-methyl		
141-93-5	Benzene, 1,3-diethyl		
142-62-1	Hexanoic acid		
142-82-5	Heptane	0.2	0.6
143-08-8	1-Nonanol		0.1
14411-56-4	Benzene, 1-(1,1-dimethylethyl)-3-ethyl		
1455-20-5	Thiophene, 2-butyl		
14686-13-6	2-Heptene, (E)		
1515-79-3	5,5-Dimethyl-1,3-hexadiene		
1528-25-2	4-Heptanone, 3-ethyl		
15356-70-4	Cyclohexanol, 5-methyl-2-(1-methylethyl)-, (1á,2á,5á)-(+/-) (Mer		
1576-87-0	t-2-Pentenal		
15869-92-8	Octane, 3,4-dimethyl		
15870-10-7	1-Heptene, 2-methyl		
1595-16-0	Benzene, 1-methyl-4-(1-methylpropyl)-		
1632-73-1	Bicyclo[2.2.1]heptan-2-ol, 1,3,3-trimethyl		
16325-63-6	2,4,4-Trimethyl-1-pentanol		
1640-89-7	Cyclopentane, ethyl	0.1	
16491-15-9	Cyclopentene, 1,5-dimethyl		
16746-86-4	2,3-Dimethyl-1-hexene		
1678-97-3	Cyclohexane, 1,2,3-trimethyl		
16982-00-6	Benzene, 1-methyl-4-(1,2,2-trimethylcyclopentyl)-, (R)-		
17066-67-0	Naphthalene, decahydro-4a-methyl-1-methylene-7-(1-methyleth		
17081-21-9	Propane, 1,3-dimethoxy-		
17302-32-8	Nonane, 3,7-dimethyl		
17312-57-1	Dodecane, 3-methyl		
17374-18-4	Tetrahydro-1,3-oxazine-2-thione		
17498-71-4	Benzene, (2-methyl-1-methylenepropyl)-		
1750-51-2	Naphthalene, decahydro-1,6-dimethyl-		
1758-88-9	Benzene, 2-ethyl-1,4-dimethyl		
17851-27-3	Benzene, 1-ethyl-2,4,5-trimethyl		
1795-15-9	Cyclohexane, octyl		
18479-58-8	7-Octen-2-ol, 2,6-dimethyl		
18491-15-1	2,2-Dimethyl-1-isopropyl-1,3-propanediol monoisobutyrate		
18669-52-8	1,4-Hexadiene, 2,3-dimethyl		
18794-77-9	Thiophene, 2-hexyl		
19037-72-0	Cyclopentene, 4,4-dimethyl-		
19549-87-2	1-Heptene, 2,4-dimethyl		
20027-77-4	Naphthalene, 1,2,3,4-tetrahydro-5,6-dimethyl-		
20279-29-2	Phenyl isobutyrate		
203-65-6	5H-Benz[def]carbazole		
2039-89-6	Styrene, 2,5-dimethyl		
2142-73-6	Ethanone, 1-(2,5-dimethylphenyl)-		
21693-51-6	Naphthalene, 1,2,3,4-tetrahydro-1,5,8-trimethyl-		
2207-03-6	Cyclohexane, 1,3-dimethyl, trans		
2207-04-7	Cyclohexane, 1,4-dimethyl, trans		
2213-23-2	Heptane, 2,4-dimethyl		

Blanks VOC Data

2213-32-3	1-Pentene, 2,4-dimethyl			
2216-30-0	Heptane, 2,5-dimethyl			
2234-20-0	Styrene, 2,4-dimethyl			
2402-06-4	Cyclopropane, t-1,2-dimethyl			
2437-56-1	1-Tridecene			
2452-99-5	Cyclopentane, 1,2-dimethyl	0.1		
2453-00-1	Cyclopentane, 1,3-dimethyl			
24720-09-0	à-Damascone (2-Buten-1-one, 1-(2,6,6-trimethyl-2-cyclohexen-1-			
2532-58-3	Cyclopentane, 1,3-dimethyl, cis			
27522-11-8	1-Pentanol, 2-ethyl			
2809-64-5	Naphthalene, 1,2,3,4-tetrahydro-5-methyl			0.1
287-92-3	Cyclopentane			
292-64-8	Cyclooctane			
2958-76-1	Naphthalene, decahydro-2-methyl			
3208-16-0	Furan, 2-ethyl			
3221-61-2	Octane, 2-methyl			
32210-23-4	4-tert-Butylcyclohexyl acetate (Vertenex)			
3333-13-9	Benzene, 1-methyl-4-(2-propenyl)			
3404-65-7	3-Methyl-3-hexene,c&t			
3522-94-9	Hexane, 2,2,5-trimethyl			
3524-73-0	1-Hexene, 5-methyl			
35507-09-6	7-Hexadecene, (Z)-			
3853-83-6	1H-Benzocycloheptene, 2,4a,5,6,7,8,9,9a-octahydro-3,5,5-trime			
3856-25-5	Copaene			
3944-36-3	2-Propanol, 1-(1-methylethoxy)			
40117-45-1	Heptane, 2,2,6,6-tetramethyl	0.1		
4050-45-7	2-Hexene, (E)			
41436-42-4	2-Buten-1-one, 1-(2,6,6-trimethyl-3-cyclohexen-1-yl)-			
4175-54-6	Naphthalene, 1,2,3,4-tetrahydro-1,4-dimethyl			
4218-48-8	Benzene, 1-ethyl-4-(1-methylethyl)			
4390-04-9	Nonane, 2,2,4,4,6,8,8-heptamethyl			
464-17-5	Bicyclo[2.2.1]hept-2-ene, 1,7,7-trimethyl			
464-45-9	L-borneol (Bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimethyl-,(1S-endo)-			
469-61-4	Cedrene, à			
470-40-6	Thujopsene			
470-82-6	Eucalyptol			
4706-90-5	Benzene, 1,3-dimethyl-5-(1-methylethyl)			
475-20-7	Longifolene			
4798-45-2	1-Penten-3-ol, 4-methyl-			
488-23-3	Benzene, 1,2,3,4-tetramethyl			
491-01-0	Cyclohexanol, 5-methyl-2-(1-methylethyl)-, (1à,2à,5á)-			
491-02-1	Cyclohexanol, 5-methyl-2-(1-methylethyl)-, (1à,2à,5à)-			
4923-78-8	Cyclohexane, 1-ethyl-2-methyl, trans			
4926-78-7	Cyclohexane, c-1-ethyl-4-methyl			
493-02-7	t-Decahydronaphthalene			
496-11-7	Indane			
4994-16-5	4-Phenylcyclohexene			
50464-95-4	6-Methyl-6-(5-methylfuran-2-yl)heptan-2-one			
513-35-9	2-Butene, 2-methyl			
5131-66-8	2-Propanol, 1-butoxy			
51655-64-2	Nonane, 3-methylene			
52253-93-7	Homomenthyl salicylate			
527-53-7	Benzene, 1,2,3,5-tetramethyl			
540-97-6	Cyclohexasiloxane, dodecamethyl			
541-02-6	Cyclopentasiloxane, decamethyl			
5413-60-5	4,7-Methano-1H-inden-6-ol, 3a,4,5,6,7,7a-hexahydro-, acetate			
542-28-9	2H-Pyran-2-one, tetrahydro-			
544-76-3	Hexadecane (Cetane)			
554-12-1	Propanoic acid, methyl ester			
555-10-2	á-Phellandrene			
556-67-2	Cyclotetrasiloxane, octamethyl			
560-21-4	Pentane, 2,3,3-trimethyl	0.1	0.3	0.1
563-46-2	1-Butene, 2-methyl			
563-79-1	2-Butene, 2,3-dimethyl			
565-59-3	Pentane, 2,3-dimethyl	0.1	0.3	
565-69-5	3-Pentanone, 2-methyl			
565-75-3	Pentane, 2,3,4-trimethyl	0.1	0.2	
565-80-0	3-Pantanone, 2,4-dimethyl			
5655-61-8	Bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimethyl-, acetate, (1S-endo)-			
57-55-6	1,2-Propanediol (Propylene glycol)			
5794-03-6	(+)-Camphene			
585-34-2	Phenol, m-tert-butyl			
586-62-9	Cyclohexene, 1-methyl-4-(1-methylethylidene)			
5875-45-6	Phenol, 2,5-bis(1,1-dimethylethyl)			
589-34-4	Hexane, 3-methyl	0.6	1.7	0.2
589-38-8	3-Hexanone (Ethyl propyl ketone)			
589-43-5	Hexane, 2,4-dimethyl			
589-81-1	Heptane, 3-methyl	0.4	1	0.1
591-76-4	Hexane, 2-methyl			

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591-78-6	2-Hexanone		
591-93-5	1,4-Pentadiene		
5911-04-6	Nonane, 3-methyl		
592-13-2	Hexane, 2,5-dimethyl		
592-27-8	Heptane, 2-methyl		
592-76-7	1-Heptene		
592-77-8	2-Heptene		
593-45-3	Octadecane	0.3	
5989-08-2	Tricyclo[5.4.0.0(2,8)]undec-9-ene, 2,6,6,9-tetramethyl-		
6004-38-2	4,7-Methano-1H-indene, octahydro		
6094-02-6	1-Hexene, 2-methyl		
611-14-3	Benzene, 1-ethyl-2-methyl (2-Ethyltoluene)		
6131-25-5	Heptane, 3-methyl		
616-12-6	2-Pentene, 3-methyl, (E)		
617-78-7	Pentane, 3-ethyl	0.1	0.3
617-94-7	Benzinemethanol, à,à-dimethyl-		
620-14-4	Benzene, 1-ethyl-3-methyl		
622-96-8	Benzene, 1-ethyl-4-methyl (4-Ethyltoluene)		
62238-33-9	Cyclohexane, 1-ethyl-2-propyl		
6236-88-0	Cyclohexane, t-1-ethyl-4-methyl		
624-16-8	4-Decanone		
624-29-3	Cyclohexane, 1,4-dimethyl, cis		
625-27-4	2-Pentene, 2-methyl		
626-38-0	2-Pentanol, acetate		
629-50-5	Tridecane		
629-59-4	Tetradecane		
629-62-9	Pentadecane		
629-78-7	Heptadecane		
629-82-3	Octane, 1,1'-oxybis		
629-92-5	Nonadecane		
638-04-0	Cyclohexane, c-1,3-dimethyl		
64-17-5	Ethanol		
64-18-6	Formic acid (Methanoic acid)		
64-19-7	Acetic acid	0.3	
6418-43-5	Hexadecane, 3-methyl		
646-04-8	2-Pentene, (E)-		
66-25-1	Hexanal		
6682-71-9	1H-Indene, 2,3-dihydro-4,7-dimethyl		
67-63-0	2-Propanol (Isopropanol)		
67-64-1	Acetone	0.1	0.1
68284-24-2	Cycloheptane, 1,3,5-tris(methylene)-		0.3
6846-50-0	TXIB (2,2,4-Trimethyl-1,3-pantanediol diisobutyrate)		
6876-23-9	Cyclohexane, t-1,2-dimethyl		
690-08-4	2-Pentene, 4,4-dimethyl, (E)		
691-38-3	2-Pentene, 4-methyl, (Z)		
693-89-0	Cyclopentene, 1-methyl		
6975-98-0	Decane, 2-methyl		
71-36-3	1-Butanol (N-Butyl alcohol)		
71-41-0	1-Pentanol (N-Pentyl alcohol)		
71-43-2	Benzene		
7146-60-3	Octane, 2,3-dimethyl		
719-22-2	2,5-Cyclohexadiene-1,4-dione, 2,6-bis(1,1-dimethylethyl)		
7319-23-5	3-Hexen-2,5-diol		
7364-19-4	Benzene, 1-(1,1-dimethylethyl)-4-ethyl		
7379-12-6	3-Hexanone, 2-methyl		
7452-79-1	Butanoic acid, 2-methyl-, ethyl ester		
75-15-0	Carbon disulfide		
76-49-3	Bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimethyl-, acetate, endo (Borny)		
763-93-9	3-Hexen-2-one		
764-13-6	2,4-Hexadiene, 2,5-dimethyl		
768-49-0	1-Phenyl-1-propene, 2-methyl		
7688-21-3	2-Hexene, (Z)		
77-68-9	2,2,4-Trimethyl-1,3-pantanediol monoisobutyrate		
77-73-6	4,7-Methano-1H-indene, 3a,4,7,7a-tetrahydro		
7779-30-8	1-Penten-3-one, 1-(2,6,6-trimethyl-2-cyclohexen-1-yl)-		
78-59-1	2-Cyclohexen-1-one, 3,5,5-trimethyl-		
78-78-4	Butane, 2-methyl (Isopentane)	0.3	0.7
78-79-5	1,3-Butadiene, 2-methyl		0.1
78-83-1	1-Propanol, 2-methyl (Isobutyl alcohol)		
78-84-2	Propanal, 2-methyl (Isobutanal)		
78-85-3	2-Propenal, 2-methyl		
78-93-3	2-Butanone (Methyl ethyl ketone, MEK)		
78-94-4	Methyl vinyl ketone (3-Buten-2-one)		
79-09-4	Propanoic acid		
79-20-9	Acetate, methyl (Acetic acid, methyl ester)		
79-31-2	Propanoic acid, 2-methyl		
80-54-6	Lilial		
80-56-8	Pinene, à (2,6,6-Trimethyl-bicyclo[3.1.1]hept-2-ene)		0.1
80-62-6	Methyl methacrylate (2-Propenoic acid, 2-methyl-, methyl ester)		

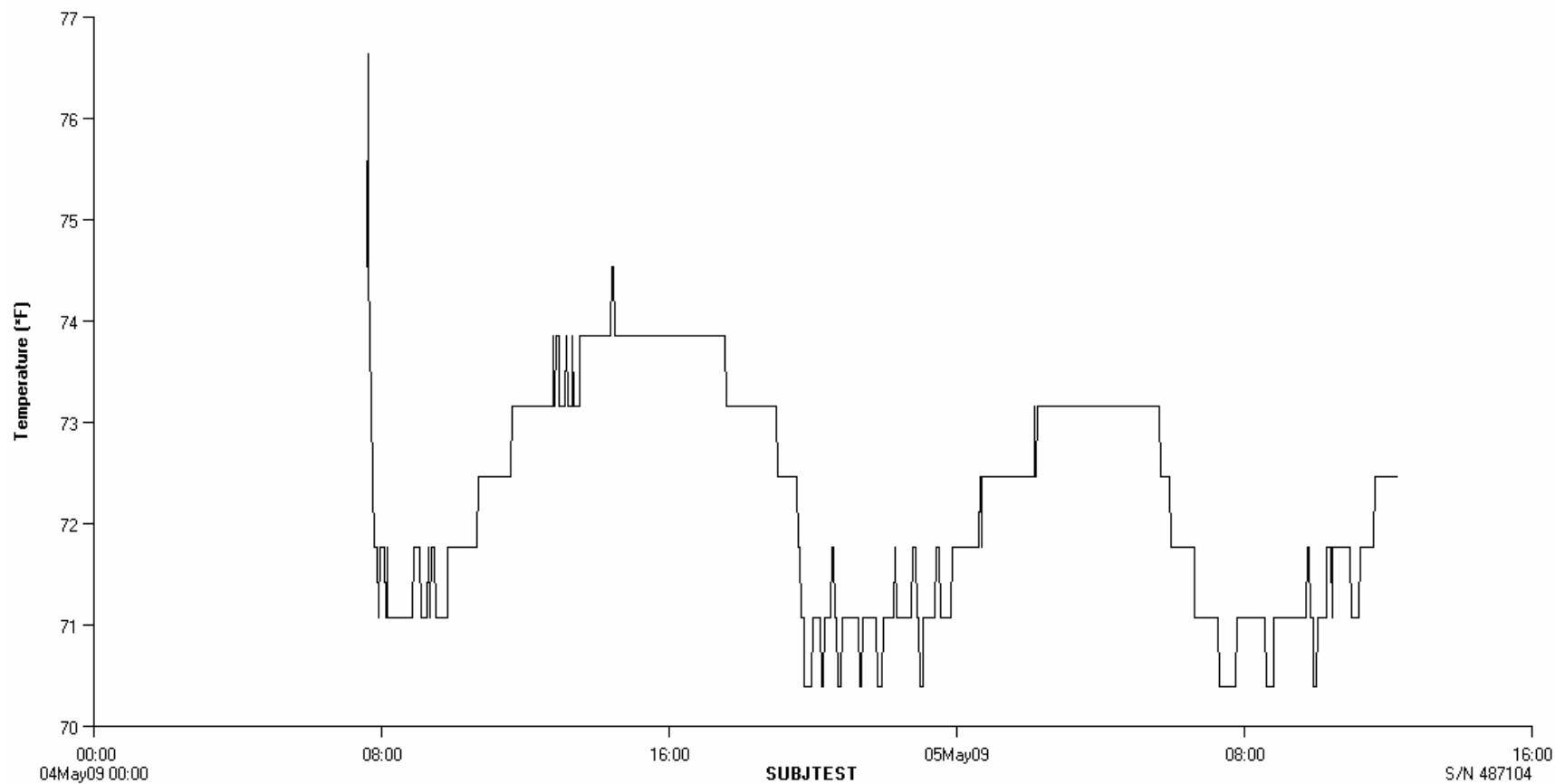
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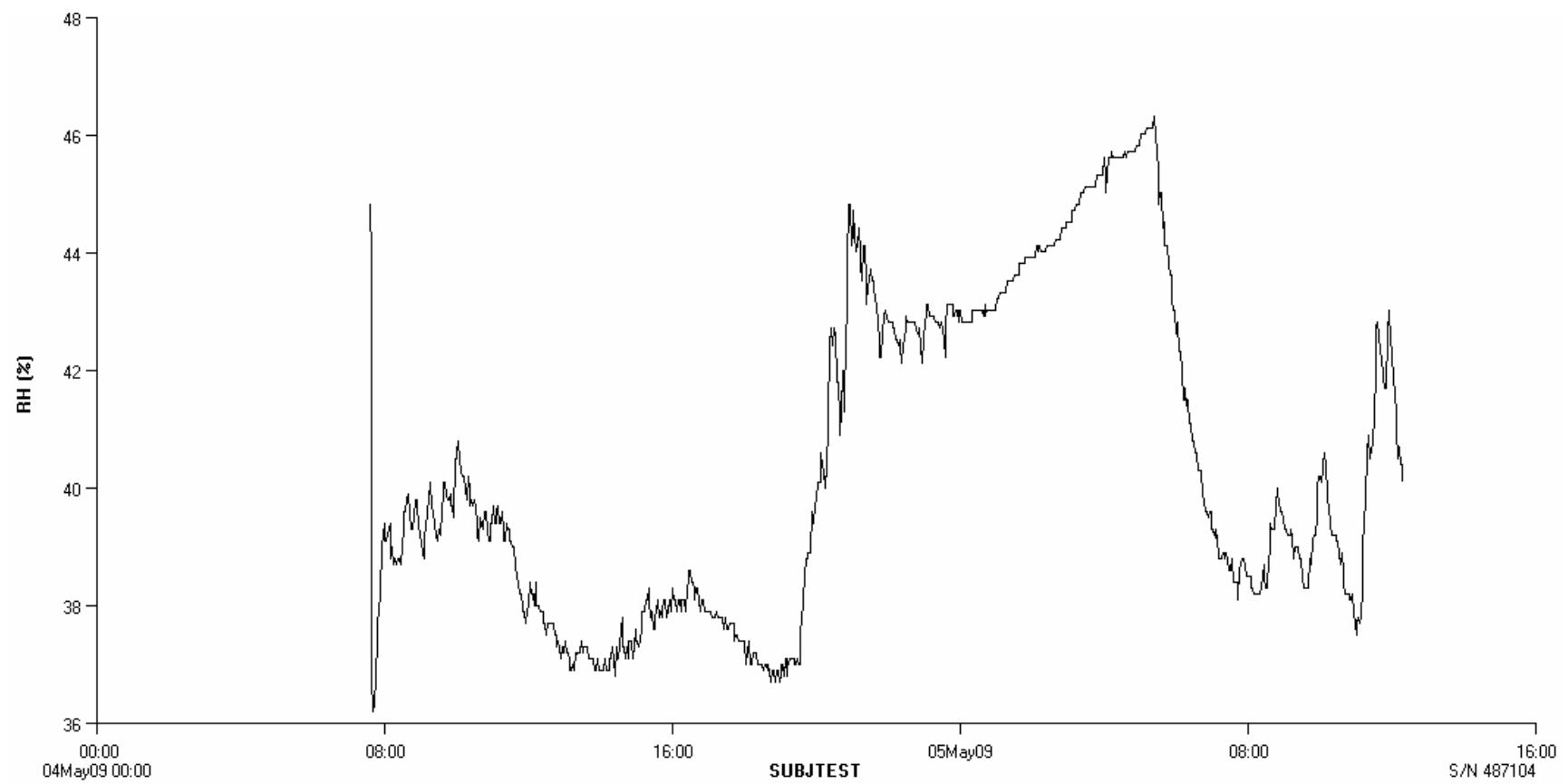
821-95-4	1-Undecene
824-90-8	1-Phenyl-1-butene
85-44-9	Phthalic anhydride (1,3-Isobenzofurandione)
870-82-6	Eucalyptol
871-83-0	Nonane, 2-methyl
874-35-1	1H-Indene, 2,3-dihydro-5-methyl
89-74-7	Ethanone, 1-(2,4-dimethylphenyl)-
90-12-0	Naphthalene, 1-methyl
91-17-8	Naphthalene, decahydro-
91-20-3	Naphthalene
91-57-6	Naphthalene, 2-methyl
92-52-4	1,1'-Biphenyl
922-62-3	2-Pentene, 3-methyl, cis
922-63-4	2-Ethylacrolein
92618-89-8	Acetic acid, 1,7,7-trimethyl-bicyclo[2.2.1]hept-2-yl ester
930-18-7	Cyclopropane, 1,2-dimethyl, cis
930-27-8	Furan, 3-methyl
933-12-0	Cyclohexene, 3,3,5-trimethyl
934-80-5	Benzene, 4-ethyl-1,2-dimethyl
95-16-9	Benzothiazole
95-47-6	Xylene, ortho
95-93-2	Benzene, 1,2,4,5-tetramethyl
96-14-0	Pentane, 3-methyl
96-29-7	2-Butanone, oxime
96-37-7	Cyclopentane, methyl
96-48-0	2(3H)-Furanone, dihydro (Butyrolactone)
97-72-3	Propanoic acid, 2-methyl-, anhydride
98-00-0	2-Furanmethanol
98-01-1	Furfural (2-Furaldehyde)
98-55-5	3-Cyclohexene-1-methanol, à,à,4-trimethyl
98-82-8	Benzene, 1-methylethyl (Cumene)
99-71-8	Phenol, 4-(1-methylpropyl)-
995-82-4	Hexasiloxane, 1,1,3,3,5,5,7,7,9,9,11,11-dodecamethyl-

0.1

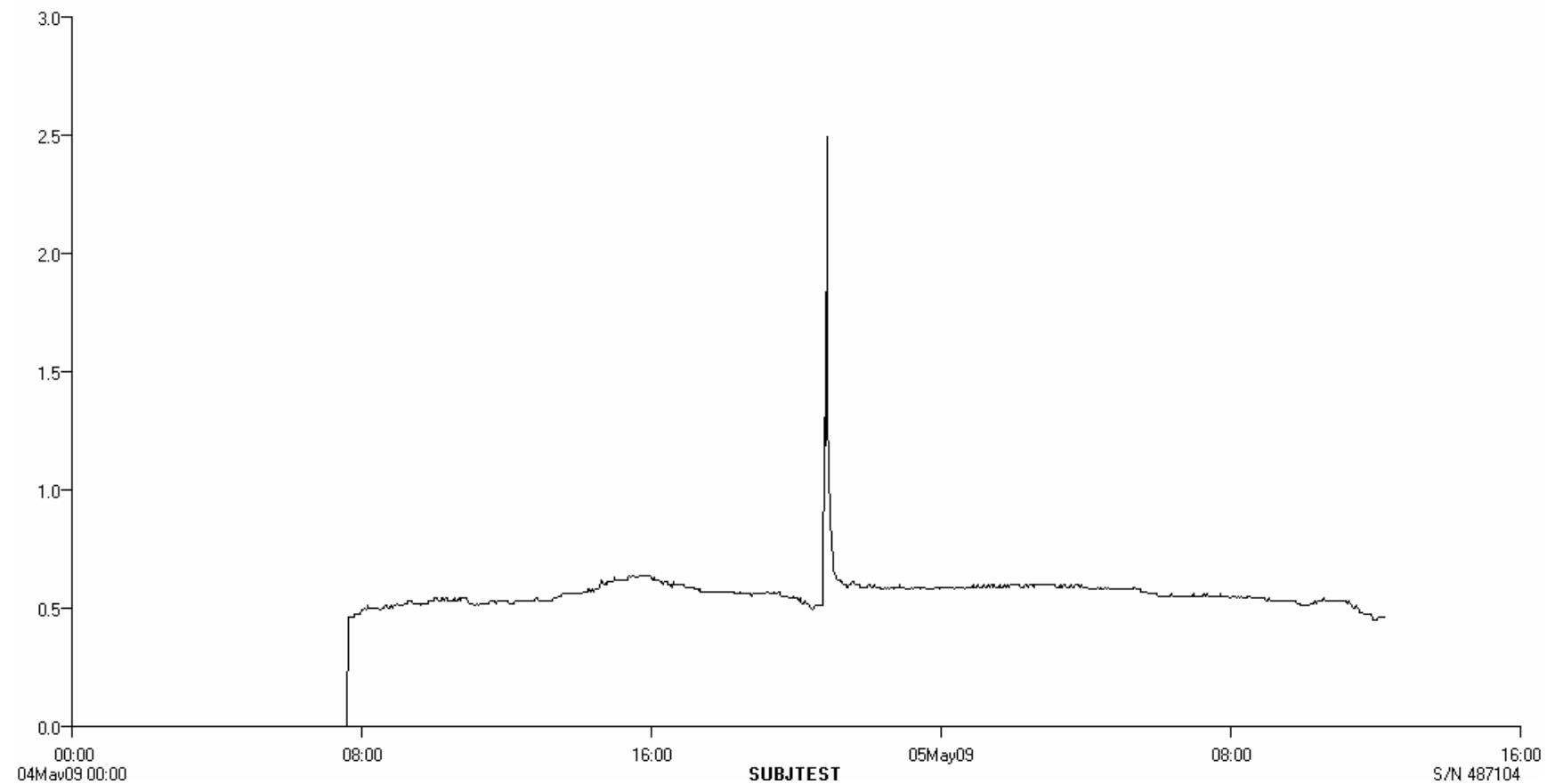
Appendix G

Environmental Parameter Measurements



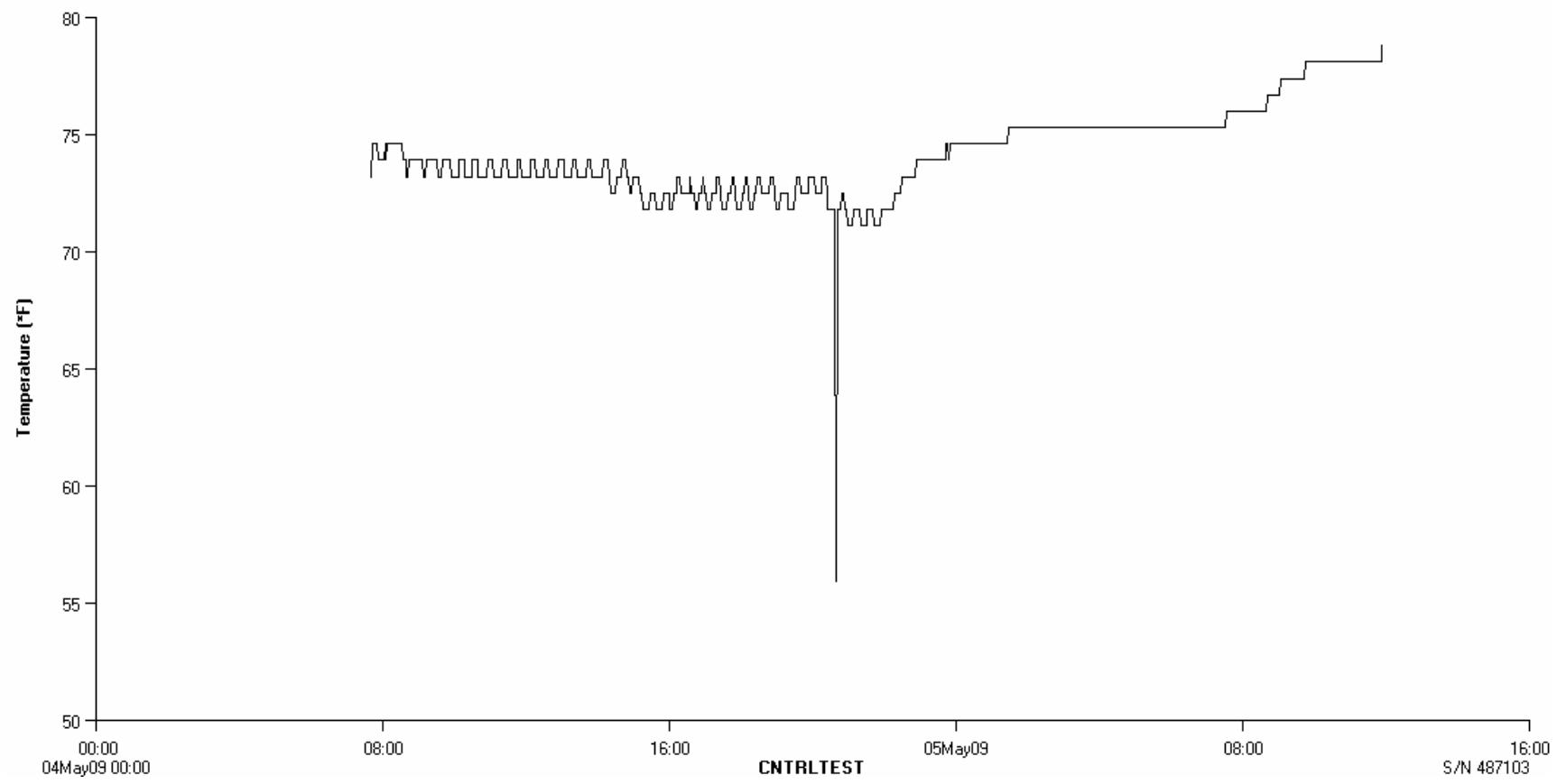


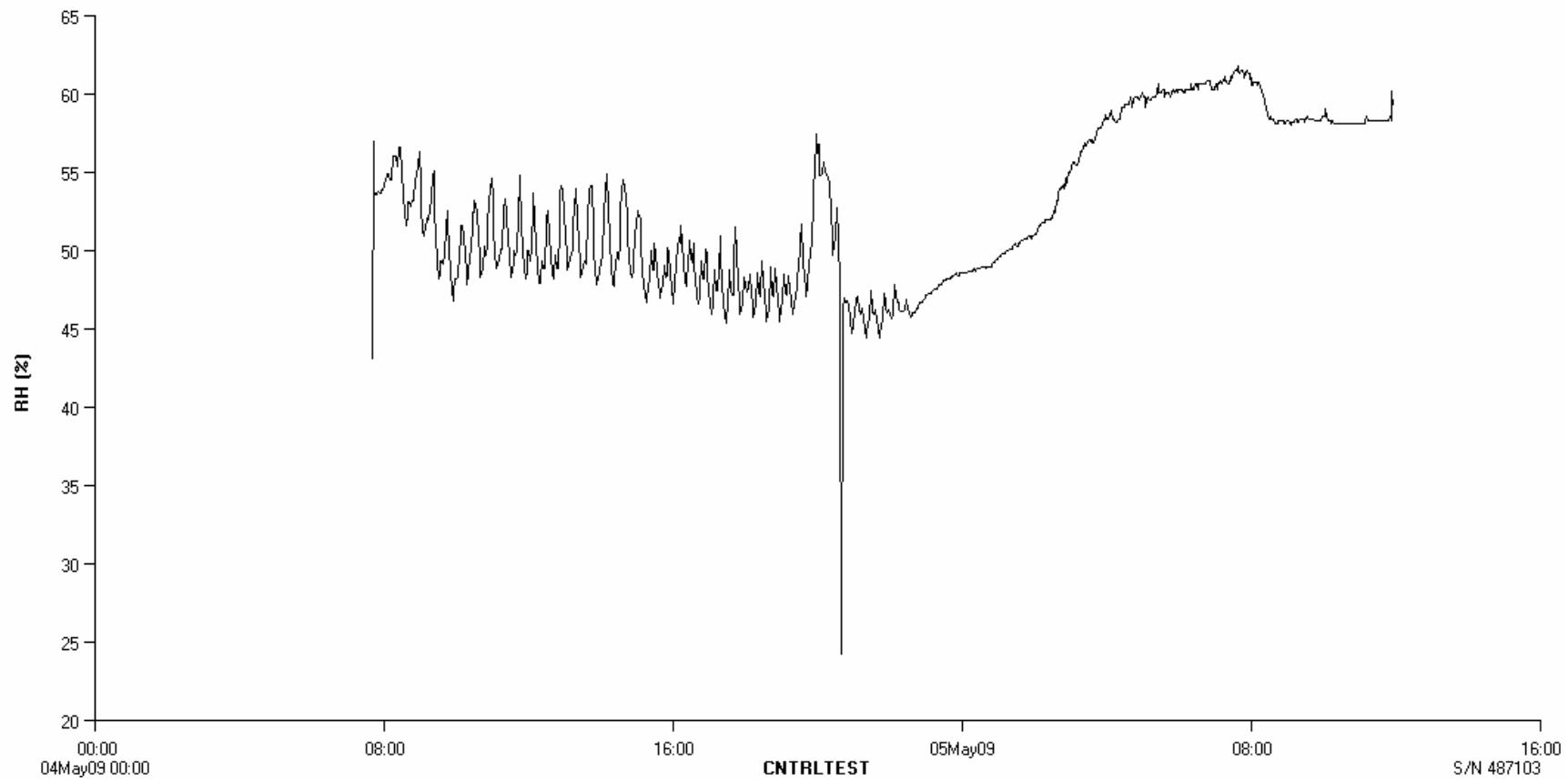
CO₂ (ppt)



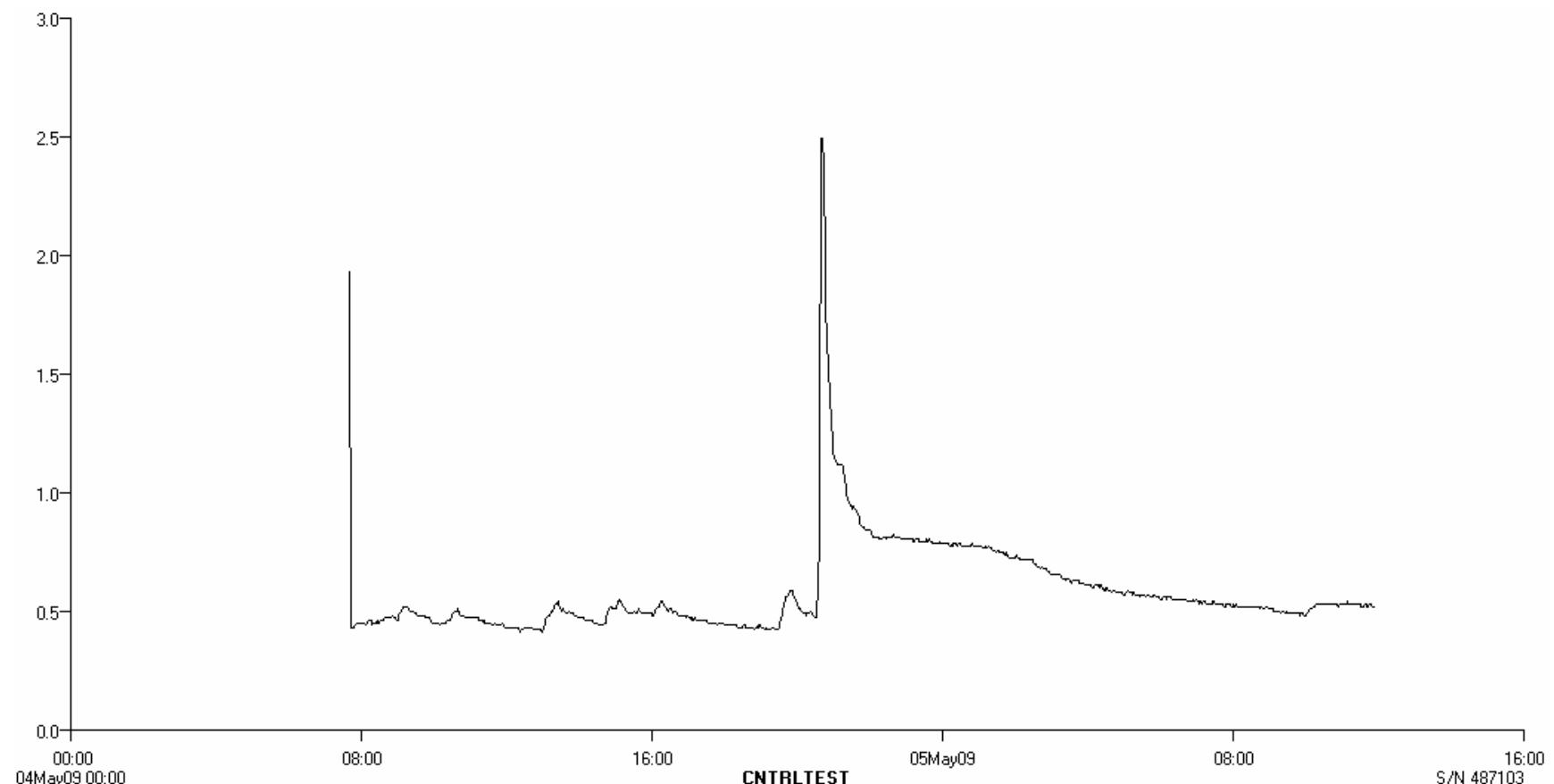
(ppt)=parts per thousand; (0.1=100 ppm)

S/N 487104

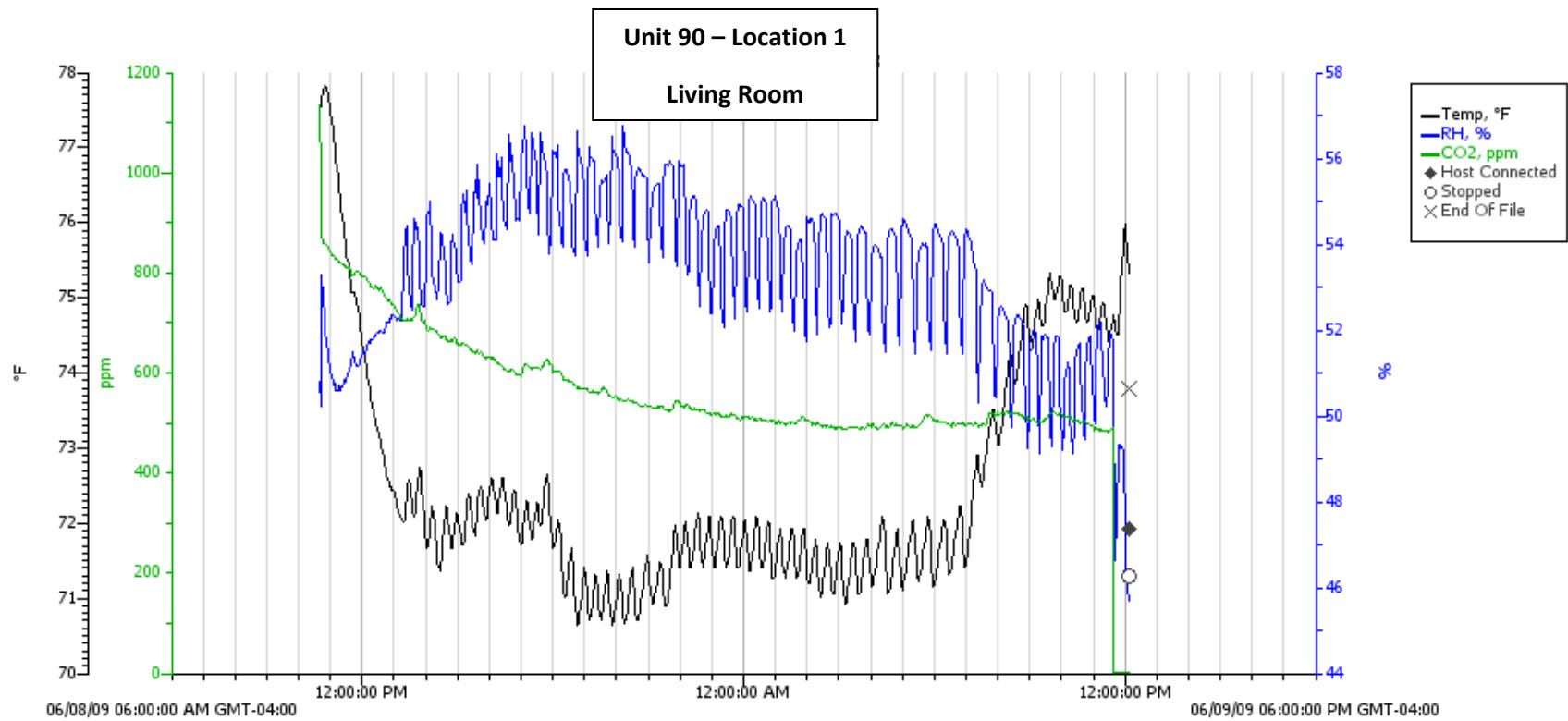


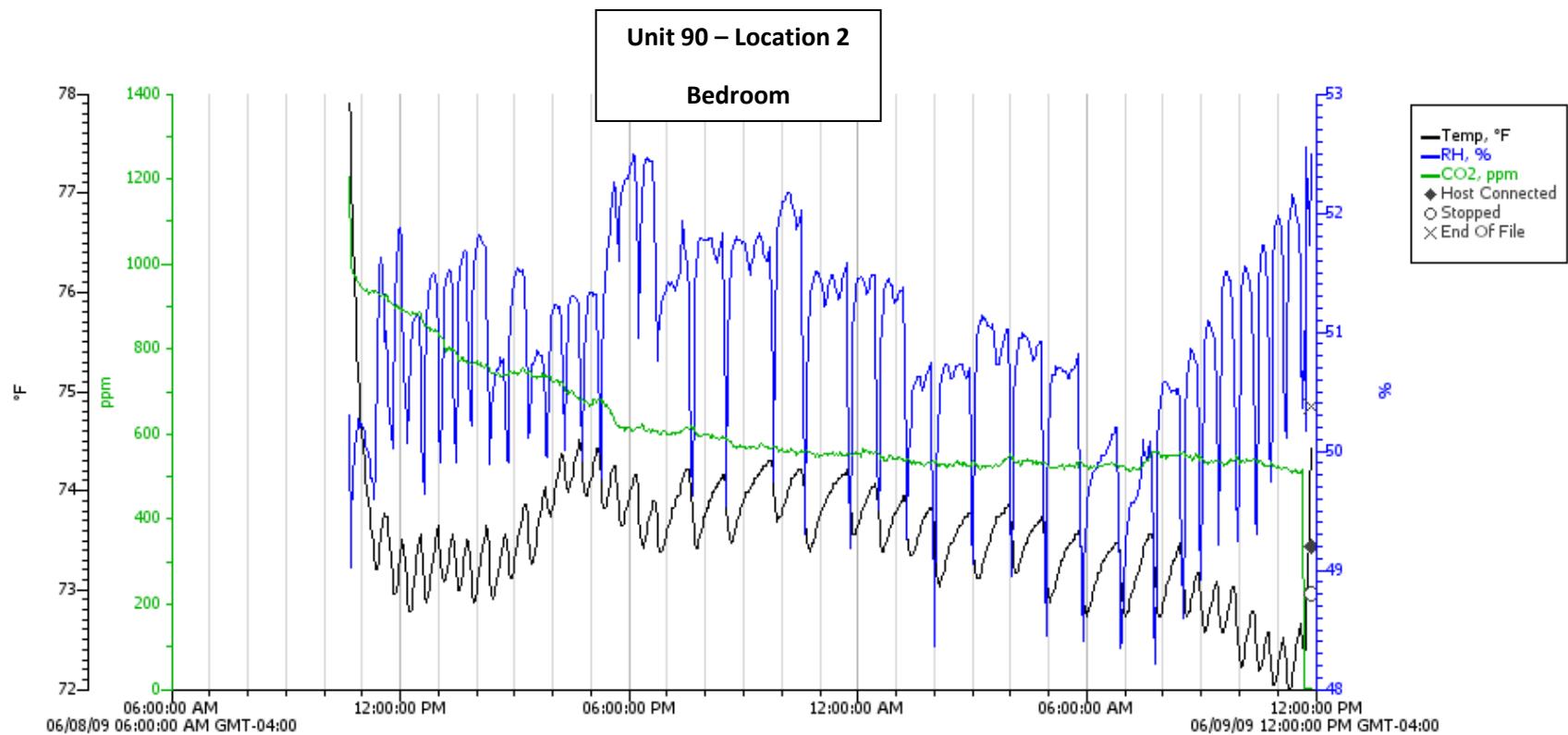


CO₂ (ppt)



(ppt)=parts per thousand; (0.1=100 ppm)





Unit 90 Outdoor Data Environmental Data

