

**PHASE II ENVIRONMENTAL
SITE ASSESSMENT**

**FOR
1560-1570 PLACENTIA AVENUE
NEWPORT BEACH, CALIFORNIA**

Prepared for

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STATEMENT OF LIMITATIONS AND PROFESSIONAL CERTIFICATION

The information provided in this report, Project Number 026-14-001-1 is intended exclusively for Ebb Tide LLC as it pertains to the property identified as 1560-1570 Placentia Avenue, Newport Beach, California. No unnamed third party shall have the right to rely on this report without the express written consent of Ecobility Corporation, as well as payment of the then current reliance letter fee. The professional services provided have been performed in accordance with practices generally accepted by other appropriate environmental professionals, geologists, hydrologists, hydrogeologists, engineers, and environmental scientists practicing in this field. No other warranty, either expressed or implied, is made. Ecobility Corporation is not an insurer and makes no guarantee or warranty that the services supplied will avert or mitigate occurrences, or the consequences of occurrences, that the services are designed to prevent or ameliorate. As with all environmental investigations and remedial action programs, there is no guarantee that the work conducted has identified any and all sources or locations of petroleum hydrocarbons or hazardous substances or chemicals in the soil, soil gas or groundwater. This report is issued with the understanding that Ebb Tide LLC is responsible for ensuring that the information contained in this report is submitted to the appropriate regulatory agency.



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LIST OF ACRONYMS

ASGI	Active Soil gas Investigation
AST	Above Ground Storage Tank
ASTM	American Society for Testing and Materials
BGS	Below Ground Surface
CalEPA	State of California Environmental Protection Agency
CHHSL	California Human Health Screening Levels
DTSC	Department of Toxic Substances Control
EPA	United States Environmental Protection Agency
ESA	Environmental Site Assessment
EST	Environmental Support Technologies, Inc.
LUST	Leaking Underground Storage Tank
µg/l	Micrograms Per Liter
mg/l	Milligrams per Liter
mg/kg	Milligrams Per Kilogram
MORO	Motor Oil Range Organic
MTBE	Methyl Tertbutyl Ether
OCHCA	Orange County Health Care Agency
PID	Photoionization Detector
PCE	Tetrachloroethene
PRG	Preliminary Remediation Goals
REC	Recognized Environmental Condition
RWQCB	Regional Water Quality Control Board
SCAQMD	South Coast Air Quality Management District
STLC	Soluble Threshold Limit Concentration
SVOC	Semi volatile Organic Compound
TBA	Tertiary Butanol
TCE	Trichloroethene
TCLP	Total Concentration Leaching Potential
TPH	Total Petroleum Hydrocarbons
TPH-DRO	Total Petroleum Hydrocarbons in Diesel Range Organic
TPH-g	Total Petroleum Hydrocarbons in Gasoline Range Organic
TTLC	Total Threshold Level Concentration
USGS	United States Geological Survey
UST	Underground Storage Tank
VEC	Vapor intrusion Condition
VOCs	Volatile Organic Compounds
WET	Waste Extraction Test

1 INTRODUCTION

Ecobility Corporation (Ecobility) has been retained by Ebb Tide LLC to conduct a Phase II Site Assessment (PHIIESA) of environmental issues related to a mobile home park at 1560-1570 Placentia Avenue in Newport Beach, California (Subject Property).

1.1 PURPOSE AND OBJECTIVES

The Phase I ESA report prepared by Ecobility (2013) for the Subject Property identified recognized environmental conditions (RECs) on the Subject Property. The RECs were listed as follows:

- According to a *Supplemental Site Investigation Report*, for the adjoining property to the north known as the AEA Investment property (775-777 W. 16th Street), local groundwater has been impacted by tetrachloroethene (PCE) and trichloroethene (TCE) in upgradient, on-site, and downgradient locations (Environ, 2013). The highest PCE and TCE concentrations in soil, soil vapor and groundwater were reported in the vicinity of a sump located in the southeast corner of the industrial property. This sump is less than 20 feet from the northern boundary of the Subject Property. Environ states that soil-gas data collected beneath the buildings on the adjoining property were below site-specific risk based target concentrations (RBTCs) except for two locations where TCE concentrations exceeded commercial RBTCs. The report indicates that groundwater and soil vapor are impacted with chlorinated solvents, specifically PCE and TCE and that migration onto the Subject Property has occurred. The presence of PCE and TCE in on-site soil vapor and groundwater and beneath the adjoining and Subject Property is considered a vapor encroachment condition (VEC) and REC to the Subject Property.
- A 2,000 to 3,000 gallon concrete sump is located along the north property boundary. The sump is used to collect stormwater runoff and pump it via an above ground piping system to Placentia Avenue. Many of the residents use the area adjacent to the sump to wash their cars. No surface staining was observed during the site reconnaissance. The on-site sump is considered a VEC and REC to the Subject Property.

The PHIIESA was designed to verify if RECs identified in the Phase I ESA are present.

1.2 SITE HISTORY

According to historical sources, the Subject Property is currently used as a mobile home park known as the Ebb Tide Mobile Home Park. The property has been developed as a mobile home park since approximately the mid-1950's. The review of historic topographic maps and aerial photographs indicate the Subject Property was undeveloped land from approximately 1901 to 1927 and agricultural farmland from approximately 1927 to 1953. The interior access roads were visible on topographic maps from 1965 to 1981. The Subject Property is listed in City Directories in 1955 as Ebb Tide Trailer Park. The current mobile home park was listed in City Directories searched in 1966 and was visible in aerial photos in 1963 to 2012.

1.3 SITE DESCRIPTION

The Subject Property is located north of 15th Street and south of the intersection of West 16th Street and Placentia Avenue (See Figure 1). The Subject Property is comprised of one rectangular parcel (APN: 374-431-09) of land approximately 4.65 acres developed as a mobile home park. The property is comprised of approximately 80 mobile homes of various sizes, with asphalt paved interior access roads that run along the north, middle and southern portions of the property. The surface is paved with asphalt with small landscaped areas around the perimeter of the individual mobile homes. Concrete parking pads adjoining individual mobile homes were observed throughout the mobile home park. A pool with an activities building is located in the northwest portion of the property along the west property boundary and an office, laundry room and mailboxes are located near the entrance to the mobile home park. Access to the property is from Placentia Avenue to the west.

A stormwater sump is located midway along the northern boundary of the property. Stormwater runoff collected through drains and on the surface are conveyed to this sump and subsequently pumped and conveyed via surface piping to Placentia Avenue for discharge. The sump is constructed of concrete block and has capacity of approximately 3000 gallons. The dimensions are approximately 7 feet by 8 feet with a depth of approximately 10 feet. Approximately 6.5 feet of the sump is below ground surface. The sump is covered and secured.

The Subject Property is located in a dense urban area. The Costa Mesa/Newport Beach border is the northern boundary of the property. Industrial and commercial properties are visible in the surrounding areas to the north, west south, and east. Immediately to the north of the site are industrial buildings. AEA Investments LLC currently owns the property at 775 to 777 West 16th Street, Costa Mesa, CA. This property is currently under investigation by Environ (2013) and under the jurisdiction of the Orange County Health Care Agency (OCHCA). The property was historically occupied by Flexible Metal Hose Manufacturing Company beginning sometime in 1955. The site obtained a permit to operate a PCE vapor-style degreaser in 1978. Environ reported that the western portion of the building was occupied by West Coast Woodworking from 1982 to 2008. Environ reports that other tenants of the eastern portion of the building have included Hills Generator Systems, West Coast Panel, LT Electronics, OCG Inc. and Murray Scott Construction. As part of the previous investigations on that property, a sump in the southeast corner appears to be a source of volatile organic compounds (VOCs) including PCE and TCE to subsurface soils and groundwater (Environ 2013).

1.4 FUTURE LAND USE

The Subject Property is currently part of a real estate transaction. Based on our discussions with the potential buyer, the property will likely be re-developed as residential.

1.5 TOPOGRAPHY

The 1981 United States Geological Survey (USGS) "Newport Beach, California" 7.5 minute quadrangle map showing the area where the property is located was obtained and reviewed as specified in ASTM Standard 1527-05 § 8.2.3. According to the contour lines on the topographic

map, the property is located approximately 105-feet above mean sea level. The contour lines in the area of the property indicated that area is slightly sloped to the east and southeast.

1.6 GEOLOGY AND HYDROGEOLOGY

The Subject Property is within the Coastal Plain of the Orange County Water Basin. The coarser, more permeable sediments in the Basin are generally located to the north and east of the Subject Property. Finer grained, less permeable sediments are located in the seaward "pressure" part of the Basin where the Subject Property is located. The primary water-bearing units in the Orange County Water Basin are located in the Upper, Middle and Lower Aquifer Systems. The Upper Aquifer includes Holocene age and older Pleistocene age alluvium and stream deposits and has an average thickness of approximately 800 feet. In the coastal area where the Subject Property is located, the Upper Aquifer System sediments tend to be finer-grained clays and clayey silts with possible minor recharge (Environmental Audit, 2009).

The Middle Aquifer System is the primary source from which groundwater is extracted in the Orange County Water Basin and has an average thickness of 1,600 feet. The Lower Aquifer System is approximately 350 to 500 feet thick and is generally not a primary source of groundwater due to its depth (Environmental Audit Inc., 2009).

The Subject Property is approximately 1.5 miles east of the Santa Ana River. Groundwater flow is reported in a number of investigations to vary from southwesterly, southerly, and southeasterly. These investigations include the J.C. Carter Company facility at 671 West 17th Street (Tetra Tech 2009 and 2012), the Costa Mesa Site Discovery area (southeast boundary the corner of 16th Street and Placentia Avenue (AMEC, 2011); and the work conducted by Environ (2013) on the adjoining and Subject Property.

Subsurface investigations conducted for the adjoining site indicate that soil beneath the Subject Property generally consists of silty sand with local layers of sandy clay and silt to approximately 50-feet below ground surface (bgs). Groundwater was encountered at a depth of approximately 45-feet bgs as part of these investigations (Environ, 2013). These findings are consistent with the findings of this Phase II on the Ebb Tide Property.

2 ASSESSMENT ACTIVITIES

This field assessment was designed to collect sufficient information to verify the presence of the suspected RECs specified in Section 1 of this report. The scope of work included sampling shallow soils for petroleum hydrocarbons, VOCs and metals in the vicinity of the RECs. Soil-gas samples were collected across the property and analyzed for VOCs.

2.1 PRELIMINARY SITE RECONNAISSANCE

Ms. Valerie Marshall and Mr. Michael Mooradian of Ecobility Corporation conducted a site walk of the property on February 13, 2014 to perform a preliminary reconnaissance of the site and to mark possible drilling locations. Immediately after marking primary and secondary drilling

locations, Underground Service Alert was contacted as required to identify major utilities that may be impacted during the field program. Pacific Coast Locators, Inc. was mobilized to the site on February 13th to also clear boring locations. Ground penetrating radar and other detection instruments were used in this process.

Prior to the start of fieldwork with all contractors, the Worker Health and Safety Plan were reviewed with all site personnel. All site personnel acknowledged review of the Worker Health and Safety Plan by signing the document (Appendix A).

2.2 DIRECT PUSH DRILLING

Drilling and sampling activities commenced on February 17, 2014 and were completed on February 18, 2014. On site were Ms. Valerie Marshall and Mr. Michael Mooradian of Ecobility, and Mr. Eric Herrera, Mr. Jose Vasquez, Mr. Juan Oserio, and Mr. Ryan Hughes of Strongarm Environmental Field Services, Inc. Also on site was Ms. Heather Evans of A&R Laboratories.

Direct Push drilling was conducted by Strongarm Environmental Services using two GeoProbes®, (Model 6600 and Model 5400) rigs.

Drilling commenced at 8:00 AM on February 17, 2014. Four of the seventeen borings (SG1, SG2, SG3 and SB6) were drilled to 35 feet below ground surface (bgs). These borings were clustered in the area of the onsite stormwater sump along the northern property. One of these borings (SG2) was drilled as close as feasible to the sump on the adjoining property that is a suspected source of soil and groundwater contamination (Environ, 2013). The remaining thirteen borings were drilled to 15 feet bgs and distributed across the property. The locations of these borings are shown on Figure 2.

Each boring was drilled using a truck-mounted Geoprobe System™ to “push” the drill rod to the termination depth of each boring. Direct push is a method of drilling that does not result in the generation of soil cuttings. The probe diameter is approximately 2.25-inch.

At the completion of drilling and sampling activities, the boreholes were backfilled with soil cuttings and hydrated bentonite. The surface of each borehole was then sealed with like material to its surroundings, either concrete or asphalt.

Prior to mobilizing to the site, the direct-push rods and probes were decontaminated at the EST's facility by steam cleaning. After the completion of each borehole, the drill rods, and sampler were washed on site and rinsed with distilled water by Strongarm Field Environmental Services, Inc.

2.3 SOIL SAMPLING

Prior to drilling, acetate sleeves were placed inside the soil sampler attached to the end of the drilling rod. As the rod was “pushed” into the subsurface at selected soil sampling locations, an intact soil sample was collected and retrieved allowing visual inspection of the lithology.

Soil samples were collected at 2, 5, 10, 15, 20, 25, 30, and 35 feet bgs in the deep borings. Soil samples were collected from 3, 8, and 15 feet in the remaining thirteen borings.

As each acetate sleeve was retrieved from the sampler, the sleeve was cut in half. One sleeve was selected for chemical analysis. Three aliquots of the sample were collected and preserved in accordance with EPA Method 5035. The remaining portion of the sample was labeled, sealed on each end, and preserved in an iced cooler for transport to the laboratory. The 5035 preserved aliquots and the remaining portion of the samples were documented for transfer under a Chain-of-Custody to Sunstar Laboratories, Inc. in Lake Forest, California.

During drilling, a field organic vapor analyzer (OVA) equipped with a photoionization detector (PID) was used to measure VOCs in the collected soil samples. The second half of the sleeve was used for this field test. This sample was placed in a Ziploc® bag and allowed to stand for approximately 10 minutes. The OVA was then used to measure the concentration of VOCs accumulating in the plastic bag. This concentration was noted on the lithologic logs along with a description of the lithology (See Appendix B).

This lithology was described using the Unified Soil Classification System and included color and general characteristics of the subsurface soil and/or bedrock. The lithology at the site is generally consistent clayey silt to approximately 3 to 5-feet bgs, clayey silt and fine sand from 5-feet bgs to 10-feet bgs and fine sand to 25-feet bgs. No odor or visual indication of contamination was identified. Groundwater was not detected in any of the borings.

2.4 SOIL-GAS TESTING

Soil-gas testing was conducted at sixteen locations (SG1 through SG15 and SG6A) across the property (Figure 3). Dual probes were installed at 5 and 15 feet in each of these borings except SG13 and SG15 where only 5-foot probes were installed. A&R Laboratories used a mobile laboratory to provide onsite analysis of the soil-gas samples for VOCs. A & R Laboratories is an Environmental Laboratory Accreditation Program (ELAP) accredited mobile laboratory. Installation of the probes and the collection and analysis of the soil-gas samples was conducted in general conformance with the California Environmental Protection Agency, Advisory – Active Soil Gas Investigations, April 2012. The probes were allowed to stand following installation for a minimum of two hours prior to sampling. A purge volume test was conducted from the first probe (SG13) sampled at 3, 5, and 10 pore volumes. The purge volume test included collecting a sample after purging 3 volumes of the probe, a second sample after 5 purge volumes, and a final sample after 10 purge volumes. The result, with the highest detection (5 purge volumes) of the chemical of concern is then identified and that purge volume is used for all subsequent soil-gas sampling.

The mobile laboratory chemist was responsible for collecting the soil-gas samples and analyzing these samples in the onsite mobile laboratory. The mobile laboratory was equipped with a gas chromatograph/mass spectrometer configured for soil gas sampling. A total of 30 soil-gas samples and two duplicates were analyzed.

2.5 LABORATORY TESTING

Soil samples were forwarded under chain-of-custody to Sunstar Laboratories, Inc. (Sunstar) in Lake Forest, California for chemical analysis. Sunstar is accredited by the Environmental Laboratory Accreditation Program (ELAP) administered by the State of California for the tests specified for this assessment.

Soil samples collected from 2 and 5 feet bgs from SG1, SG2, SG3 and SB6 in the vicinity of the sumps were analyzed for total petroleum hydrocarbons (TPH) by gas chromatography by EPA Method 8015. The 2-foot samples were also analyzed for seventeen metals as specified in the California Code of Regulations (CCR) Title 22. The metals were analyzed by EPA Method 6010B. These samples were selected because of their proximity to the sumps in the northern portion of the property. The 2 and 5-foot samples were selected because they are more representative of soils that may be impacted during site development.

3 RESULTS

The results of the laboratory's analysis of soil samples for TPH and VOCs are presented in Table 1. Concentrations of Title 22 metals in select soil samples are presented in Table 2. The results of the soil-gas testing are presented in Table 3. Detailed laboratory results are presented in Appendix C.

3.1 SOIL SAMPLES

The results show that TPH was not detected above the laboratory's reporting limit in any of the samples analyzed for this compound. The only VOCs detected in the soil sample analyzed were PCE, TCE, and tert butyl alcohol (TBA) (See Table 1 and Figure 2). TBA was detected in two samples. These samples were collected from 25 feet from SG1 (210 µg/kg) and SG2 (51 µg/kg). PCE and TCE were detected in samples collected from the 35-foot borings (SG1, SG2, SG3, and SB6) at depths ranging from 15 to 35 feet bgs. These constituents were not detected in the shallower sediments with the exception of a low concentration (6.2 µg/kg) of PCE at 2 feet in SG2. In addition to the VOCs found in the deep borings, TCE was detected only at 15 feet bgs in SG6 and at SG7. No other VOCs were detected in these samples. Borings SG6 and SG7 are also located along the northern boundary of the property providing further evidence that the source of the contamination is likely located off property.

The VOC concentrations were compared to the U.S. Environmental Protection Agency Region 9 (2013) residential soil Regional Screening Levels (RSLs) that OCHCA confirmed could be relied upon and the San Francisco Regional Water Quality Control Board (RWQCB) Environmental Screening Levels (2013). Because RSLs were not available for TPH and TBA, the San Francisco Bay RWQCB ESLs where groundwater is a current or potential source of drinking water and is deeper than 3 meters were used for comparison to these compounds. The concentration of TBA at SG1 at 25 feet (SG1-25; 210 µg/kg) exceeded the ESL of 75 µg/kg. None of the remaining samples had detectable concentrations of VOCs above their respective residential soil RSL or ESL.

The 2-foot soil samples collected from SG1, SG2, SG3, and SB6 were also analyzed for CCR Title 22 metals for further characterization. Eight of the 17 metals were detected in the soils. These included barium, cobalt, chromium, copper, lead, nickel, vanadium, and zinc.

These concentrations were compared with the California Human Health Screening Levels (CHHSLs) developed by the California Environmental Protection Agency (2005). The CHHSLs are designed as guidance for regulatory agencies as part of their oversight. The document states that *“The CHHSLs can be used to screen sites for potential human health concerns where releases of hazardous chemicals to soils have occurred. Under most circumstances, and within the limitations described in the document, the presence of a chemical in soil, soil gas or indoor air at concentrations below the corresponding CHHSLs can be assumed to not pose a significant health risk to people who may live (residential CHHSLs) or work (commercial/industrial CHHSLs) at a site.”* *“The presence of a chemical at concentrations in excess of a CHHSL does not indicate that adverse impacts to human health are occurring or will occur but suggests that further evaluation of potential human health concerns is warranted.”*

With the exception of chromium, all concentrations were significantly lower than the residential CHHSLs. Total chromium was detected from 7.9 mg/kg to 18 mg/kg. California does not have published residential CHHSLs for total chromium, only chromium III and chromium VI. According to Mr. John Sheplar, Director of Sunstar Laboratories, total chromium is generally made up of approximately 99 percent chromium III and 1 percent chromium VI. Chromium III has a residential CHHSL of 100,000 mg/kg and chromium VI has a CHHSL of 17 mg/kg. The highest concentration detected is 18 mg/kg. Based on the percent chromium VI typically found in total chromium, there is a low probability that chromium VI is present at concentrations in excess of the residential CHHSL.

3.2 SOIL-GAS SAMPLES

The results of the analyses identified four constituents on the property with concentrations above the laboratory's reporting limit. These constituents are PCE, TCE, toluene, and chloroform. Although concentrations reported for samples collected from both the 5 and 15-foot samples are compared to the residential CHHSLs in Table 3, for the purposes of estimating risk only the five foot samples are used as stated in the CHHSL guidance document (California Environmental Protection Agency, 2005).

Chloroform was only detected in one sample in the 15-foot sample collected at SG7 (SG7-15). The concentration ($54 \mu\text{g}/\text{m}^3$ or $0.054 \mu\text{g}/\text{l}$) was only slightly above the laboratory's reporting limit of $50 \mu\text{g}/\text{m}^3$. California does not have a residential CHHSL so the soil-gas ESL was used as a screening level for chloroform. The residential ESL for chloroform in soil gas is reported at $230 \mu\text{g}/\text{m}^3$ ($0.23 \mu\text{g}/\text{l}$) over 4 times higher than the reported concentration. The single detection of this compound and its low concentration make it not a likely chemical of concern.

Toluene was detected in thirteen of the 30 samples analyzed and concentrations ranging from 100 to 910 $\mu\text{g}/\text{m}^3$. These concentrations are significantly lower than the residential CHHSL for toluene of 135,000 $\mu\text{g}/\text{m}^3$.

PCE and TCE are the primary chemicals of concern (COCs) on the property. Concentrations in soil gas ranged from less than 100 $\mu\text{g}/\text{m}^3$ to 1600 $\mu\text{g}/\text{m}^3$ of PCE and from less than 100 $\mu\text{g}/\text{m}^3$ to 8100 $\mu\text{g}/\text{m}^3$ of TCE. Concentrations of one or both of these constituents were detected in 25 of the 30 soil-gas samples. PCE exceeded the residential CHHSL of 180 $\mu\text{g}/\text{m}^3$ in eleven samples and TCE exceeded the residential CHHSL of 528 $\mu\text{g}/\text{m}^3$ in twelve samples. Lower concentrations of these compounds were found in samples collected from 5 feet bgs except at SG6 along the northern property boundary in the eastern portion of the property where higher concentrations were found at 5 feet bgs.

4.0 RISK SCREENING

4.1 METHODOLOGY

The concentrations of TCE and PCE exceeded the residential CHHSLs in several samples. As a result, a risk screening analysis was conducted to estimate both the carcinogenic and non-carcinogenic risk associated with these constituents. The screening methodology used the California Department of Toxic Substances Control (DTSC) version of the Johnson-Ettinger Screening-Level Model for Soil Gas Contamination (DTSC, 2011) was used to estimate the carcinogenic risk and hazard quotient for non-carcinogenic risk for the concentrations detected in the soil gas. The carcinogenic risk is presented as a unit less number representing the cancer risk of a population. For example, a risk of 2.3×10^{-6} is read as 2.3 persons in one million have the risk of developing cancer. The generally accepted threshold level by the U.S. EPA, DTSC and other regulatory agencies is a cancer risk of one in one million (1×10^{-6}). Risks greater than 1×10^{-6} may also be acceptable or may require further analysis as determined by the agency with jurisdiction over the site. Considerations for higher thresholds by these agencies are often based on a wide range of factors including future land use, site conditions, surrounding property uses, identification of the source and delineation of the contamination.

The model also provides an estimate of the non-carcinogenic risk known as the hazard quotient (HQ). The HQ is the ratio of the exposure estimate to an effects concentration considered to represent a "safe" environmental concentration or dose. The HQ ranges from less than one to greater than one. HQ's less than one are generally considered an acceptable risk.

The risk screening was first conducted using the default soil types provided by the U.S. EPA and DTSC (2011). DTSC has historically suggested that the default parameters be first used and site-specific parameters be inputted only if exceedences are identified. The results of these analyses are shown in Table 4. In addition, the model was run using a soil type of sandy clay and the parameters associated with that soil type. Sandy clay appears to be representative of the conditions observed in the field as well as those presented in lithologic logs for the north

adjoining property (Environ, 2013). The OCHCA also suggested using this soil type based on their review of the preliminary data.

4.2 RISK SCREENING RESULTS

The screening analysis was only conducted on those 5-foot samples where one or more of the VOCs exceeded the residential CHHSLs. The risk was estimated for each VOC detected in each sample and then summed to provide a cumulative risk. As a result, the risk screening was conducted for the soil-gas samples collected from SG2, SG6, SG9, SG11, and SG13. Cumulative risks were estimated by summing the individual carcinogenic risks for the detected VOCs. Cumulative carcinogenic risks ranged from 1.79×10^{-6} to 6.2×10^{-6} for the DTSC default soil type; and 8.0×10^{-7} to 3.3×10^{-6} for sandy clay. The results of the carcinogenic screening risks are provided in Tables 2 to 4 and the model worksheets in Appendix D.

A HQ of 1 is generally considered an acceptable Hazard Quotient by most regulatory agencies including the U.S. EPA and the DTSC. The screening analysis using the DTSC soil type identified hazard quotients for non-carcinogenic risks in excess of 1. However, the HQ values for the sandy clay soil type were all below 1.

These results should generally be considered representative within the limitations of the data however final determination of acceptability is made by government agencies with jurisdiction over the property. This risk screening does not include possible risks associated with either dermal contact or ingestion of materials (including soil) containing these chemicals.

5 DATA INTERPRETATION

The results of the field investigation and laboratory analysis were reviewed and assessed based on the future residential planned development of the Subject Property. A review of the field data and information from reports focused on the COCs in soil and soil gas. The scope of this assessment did not include the collection of groundwater samples on the Subject Property but Ecobility did review groundwater information for neighboring properties and the soil data collected from the Subject Property with respect to groundwater conditions.

COCs identified on the site as well as on adjoining and neighboring properties were primarily PCE and TCE. The only other VOCs detected were TBA in two soil samples and toluene in some soil-gas samples. PCE, TCE, and toluene are often used as cleaners by dry cleaning services and various industrial operations where solvents are used. TBA is also used as a solvent as well as a component of gasoline. The Phase I ESA did not identify a source or use of these chemicals on the Subject Property. However, several industrial properties are present in the vicinity of the Subject Property with some of these confirmed release sites of some of these constituents. The AEA Investment property immediately north of the Subject Property (775-777 West 16th Street) is currently under investigation and remediation with oversight from the OCHCA for VOCs including TCE and PCE. The site has been under investigation since at least 2008. Environ (2013) reports that PCE has been used on the property and both PCE and TCE

have been detected in soil, soil vapor, and groundwater. The report further suggests that in addition to the AEA Investment property other contributing sources of PCE and TCE may also be originating from other off-site sources to the northeast, north and northwest.

Less than 1000 feet west of the Subject Property is Hixson Metal Finishing another known contributor of PCE and TCE to soil and groundwater. This site is currently under investigation by DTSC. A review of available reports suggests that the contamination is migrating southward and cross gradient from the Subject Property.

5.1 SOIL SAMPLES

Total petroleum hydrocarbons were not detected in the soil samples collected from SG1 adjacent to the onsite stormwater sump. In addition, the concentrations of Title 22 metals in the 2-foot samples in the area of the sump were all below their respective residential CHHSLs. VOC analysis of soil samples across the property only identified PCE, TCE and in two samples TBA. The detected concentrations were limited to samples collected from SG1, SG2, SG3, SG6, SG7 and SB6 along the northern boundary of the property (See Figure 2). With the exception of TBA detected in one sample all VOC concentrations reported by the laboratory are below their respective residential soil RSLs or ESLs.

SG1 was drilled adjacent to the onsite stormwater sump in an effort to verify the presence of the REC identified in the Phase I ESA. VOCs were only detected in the sample collected from 25 feet bgs with no reportable concentrations in the 2, 5, 15, or 35-foot samples. The 10, 20 and 30-foot samples were not analyzed. In addition, only TCE and TBA were detected in the 25-foot sample. The absence of VOCs in the 2, 5, and 15-foot samples in SG1 supports that the source of these constituents is not the onsite sump. The presence of VOCs mainly in the deeper samples collected from SG1, SG2, SG3, and SB6 suggest that these borings are not at the source of contamination. Generally more detections and higher concentrations of TCE and PCE were detected in samples collected from SG2. This boring was drilled along the property boundary as close as feasible to the sump on the AEA Investments property. This sump has been previously identified as a source of soil and groundwater contamination by Environ (2013). That site is under the jurisdiction of the OCHCA and is currently under investigation and remediation further suggesting an off-site source of the VOCs in soil on the Subject Property.

Only one sample collected above 15 feet bgs contained a reportable concentration of a VOC. A low concentration (6.2 µg/kg) of PCE was detected in the 2-foot sample collected from SG2. The absence of this compound, or any VOCs, in the 5-foot sample from this boring does not support that this location is the source of contamination, but it does further suggest that off-site activities have impacted the Subject Property. According to Mr. Joe Labarbera, owner of the Subject Property, during significant rain events in the past, the sump on the adjoining industrial property to the north has overflowed onto the mobile home park property and into the on-site sump. Mr. Labarbera indicated that a concrete curb was placed on the north property boundary to direct any overflow from the adjoining property back onto their property or away from the mobile home park property (Ecobility, 2013). Contaminants transported with the floodwaters may have been the source of this shallow contamination.

TBA was found in the 25-foot sample of SG1 at nearly three times the ESL. The compound was not detected in shallower or deeper samples analyzed from the boring. TBA was detected in only one other sample out of the 39 total samples collected and analyzed across the site. The sample collected from 25 feet at SG2 had a concentration of 51 µg/kg, which is below the ESL (75 µg/kg). The presence of TBA appears isolated and, although insufficient information is available to identify the source, the absence of this compound in the shallower samples suggests the source is not surface spillage. The isolated exceedence of the ESL in a single sample at 25 feet bgs does not suggest remediation is necessary considering this depth is well below the depth of the soil that may be impacted during site development and the lack of detection below this depth does not demonstrate a pathway to groundwater at these locations.

Concentrations of PCE and TCE, again well below the RSLs for residential soil, were also detected at 15 feet at SG6 and SG7 approximately 40 feet and 125 feet east of the boring cluster (SG1, SG2, SG3, and SB6) previously discussed. A second off-site sump at Criterion Machine Works (a manufacturer of machine tool accessories located at 777 W. 16th Street) was identified approximately 50 feet northeast of SG6. Although the available data are insufficient to identify this sump as the source of this contamination, it is a potential candidate. Insufficient data are available to assess if a common source exists but the proximity to the industrial properties less than 20-feet north from these borings and the absence of these constituents in the 3-foot samples suggest that the likely source(s) are off site. Onsite sources of the VOCs were not identified on the Subject Property.

The concentrations of TCE and PCE were also compared to the U.S. EPA RSLs for groundwater protection as well as the San Francisco Bay RWQCB Environmental Screening Levels (ESLs) for deep soil and groundwater is a current or potential source of drinking water. The EPA RSLs were designed to screen concentrations of contaminants in soil based on their risk of increasing concentrations in groundwater above the MCL. The San Francisco Bay RWQCB ESLs in their Table C states "Soil ESLs intended to address direct-exposure, groundwater protection, urban ecological receptors, and nuisance concerns under noted land-use scenarios." Although all of the detected concentrations of PCE and TCE were below the EPA residential soil RSL they were also all above the EPA RSL for groundwater protection. However, these same concentrations were below the San Francisco Bay RWQCB ESLs. The absence of significant concentrations of PCE at the shallow soil depths suggests that the source of this contamination is not in proximity to the borings. Historic and current review of the Subject Property did not identify the storage or use of these chemicals and historic and current use of the property did not identify activities that would support the use of these chemicals. The adjoining AEA Investment property to the north has been identified as a user of these chemicals as well as a contributor to soil, soil-gas and groundwater contamination based on the sites current oversight by the OCHCA. Specifically, a sump approximately 20 feet north of the northern property boundary has been identified as a source. Likely pathways onto the Subject Property include migration through soils above the water table and groundwater migration to the south. Seasonal fluctuations in the groundwater may have also impacted the deeper soil by depositing these contaminants during periods of higher water tables.

With the exception of a low concentration of PCE in one sample, VOCs were not detected in any of the 34 soil samples analyzed in the upper five feet of soil across the property. As a result, it is unlikely that significant contamination will be contacted during grading of the site. However, some isolated zones of contamination may be encountered along the northern boundary in the vicinity of the adjacent off-site sumps and during the removal of the onsite stormwater sump.

5.2 SOIL GAS

The COCs found in soil were also found in the soil gas beneath the property. PCE, TCE, and at some locations toluene were detected in soil-gas samples collected from the Subject Property. Toluene was detected in 13 of the 30 samples collected however all concentrations were less than the residential CHHSLs.

Figures 3 through 6 show the distribution of PCE and TCE at 5 and 15 feet bgs. The highest concentrations of PCE at 5 feet appear to be in the southeast corner of the property (1400 $\mu\text{g}/\text{m}^3$ at SG13) and in the northern portion of the property adjacent to the off-site sump (730 $\mu\text{g}/\text{m}^3$ at SG2). This distribution suggests that there may be multiple off site sources. The 5-foot concentration is higher than the 15-foot sample at SG2 suggesting proximity to a possible source.

At 15 feet, the highest concentrations of PCE were found at SG7 (870 $\mu\text{g}/\text{m}^3$) in the northeast corner of the property, in the central portion at SG9 (1400 $\mu\text{g}/\text{m}^3$) and SG11 (800 $\mu\text{g}/\text{m}^3$) and at SG14 (1600 $\mu\text{g}/\text{m}^3$) in the south-central portion of the property.

The distribution of TCE at 5 feet bgs revealed the highest detected concentrations in the central portion of the property at SG9 (3300 $\mu\text{g}/\text{m}^3$) and SG11 (3400 $\mu\text{g}/\text{m}^3$). Higher concentrations of TCE were found at 15 feet bgs at these locations.

The figures show that concentrations of PCE and TCE at 5 feet are generally lower than the concentrations detected at 15 feet. These results suggest that the source(s) of these constituents is at depth. The presence of significant concentrations of these chemicals in groundwater (Environ, 2013) suggests that vapors may be emanating from groundwater.

The concentrations on the Subject Property were compared to concentrations reported on the AEA Investment property to the north. Environ reports that the highest concentrations of PCE and TCE were found adjacent the sump in the southeast corner of their property less than 20 feet north of SG2 on the Subject Property. PCE in soil gas was reported at 990 $\mu\text{g}/\text{l}$ at 4 feet; 670 $\mu\text{g}/\text{l}$ at 10 feet and 2 $\mu\text{g}/\text{l}$ at 40 feet; and TCE 220 $\mu\text{g}/\text{l}$ at 4 feet, 150 $\mu\text{g}/\text{l}$ at 10 feet and 200 $\mu\text{g}/\text{l}$ at 40 feet adjacent to this sump. Testing was also conducted on the Subject Property at locations near SG5 and SG6A. The results were significantly lower, and consistent with soil-gas concentrations detected as part of the current assessment. PCE concentrations were reported by Environ to range from 0.03 to 1.1 $\mu\text{g}/\text{l}$ and TCE ranging from not detected to 0.81 $\mu\text{g}/\text{l}$. These results further suggest that the sump on the north adjoining property is at least one source of these vapors.

PCE and TCE concentrations in the 5-foot samples exceeded the residential CHHSLs at five locations: SG2, SG6, SG9, SG11, and SG13. A risk screening of these numbers found the cumulative carcinogenic risk to range from 1.7 to 6.2 in a million; and a hazard quotient range from 0.105 to 1.42 using the DTSC default parameters. Each of these locations exceeded the 1 in a million acceptable threshold and one location exceeded the hazard quotient of 1 used by OCHCA and a number of other agencies in California. Risk levels were lower, ranging from 8 in 10 million to 3.3 in one million for sandy clay soil that is more representative of the site. The cumulative HQ at each location for this soil type is less than one. These results suggest further assessment or mitigation of vapors may be necessary. Discussions with OCHCA stated that sites under their jurisdiction with estimated carcinogenic risks above one in a million or HQ's in excess of 1 would require mitigation prior to closure. However, a review of California Vapor Intrusion Guidance documents and past discussions with DTSC suggest that this agency has more flexibility in establishing mitigation thresholds. Carcinogenic risks below 1×10^{-6} generally are considered safe and require no further action. Risks greater than 1×10^{-4} require mitigation and/or remediation. Risks estimate between 1×10^{-4} and 1×10^{-6} require further assessment, monitoring and may also require mitigation (DTSC, 2011a and 2011b).

5.3 GROUNDWATER

Although groundwater testing was not part of the Phase II Scope of Work, information regarding groundwater was obtained from reports on nearby properties as well as previous work conducted on the Subject Property. Groundwater is reported to range from approximately 40 to 50 feet bgs based on information obtained from the ongoing assessment at AEA Investments property at 775-777 West 16th Street by Environ (2013). However, it does not appear that on site data has been collected to determine the local direction of groundwater flow. Environ reports that based on other assessments in the area the direction of groundwater flow appears to vary in the area from southwest to southeast. These findings are similar to that reported for the Hixson property at 817-853 Production Place, Newport Beach, California less than 1000 feet west of the Subject Property.

According to Environ, groundwater sampling was conducted on the AEA Investments LLC property and on the Subject Property in 2013. The results of their investigation for OCHCA (Environ, 2013) identified concentrations of PCE and TCE immediately north of the Subject Property at two locations. The first location was adjacent a sump where concentrations of PCE and TCE were detected at 280 μ g/l and 810 μ g/l respectively. The second location was approximately 100 feet to the west where concentrations of PCE and TCE were 76 μ g/l and 510 μ g/l, respectively. Environ also collected three water samples on the Subject Property. These locations were near SG12 (PCE 9 μ g/kg and TCE 52 μ g/l), near the center of the property at SG10 (PCE 140 μ g/l and TCE at 580 μ g/l) and near SG8 (PCE at 100 μ g/l and TCE 330 μ g/l). Although the concentrations detected on the Subject Property exceed California's Maximum Contaminant Levels (5 μ g/l for each constituent), these concentrations are lower than those reported north of the property boundary. In addition, the concentrations detected in groundwater were significantly higher than the concentrations reported for the deep soil samples collected from the 35-foot borings drilled as part of this assessment suggesting that the concentrations found in these soils are not a significant source of potential groundwater contamination. The

increasing concentration of VOCs with depth in the soil-gas samples and their presence in groundwater, however, suggest that groundwater is the likely source of vapors beneath the Subject Property.

A review of DTSC's online Envirostor database identifies the Costa Mesa Site Discovery Project that has a regulatory status of "No Further Action" as of January 2012. This project was established under the California Land Reuse and Revitalization Act of 2005, as part of the City of Costa Mesa's development of the Eaton facility at 1640 Monrovia Avenue as part of the City's development of Westside Costa Mesa. During the course of the investigation PCE was found in soil and groundwater. Numerous hazardous waste generators were identified in the vicinity facilitating the screening of this portion of Costa Mesa. The study area boundaries included 16th Street on the south and Placentia Avenue on the east less than 1000 feet from the Subject Property.

As in other areas of southern California, the high number of industrial sites known or suspected to be impacting groundwater suggest that shallow groundwater across much of this portion of Costa Mesa and Newport Beach may be impacted with VOCs. The evidence suggests that the Subject Property is not a likely contributor to groundwater contamination considering that:

- No evidence of the use or storage of the COCs were identified on the Subject Property during the Phase I and Phase II ESAs,
- A source has been identified immediately to the north on the AEA Investment property and it is our understanding that OCHCA and the Santa Ana RWQCB are addressing the issue,
- A number of other suspected or confirmed sources of groundwater contamination are present in this portion of Costa Mesa and Newport Beach,

Because groundwater is the likely source of the VOCs in the soil gas beneath the property, appropriate mitigation of vapor intrusion should be implemented as warranted by DTSC protocols.

6 CONCLUSIONS

Ecobility conducted a Phase II site assessment for the property at 1560 to 1570 Placentia Avenue, Newport Beach, California. The assessment was limited to assessing the RECs identified in Section 1.1 of this report.

The scope of work included drilling seventeen soil borings and collecting and analyzing soil samples from these borings. In addition, soil-gas testing was conducted in sixteen of these borings with dual probes completed at 5 and 15 feet bgs at fourteen of these locations. The extent of interpretations of the data was based on magnitude and distribution of the contaminants detected, the media impacted, and the proposed residential future land use. Conclusions regarding this assessment are as follows:

1. Based on the sampling and analysis of soil and soil-gas samples at SG1, the on site sump is not likely a REC for the Subject Property. Upon its removal, environmental professionals should be on site to sample and verify this condition.
2. TBA was detected in two samples collected at 25 feet from SG1 and SG2. The concentration detected at SG1 was significantly higher than the San Francisco Bay RWQCB ESL for this compound. There is no RSL for TBA. However, the detection of this compound at only 25 feet bgs in these two borings and the absence of detectable concentrations in the remaining fifteen borings sampled support that the Subject Property is not a likely source of this contamination and that the concentrations detected are not indicative of a groundwater contamination threat.
3. PCE and TCE were detected only in soil samples from six borings along the northern portion of the property. Four of these borings (SG1, SG2, SG3, and SB6) are in proximity to the adjoining property sump and the onsite sump. With the exception of a low concentration of PCE at 2 feet at SG2 all detected VOCs were in samples collected and analyzed at depths of 15 or greater in these six borings. The available data suggests that it is unlikely that extensive soil contamination will be contacted during grading and construction. However, some localized areas of impacted soil may be encountered during the removal of the onsite sump and other isolated areas as suggested by the detection of PCE at 2 feet in SG2.
4. Significant concentrations of VOCs in excess of the residential CHHSLs were found in a large number of soil-gas samples collected from the site. A risk screening resulted in cumulative carcinogenic risks at several locations exceeding the one in a million threshold.
5. Groundwater beneath the site has previously been documented as impacted with significant concentrations of chlorinated solvents including TCE and PCE. The general increase in TCE and PCE concentrations in the soil gas with depth suggest that groundwater is the likely source of these vapors. Ecobility found no evidence in the historic data reviewed or the Phase I ESA reconnaissance of the presence or use of these chemicals or on-site activities that would suggest the use of these chemicals on the Subject Property. Offsite contributors of the groundwater contamination have been identified including the AEA Investment property immediately north of the Subject Property. PCE and TCE found in the deeper soils, albeit higher than the US EPA groundwater RSLs, were lower than the San Francisco Bay ESLs and generally lower than concentrations detected in groundwater. Insufficient information was available to assess if impacted soil in the northern portion of the property has impacted groundwater however, the concentrations detected in the deep soil samples collected from the 35-foot borings are generally lower than concentrations found in groundwater north of the property boundary and in the central portion of the Subject Property suggesting that these soils are not a significant source of groundwater contamination beneath the property.

7 RECOMMENDATIONS

Based on the findings of the Phase II Assessment and the proposed future development of the property, the following recommendations are made:

1. Prepare a soil management plan (SMP) to address the removal of the stormwater sump in the northern portion of the property and any impacted soil that may be encountered during excavation and grading. As part of the plan, the sump should be removed and disposed in accordance with local and state regulations.
2. During grubbing and grading operations, an environmental professional should be on-site to identify other issues that may arise. The SMP will be used as guidance during this activity. Samples should be collected and screened through visual observation and with an organic vapor analyzer. Where warranted, samples will be submitted to a State certified laboratory for chemical analysis. Should areas of concern be identified, those areas will be excavated to a maximum depth of 5 feet and stockpiled for further analysis. Representative samples will be collected from stockpile per the SMP. These results will determine the final disposition of the soil. Upon completion of mass grading, representative samples will be collected from the upper 3 feet of soil to verify conditions. This procedure will also be specified in the SMP. Ecobility understands that \$100,000 has been reserved for items 1 and 2 and, based on the available data, this estimate appears sufficient.
3. Based on the data collected as part of this assessment and discussions with OCHCA, preventive barriers and venting systems are an appropriate mitigation measure for vapor intrusion. The measure includes the installation of vapor barriers with passive venting systems beneath each structure. The venting system should be capable of conversion to an active system should monitoring results dictate. In addition, utility trench dams should be installed in all utility trenches that extend beneath the building foundations. An operation and maintenance plan (O&M) should be prepared for the site that includes protocols for monitoring, data acquisition, performance evaluation and reporting activities associated with the mitigation program. A firm and contractor experienced in the design and installation of vapor mitigation measures should be employed. Selection, design, construction, operation and monitoring of these mitigation measures should be in accordance with DTSC vapor intrusion guidance documents. Based on information from Ebb Tide LLC, estimated costs for this mitigation have been included into the development budget.
4. As part of construction, stormwater runoff should be permanently controlled to prevent runoff from adjoining properties entering the Subject Property. Costs for this control have been included in the development budget by Ebb Tide LL.
5. Legal counsel should be consulted on all environmental issues regarding the acquisition and development of the property including innocent purchaser defenses.

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TABLES

Table 1. Concentrations of TPH and VOCs in Soil Samples

SAMPLE	LOCATION	DEPTH ¹	PCE ²	TCE	TERT-BUTYL ALCOHOL	Total Petroleum Hydrocarbons ³
SG1-2	SG1	2	ND ⁴	ND	ND	ND
SG1-5	SG1	5	ND	ND	ND	ND
SG1-10	SG1	10	NA ⁵	NA	NA	NA
SG1-15	SG1	15	ND	ND	ND	NA
SG1-25	SG1	25	ND	7.9 ⁶	210	NA
SG1-35	SG1	35	ND	ND	ND	NA
SG2-2	SG2	2	6.2	ND	ND	ND
SG2-5	SG2	5	ND	ND	ND	ND
SG2-10	SG2	10	NA	NA	NA	NA
SG2-15	SG2	15	130	21	ND	NA
SG2-20	SG2	20	NA	NA	NA	NA
SG2-25	SG2	25	32	13	51	NA
SG2-35	SG2	35	7.2	15	ND	NA
SG3-2	SG3	2	ND	ND	ND	ND
SG3-5	SG3	5	ND	ND	ND	ND
SG3-10	SG3	10	NA	NA	NA	NA
SG3-15	SG3	15	ND	10	ND	NA
SG3-20	SG3	20	NA	NA	NA	NA
SG3-25	SG3	25	ND	ND	ND	NA
SG3-30	SG3	30	NA	NA	NA	NA
SG3-35	SG3	35	10	42	ND	NA
SG4-3	SG4	3	ND	ND	ND	NA
SG4-8	SG4	8	NA	NA	NA	NA
SG4-15	SG4	15	ND	ND	ND	NA
SG5-3	SG5	3	ND	ND	ND	NA
SG5-8	SG5	8	NA	NA	NA	NA
SG5-15	SG5	15	ND	ND	ND	NA
SG6-3	SG6	3	ND	ND	ND	NA
SG6-8	SG6	8	NA	NA	NA	NA

Table 1. Concentrations of TPH and VOCs in Soil Samples

SAMPLE	LOCATION	DEPTH ¹	PCE ²	TCE	TERT-BUTYL ALCOHOL	Total Petroleum Hydrocarbons ³
SG6-15	SG6	15	ND	29	ND	NA
SG6A-3	SG6A	3	ND	ND	ND	NA
SG6A-8	SG6A	8	NA	NA	NA	NA
SG6A-15	SG6A	15	ND	ND	ND	NA
SB6-2	SB6	2	ND	ND	ND	ND
SB6-5	SB6	5	ND	ND	ND	ND
SB6-10	SB6	10	NA	NA	NA	NA
SB6-15	SB6	15	6	6.1	ND	NA
SB6-25	SB6	25	ND	ND	ND	NA
SB6-35	SB6	35	ND	12	ND	NA
SG7-3	SG7	3	ND	ND	ND	ND
SG7-8	SG7	8	NA	NA	NA	NA
SG7-15	SG7	15	ND	6.2	ND	ND
SG8-3	SG8	3	ND	ND	ND	NA
SG8-8	SG8	8	NA	NA	NA	NA
SG8-15	SG8	15	NA	NA	NA	NA
SG9-3	SG9	3	ND	ND	ND	NA
SG9-8	SG9	8	ND	ND	ND	NA
SG9-15	SG9	15	ND	ND	ND	NA
SG10-3	SG10	3	ND	ND	ND	NA
SG10-8	SG10	8	NA	NA	NA	NA
SG10-15	SG10	15	ND	ND	ND	NA
SG11-3	SG11	3	ND	ND	ND	NA
SG11-8	SG11	8	NA	NA	NA	NA
SG11-15	SG11	15	ND	ND	ND	NA
SG13-3	SG13	3	ND	ND	ND	NA
SG14-3	SG14	3	ND	ND	ND	NA
SG14-8	SG14	8	NA	NA	NA	NA
SG14-15	SG14	15	ND	ND	ND	NA
SG15-3	SG15	3	ND	ND	ND	NA
SG15-8	SG15	8	NA	NA	NA	NA
SG15-15	SG15	15	ND	ND	ND	NA
US EPA Residential Soil RSLs ⁷			2200	910	NAA ⁸	NAA
US EPA Soil GW Protection RSLs ⁹			2.3	1.8	NAA	NAA
SF BAY ESLs ¹⁰			550	460	75	100

NOTES:

- 1 Depth reported in feet below ground surface
- 2 Concentrations of VOCs in micrograms per kilogram (ug/kg)
- 3 Concentrations of TPH in milligrams per kilogram (mg/kg).
- 4 ND - Constituent not detected above laboratory's reporting limit. Reporting limit varies with the constituent.
- 5 NA= Not Analyzed.
- 6 Bolded values are detected above the laboratory's reporting limit.
- 7 U.S. Environmental Protection Agency - Residential Screening Levels for Residential Soils
- 8 NAA No published values for these compounds
- 9 U.S. Environmental Protection Agency - Residential Screening Levels for Groundwater Protection
- 10 San Francisco Bay RWQCB ESL

Table 2. Concentrations of Metals in Soil

SAMPLE	LOCATION	Depth (feet)	DEPTH (FT) ¹	ANTIMONY ²	SILVER	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CHROMIUM	COBALT	COPPER	LEAD	MOLYBDENUM	NICKEL	SELENIUM	THALLIUM	VANADIUM	ZINC	MERCURY
SG1-2	SUMP	2	2	<3.0 ³	<2.0	<5.0	71 ^{3,4}	<1.0	<2.0	10	8.3	6.3	4.3	<5.0	7.8	<5.0	<2.0	22	26	<0.10
SG2-2	ADJOINING SUMP	2	2	<3.0	<2.0	<5.0	90	<1.0	<2.0	18	9.9	13	6.3	<5.0	12	<5.0	<2.0	39	43	<0.10
SG3-2	SUMP AREA	2	2	<3.0	<2.0	<5.0	59	<1.0	<2.0	13	5.8	6.6	4.4	<5.0	10	<5.0	<2.0	27	35	<0.10
SB6-2	SUMP AREA	2	2	<3.0	<2.0	<5.0	<1.0	<1.0	<2.0	7.9	9.4	5.7	4.6	<5.0	4.2	<5.0	<2.0	26	19	<0.10
Residential CHHSLs ⁵				30	380	0.07	5200	150	1.7	100000/ 1.7 ⁶	660	3000	150	380	1600	380	5	530	23000	18

NOTES

1 Depth reported in feet below ground surface.

2 < 20 indicates no detection at or above the Laboratory's reporting level.

3 Concentrations of metals in milligrams per kilogram (mg/kg).

4 Bolded values are detected above the laboratory's reporting limit.

5 California Human Health Screening Levels (CHHSLs) for Residential Use.

6 California Residential CHHSLs for chromium reported as Chromium III/Chromium VI Screening Levels.

**Table 3. Volatile Organic Compound (VOC)
Concentrations in Soil Gas**

SAMPLE	LOCATION	DEPTH ¹	PCE ²	TCE	TOLUENE	CHLOROFORM
SG1-5	SG1	5	<100 ³	<100	<100	<50
SG1-15	SG1	15	<100	<100	<100	<50
SG2-5	SG2	5	730 ^{4,5}	1100	910	<50
SG2-15	SG2	15	150	1200	170	<50
SG3-5	SG3	5	120	380	<100	<50
SG3-15	SG3	15	280	1700	110	<50
SG4-5	SG4	5	<100	<100	100	<50
SG4-15	SG4	15	<100	430	<100	<50
SG5-5	SG5	5	<100	<100	<100	<50
SG5-15	SG5	15	<100	<100	<100	<50
SG6-5	SG6	5	200	1000	100	<50
SG6-15	SG6	15	<100	350	100	<50
SG6A-5	SG6A	5	<100	100	<100	<50
SG6A-15	SG6A	15	<100	200	<100	<50
SG7-5	SG7	5	<100	420	<100	<50
SG7-15	SG7	15	870	8100	140	54
SG7-15 DUP	SG7	15	310	3800	<100	<50
SG8-5	SG8	5	<100	500	100	<50
SG8-15	SG8	15	100	600	<100	<50
SG9-5	SG9	5	600	3300	100	<50
SG9-15	SG9	15	1400	7600	<100	<50
SG10-5	SG10	5	<100	300	400	<50
SG10-15	SG10	15	100	300	<100	<50
SG11-5	SG11	5	200	3400	100	<50
SG11-15	SG11	15	800	6300	100	<50
SG12-5	SG12	5	<100	200	<100	<50
SG12-15	SG12	15	300	2700	<100	<50
SG13-5 1PV	SG13	5	<100	<100	<100	<50
SG13-5 3PV	SG13	5	1400	180	<100	<50
SG13-5 10PV	SG13	5	<100	<100	<100	<50
SG14-5	SG14	5	100	500	<100	<50
SG14-15	SG14	15	1600	7300	<100	<50
SG15-5	SG15	5	<100	400	100	<50
SG15-5 DUP	SG15	15	<100	300	100	<50
CHHSLs ⁶			180	528	135000	230 ⁷

NOTES:

1. Depth reported in feet below ground surface elevation of the retail shopping center.
2. Concentrations in micrograms per cubic meter (ug/m³).
3. <100 indicates no detection at or above the Laboratory's reporting limit.
4. **Bold** values indicate concentration at or above laboratory reporting limit.
5. **Highlighted** values exceed the CHHSLs.
6. CHHSLs refer to Residential California Human Health Screening Levels.
7. San Francisco Bay RWQCB ESL - no published CHHSL for chloroform.

TABLE 4. RISK SCREENING RESULTS FOR VOC CONCENTRATIONS IN SOIL GAS**SOIL TYPE: DTSC DEFAULT**

PROBE	SG2	SG6	SG9	SG11	SG13
Carcinogenic Risk					
PCE C-RISK	1.40E-06	3.90E-07	1.40E-06	3.90E-07	2.70E-06
TCE C-RISK	1.10E-06	1.40E-06	4.80E-06	4.90E-06	2.70E-07
TOLUENE C-RISK	NA	NA	NA	NA	ND
CUMULATIVE RISK	2.50E-06	1.79E-06	6.20E-06	5.29E-06	2.97E-06
HAZARD QUOTIENT					
PCE HI	1.60E-02	4.40E-03	1.60E-02	4.40E-03	3.10E-02
TCE HI	3.00E-01	4.10E-01	1.40E+00	1.40E+00	7.40E-02
TOLUENE HI	2.70E-03	2.90E-04	2.90E-04	2.90E-04	ND
CUMULATIVE RISK	3.19E-01	4.15E-01	1.42E+00	1.40E+00	1.05E-01

SOIL TYPE: SANDY CLAY¹

PROBE	SG2	SG6	SG9	SG11	SG13
Carcinogenic Risk					
PCE C-RISK	6.10E-07	1.70E-07	1.20E-06	3.90E-07	2.70E-06
TCE C-RISK	6.90E-07	6.30E-07	2.10E-06	2.10E-06	1.10E-07
TOLUENE C-RISK	NA	NA	NA	NA	ND
CUMULATIVE RISK	1.30E-06	8.00E-07	3.30E-06	2.49E-06	2.81E-06
HAZARD QUOTIENT					
PCE HI	6.90E-03	1.90E-03	1.30E-02	4.40E-03	3.10E-02
TCE HI	2.00E-01	1.80E-01	5.90E-01	6.10E-01	3.20E-02
TOLUENE HI	1.20E-03	1.30E-04	1.40E-04	1.30E-04	ND
CUMULATIVE RISK	2.08E-01	1.82E-01	6.03E-01	6.15E-01	6.30E-02

Results are based on the DTSC version of the Johnson-Ettinger Model (November, 2011)

Only samples from these 5-foot probes exceeded the Residential CHHSLs.

C-Risk refers to Incremental Carcinogenic risk from vapor intrusion to indoor air

HI - refers to Hazard quotient from vapor intrusion to indoor air.

All values are based on samples collected from 5-feet below ground surface.

NA - No carcinogenic risk values from the Johnson Ettinger Model

ND - No detected concentrations above the laboratory's reporting limit.

¹ Sandy Clay selected based on lithology on the site and north adjoining property; and suggested by OCHCA.

FIGURES

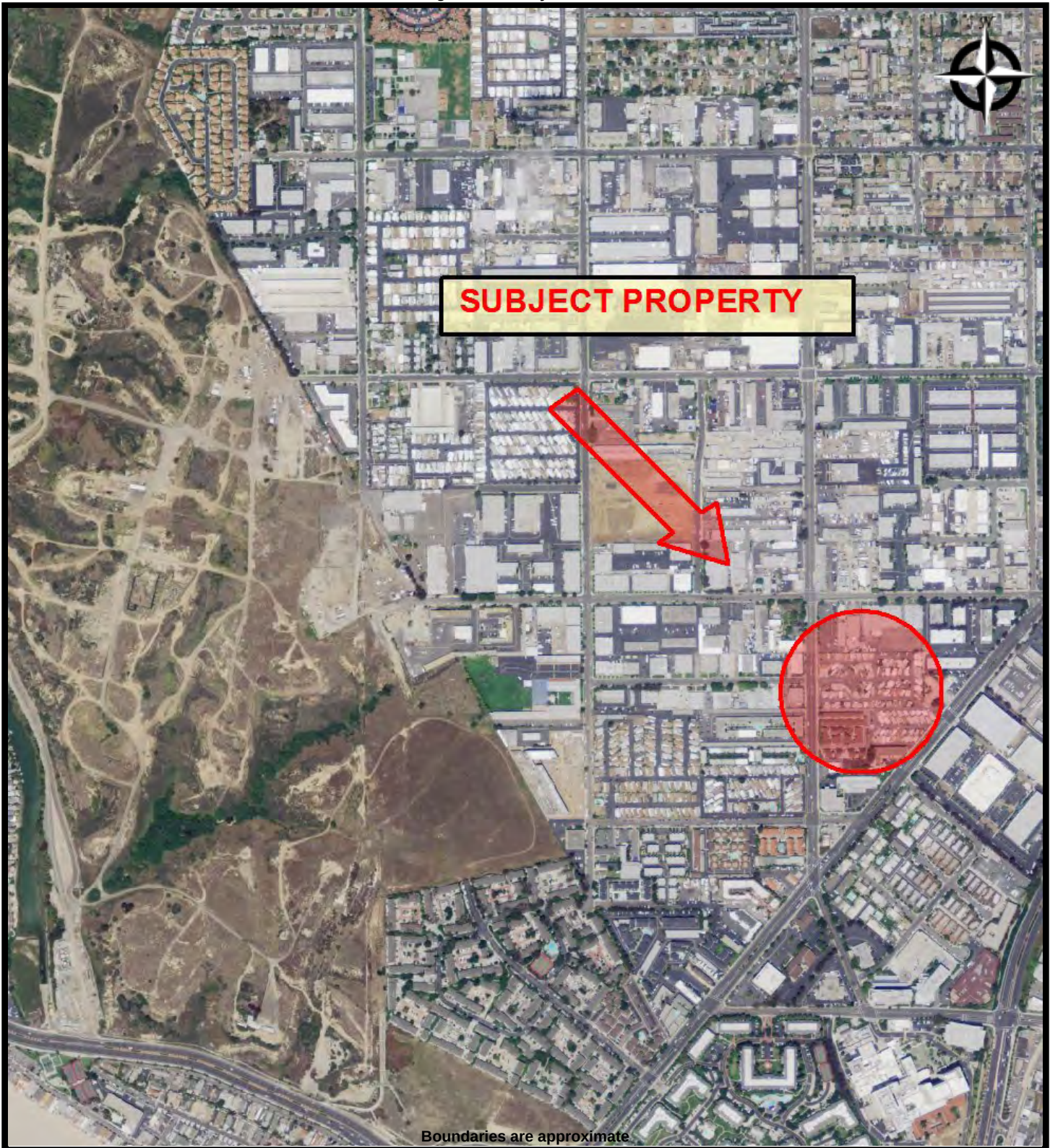


FIGURE 1-SITE LOCATION MAP
EBB TIDE LLC - NEWPORT BEACH PROJECT
1560-1570 PLACENTIA AVENUE
Costa Mesa CA 92627

PREPARED FOR: Ebb Tide LLC
PROJ. MGR: M. Mooradian
DRAWN BY: Valerie Marshall

DATE: 6/9/2014
PROJ. #: 026-14-001-1

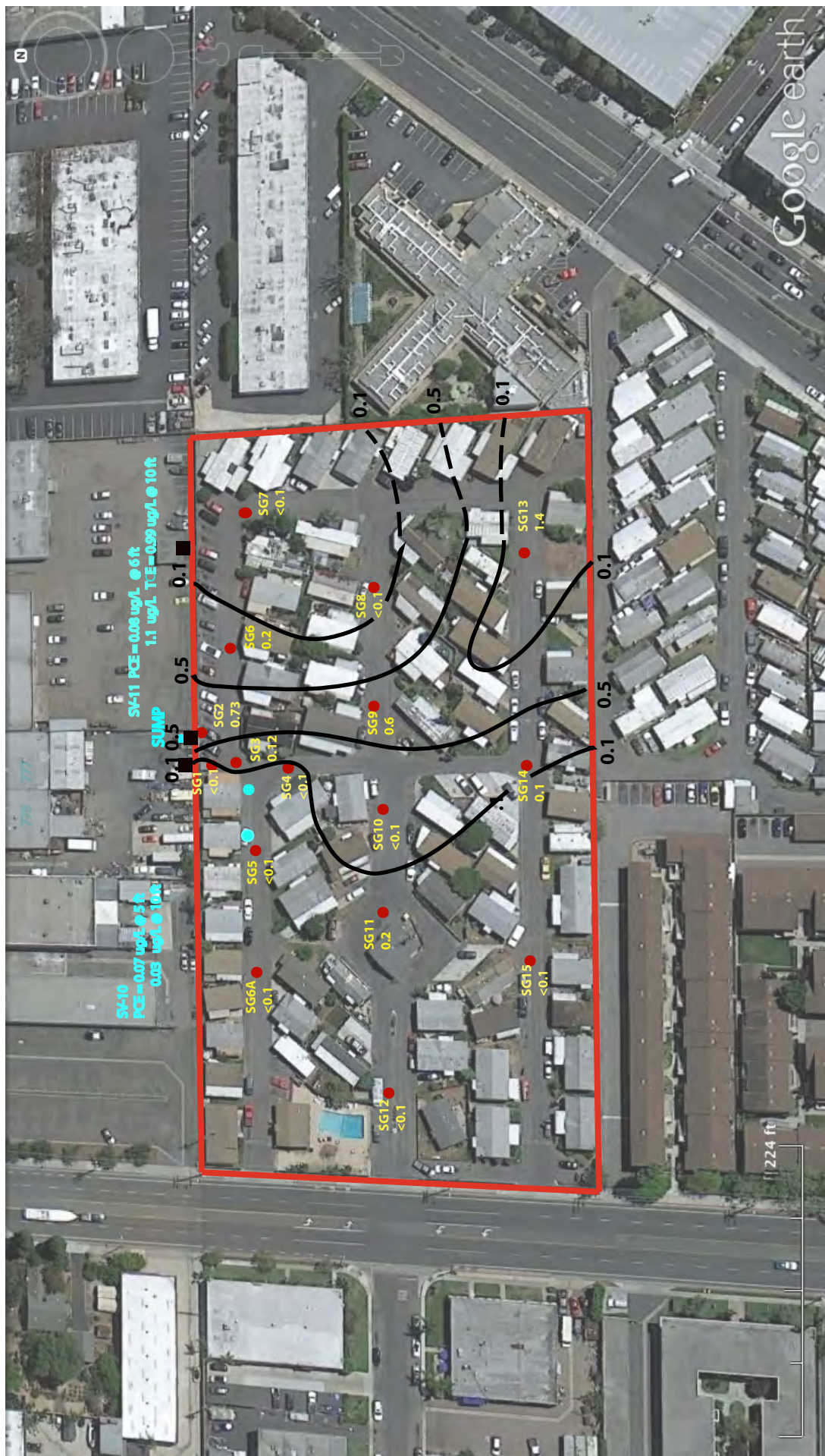




NORTH

FIGURE No.: **2**

VOC Concentrations in Soil Phase II Environmental Site Assessment Ebb Tide LLC 1560-1570 Placentia Avenue, Newport Beach, CALIFORNIA	PROJECT NO: 026-14-001-1	DATE: FEBRUARY 18, 2014	
	DRAWN BY: C.M.		
	FILE NO:		
	ecobility PHONE: (310) 910-1499 FAX: (310) 377-3745		



Legend

● Boring Location

● Boring Location previously drilled by Environ

— Line of equal concentration, dashed where inferred.

0.0 PCE Concentrations reported in micrograms per liter (µg/l)

■ Sump Location

Tetrachloroethene (PCE) in Soil-Gas at 5 Feet BGS

Phase II Environmental Site Assessment
Ebb Tide LLC

1560-1570 Placentia Avenue, Newport Beach, California

FIGURE No.:

PROJECT NO: 026-14-001-1

DATE: FEBRUARY 18, 2014

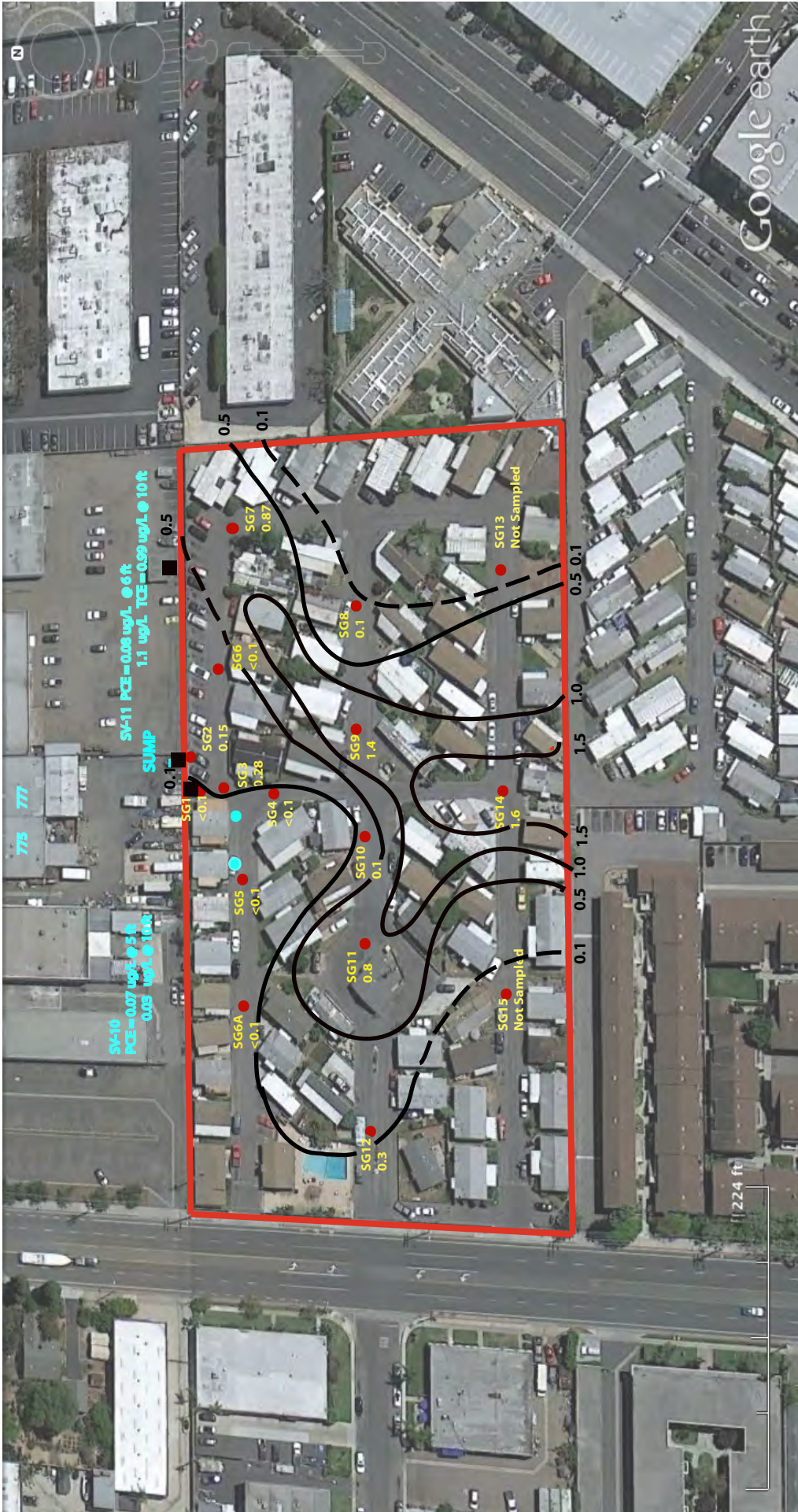
DRAWN BY: C.M.

FILE NO:

3



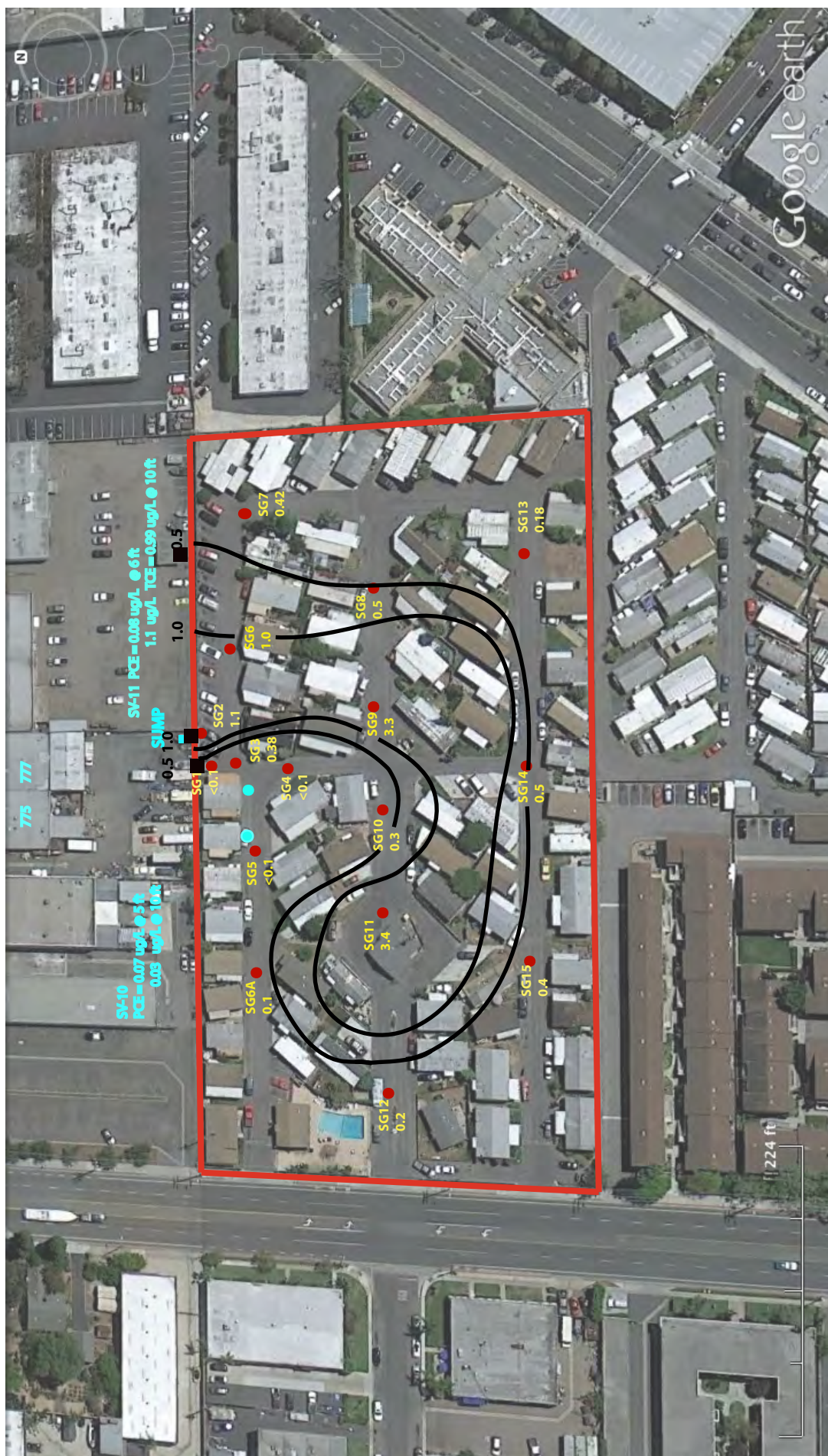
PHONE: (310) 910-1499 FAX: (310) 377-3745



Legend

- Boring Location
- Boring Location previously drilled by Environ
- PCE Concentrations reported in micrograms per liter (µg/l)
- 15-foot probes were not installed in SG13 and SG15.
- Note: PCE in a duplicate sample from SG7 was 0.31 µg/l.
- Line of equal concentration, dashed where inferred.
- Sump Location

	Tetrachloroethene (PCE) in Soil-Gas at 15 Feet BGS			PROJECT NO: 026-14-001-1	FIGURE No.: 4
	Phase II Environmental Site Assessment Ebb Tide LLC			DATE: FEBRUARY 18, 2014	
	1560-1570 Placentia Avenue, Newport Beach, CALIFORNIA			DRAWN BY: C.M.	
	PHONE: (310) 910-1499 FAX: (310) 377-3745			FILE NO:	

**Legend**

● Boring Location

● Boring Location previously drilled by Environ

● TCE Concentrations reported in micrograms per liter (µg/l)

Note: TCE in a duplicate sample from SG15 was 0.3 µg/l.

— Line of equal concentration., dashed where inferred.

■ Sump Location



FIGURE No.:

PROJECT NO: 026-14-001-1

DATE: FEBRUARY 18, 2014

DRAWN BY: C.M.

FILE NO:

Trichloroethene (TCE)
in Soil-Gas at 5 Feet BGS

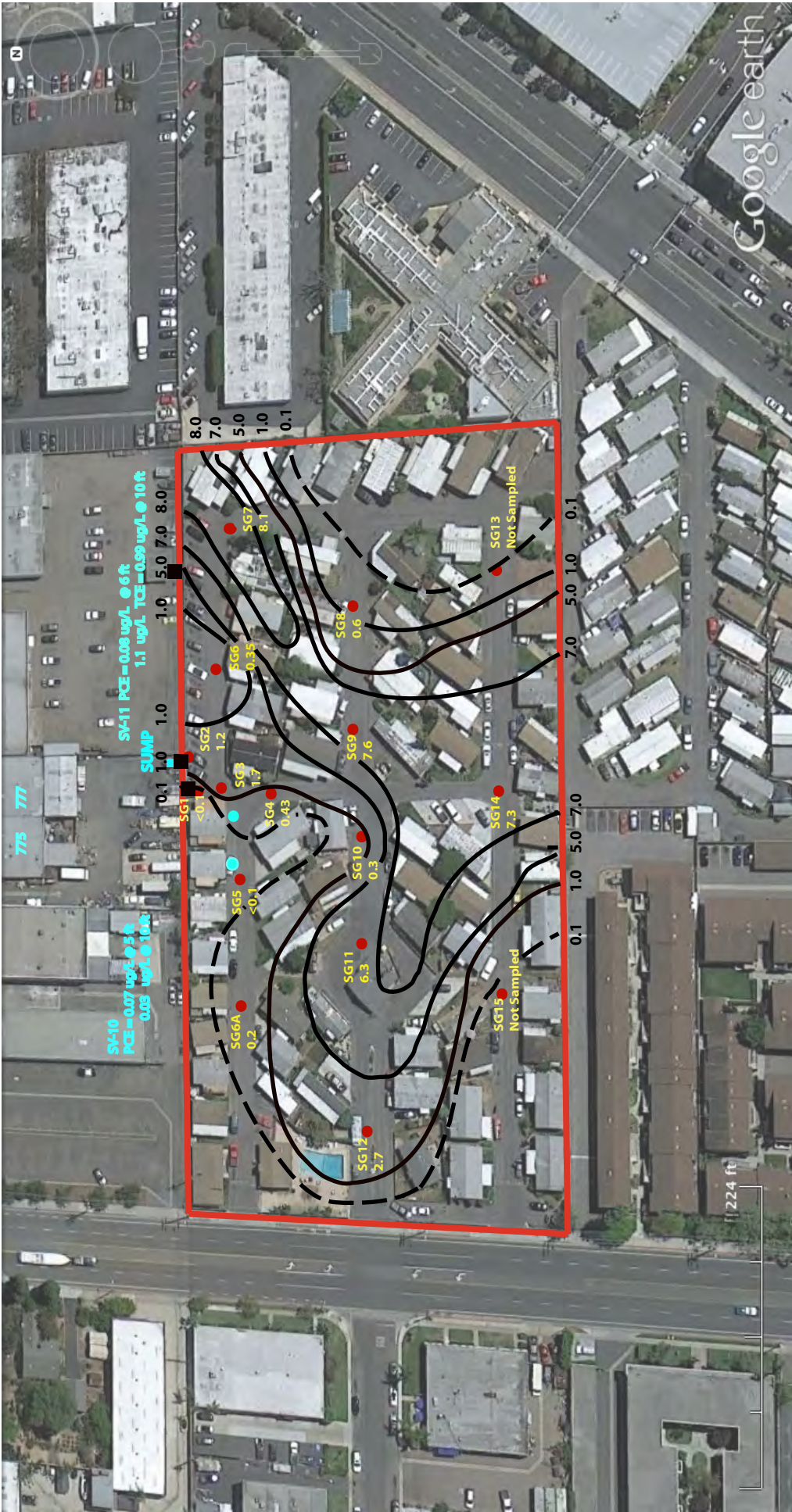
Phase II Environmental Site Assessment
Ebb Tide LLC

1560-1570 Placentia Avenue, Newport Beach, CALIFORNIA



PHONE: (310) 910-1499 FAX: (310) 377-3745

5



Legend

- Boring Location
- Boring Location previously drilled by Environ
- TCE Concentrations reported in micrograms per liter (ug/l)
- 15-foot probes were not installed in SG13 and SG15.
- Note: TCE in a duplicate sample from SG7 was 3.8 ug/l.
- Line of equal concentration, dashed where inferred.
- Sump Location



	Trichloroethene (TCE) in Soil-Gas at 15 Feet BGS			PROJECT NO: 026-14-001-1	FIGURE No.: 6
	Phase II Environmental Site Assessment			DATE: FEBRUARY 18, 2014	
	Ebb Tide LLC			DRAWN BY: C.M.	
	1560-1570 Placentia Avenue, Newport Beach, California			FILE NO:	

APPENDIX A

HEALTH AND SAFETY PLAN

WORKER HEALTH AND SAFETY PLAN

**PHASE II ESA
1560-1570 PLACENTIA AVENUE
NEWPORT BEACH, CALIFORNIA**

Prepared for

**EBB TIDE LLC
4 PARK PLAZA, SUITE 1000
IRVINE, CALIFORNIA 902614**

Prepared by



PO Box 2651
Palos Verdes Peninsula, California 90274
310.910.1499

Prepared By:

A handwritten signature in black ink that reads "Valerie Marshall".

Valerie Marshall, REA II
Site Health and Safety Officer

Date: 02/16/2014

A handwritten signature in black ink that reads "Michael Mooradian".

Reviewed By:

Michael Mooradian, REA II
Principal

Date: 02/16/2014

ECOBILITY Project Number 026-14-001-1
February 16, 2014

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APPENDIX C ACCIDENT/INCIDENT INVESTIGATION REPORT
APPENDIX D HOSPITAL MAP & DIRECTIONS

PROJECT SUMMARY

Site Description:	The site is located at 1560-1570 Placentia Avenue, Newport Beach, California.
Project Description:	The purpose of this project is to drill and collect soil samples and to conduct soil gas testing in various commercial/industrial tenant spaces to assess specific RECs identified in a Phase I ESA.
Hazardous Materials Anticipated:	Volatile organic compounds, total petroleum hydrocarbons, metals
Other Health and Safety Concerns:	None – Physical safety with heavy equipment, noise level during drilling and concrete coring in the interior of the service areas
Initial Personal Protection:	Level D
Wind Direction Indicator:	Flag

1.0 EMERGENCY REFERENCES

(to be posted on site)

AMBULANCE: 911

POLICE: 911
FIRE:

911

SPILL 911

**HOSPITAL: HOAG MEMORIAL HOSPITAL
1 HOAG WAY, NEWPORT BEACH, CA
(949) 764-4624**

DIRECTIONS TO HOSPITAL:

Distance: 0.6 Miles

Approximate Travel Time: 3 minutes

NATIONAL RESPONSE CENTER: 1-800-424-8802
POISON CONTROL CENTER: 1-800-682-9211
TOXLINE: 1-301-496-1131
CHEMTREC: 1-800-424-9300

EMERGENCY TELEPHONE NUMBERS:

**PROJECT HEATH & SAFETY OFFICER: MICHAEL MOORADIAN
OFFICE (310) 910-1499, CELL (310) 947-4233 – 24 HOUR**

**SITE HEATH & SAFETY OFFICER VALERIE MARSHALL
OFFICE (310) 910-1499, CELL (310) 847-9972– 24 HOUR**

CLIENT CONTACT: CHRIS CARAS (310) 779-9009 CELL

2.0 INTRODUCTION

This Health Safety Plan (H&SP) is intended to establish the health and safety procedures required to minimize potential risk to ECOBILITY personnel who will be involved with the project at the site. The provisions of this H&SP directly apply to ECOBILITY personnel who may be exposed to health and/or safety hazards related to the performance of the investigation described in the Work Plan to which this document is appended.

The procedures in this H&SP have been developed based upon current knowledge of specific chemical and physical hazards that are known or anticipated to be encountered during field operations.

This H&SP has been written to comply with:

- The requirements of ECOBILITY Safety and Health policies and
- The California Occupational Safety and Health Administration's (Cal/OSHA) Hazardous Waste Operation and Emergency Response regulations found in Title 8, California Code of Regulations (CCR) 5192.

All activities covered by this H&SP shall be conducted in accordance with this H&SP and all applicable federal, state, and local health and safety regulations including CCR Title 8, General Industry Standards Sections 3200-6184 and CCR Title 8, Construction Standards Sections 1500-1938. Personnel covered by this H&SP who cannot, or will not, comply with these requirements will be excluded from project activities. All personnel covered by this H&SP must read and sign the H&SP and return the H&SP sign-off sheet to the Site Health and Safety Officer (SHSO) prior to the start of field operations.

3.0 SITE DESCRIPTION

The site is located at 1560-1570 Placentia Avenue, Newport Beach, California. The Subject Property is a residential mobile home park since approximately 1955.

4.0 SCOPE OF WORK

The site assessment will be conducted to assess if volatile organic compounds (VOCs), total petroleum hydrocarbons and metals have migrated into on-site subsurface soils and soil vapor from the north adjoining industrial property. The assessment will include use of direct push drill rigs, the collection of subsurface soil and soil gas samples for chemical analysis. Potential boring locations will be cleared with geophysical techniques to minimize the likelihood of damaging possible subsurface piping or equipment. In addition, Underground Service Alert (DigAlert) will be contacted a minimum of 48 hours prior to subsurface drilling for verification of clearance. A GeoProbe drill rig will be mobilized to direct push borings to a depth of ranging from approximately 5 to 35 feet below ground surface (bgs). Soil samples will be collected at 5 feet intervals. Soil vapor samples will be analyzed for VOCs and select soil samples will be analyzed for total petroleum hydrocarbons (TPH) carbon chain, VOCs and metals. The laboratory results will be reviewed and assessed and compared to the residential CHHSLs used

by the SWQCB. Based on the results of that assessment, recommendations will be made for no further assessment or possible additional actions.

5.0 PROJECT PERSONNEL

Key personnel assigned to this project include the Project Manager, Senior Engineer and Site Safety Officer. The Project Manager will also assume the role of the Project Health and Safety officer (PH&SO). Table 3 identifies those key personnel.

TABLE 3. 24-HOUR EMERGENCY CONTACTS

Project Manager:	Valerie Marshall
.....	(310) 847-9972
Project Health and Safety Officer:	Valerie Marshall
.....	(310) 847-9972
Site Health and Safety Officer:	Michael Mooradian
.....	(310) 947-4233

5.1 PROJECT MANAGER

The Project Manager is, by designation, the individual who has the primary responsibility for assuring the health and safety of personnel involved throughout the duration of this project. The PM, therefore, has the primary responsibility for implementing this H&SP. Some of the PM's specific responsibilities include the following:

- * Implementing the approved work plan.
- * Serving as the Project Health and Safety Officer (PHSO).
- * Implementing the Community Health and Safety Plan and serving as the point of contact for the project.
- * Maintaining a high level of safety and health consciousness among employees at the site/facility.
- * Preparing accident/incident investigations with the assistance of the SHSO.
- * Maintaining regular communications with the SHSO and, if necessary, resolving safety and health conflicts.

The responsibilities of these personnel are described in the following paragraphs. The implementation of health and safety procedures at this site and/or facility will be an integrated effort among the ECOBILITY Project Manager (PM), ECOBILITY Project Health and Safety Officer (PHSO), the appointed Site Health and Safety Officer (SHSO), and ECOBILITY Field Personnel (FP).

5.2 PROJECT HEALTH AND SAFETY OFFICER

The PHSO is the individual responsible for the implementation and development of ECOBILITY safety and health policies. The PHSO prepares and approves all H&SPs before presentation to regulatory agencies or field implementation. The SHSO or other appointee consults with the PHSO on ECOBILITY policy and specific site characteristics during development of all H&SPs.

The PHSO is the individual responsible for the preparation, interpretation, and modification of this H&SP. Modifications to this H&SP that may result in less stringent precautions cannot be undertaken by the PM or the SHSO without the approval of the PHSO. Specific duties of the PHSO include the following:

- * Advising the SHSO on matters relating to safety and health on this project.
- * Performing field audits, when necessary, to monitor the effectiveness of this H&SP and to assure compliance with this H&SP.
- * Regularly evaluate project conditions and new information that might require modifications to the H&SP.
- * Conducting briefing meetings, when necessary, to apprise personnel of the contents of this H&SP and the project hazards.
- * Assisting with the preparation of accident/incident report(s) as needed.
- * Serving as the safety contact with the community.

5.3 SITE HEALTH AND SAFETY OFFICER

The appointed SHSO will be a member of the ECOBILITY field team. The SHSO is responsible for enforcing the requirements of both the CH&SP and the Worker H&SP once work begins. By design, the SHSO has the authority to immediately correct all situations where noncompliance with this H&SP is noted and to immediately stop work in cases where an immediate danger is perceived. Some of the SHSO's specific responsibilities include:

- * Procuring and distributing the PPE needed for this project.
- * Procuring the air monitoring instrumentation required and performing air monitoring.
- * Verifying that all PPE and safety and health equipment is in good working order.
- * Setting up and maintaining the personnel cleansing facility, if necessary.
- * Notifying the PM and the PHSO of all noncompliance situations that are immediately dangerous to life & health (IDLH).
- * Keeping track of weather conditions and wind directions to the extent that they could affect potential exposure.

- * Supervising and monitoring the safety performance of all personnel to assure that required health and safety procedures are followed, and correcting any deficiencies.
- * Reporting all accidents/incidents to the PM and assisting the PM and PHSO in accident/incident reports.
- * Initiating emergency response procedures.

5.4 FIELD PERSONNEL

All ECOBILITY and subcontractor Field Personnel are responsible for following the health and safety procedures specified in this H&SP and for performing their work in a safe and responsible manner. Some of the specific responsibilities of the FP are as follows:

- Reading the H&SP in its entirety prior to the start of fieldwork.
- Signing the H&SP sign-off sheet acknowledging receipt and understanding of this H&SP (see Appendix C) and returning the sheet to the SHSO.
- Bringing forth any questions or concerns regarding the content of the H&SP to the SHSO prior to the start of work.
- Reporting all accidents and incidents to the SHSO.
- Complying with the requests of the appointed SHSO.

6.0 HAZARD ANALYSIS

6.1 HEALTH AND SAFETY RISK ANALYSIS

The nature of the task that will take place during this project presents the potential for a chemical exposure hazards. A summary of the hazards associated with the scope of work is presented in Tables 1 and 2.

TABLE 1
HEALTH AND SAFETY RISK ANALYSIS

Location	Tasks	Hazards	Initial Level of Protection
1560-1570 Placentia Ave., Newport Beach, CA	Mark boring locations, geophysical clearance, drilling, soil sampling, soil vapor sample collection, backfill, and resurface.	Potential noise and vibration hazards due to drilling and/or saw cutting. Hazards for being in the proximity of heavy equipment. Avoid by remaining outside the exclusion zone and project area. Potential toxic vapors inhalation hazard released from the subsurface during direct push operations. Potential bioaerosol inhalation hazard related to soil agitation during sample preparation.	Level D which can be upgraded to Level C or B after air monitoring results indicate levels of air contaminants exceeding the adopted Action Levels and/or OSHA PELs. Hearing protection will also be required during drilling and/or saw cutting.

TABLE 2
CHEMICAL HAZARDS

Mixture/Chemical	Physical and Chemical Properties	Routes of Exposure	Target Organs	Exposure and Adverse Health Effects	Carcinogenicity	Exposure Standards & Limits
Total Petroleum as Gasoline, Motor Oil, Diesel	Colorless liquid with a mild chloroform-like odor	Inhalation, ingestion, skin or eye contact	CNS, GI tract, kidneys, liver, lungs, and skin	Dilated pupils, burning of the eyes, nausea, vomiting, respiratory irritation of the mucous membranes, coughing, and severe skin irritation, unconsciousness, and possible death, and can be an asphyxiant	Yes	50 ppm No data 500 ppm
Toluene	Toluene is a clear, colorless liquid with a distinctive smell. Toluene occurs naturally in crude oil and in the tolu tree.	Inhalation, ingestion, skin or eye contact	Cardiovascular (Heart and Blood Vessels), Neurological (Nervous System)	Mild burning of the eyes, nausea, vomiting, respiratory irritation of the mucous membranes, coughing, and severe skin irritation, unconsciousness, and possible death with consumption.	No	50-100 ppm
Tetrachloroethene	Colorless liquid with a mild chloroform-like odor	Inhalation, ingestion, skin or eye contact	CNS, GI tract, kidneys, liver, lungs, and skin	Dilated pupils, burning of the eyes, nausea, vomiting, respiratory irritation of the mucous membranes, coughing, and severe skin irritation, unconsciousness, and possible death, and can be an asphyxiant	Yes	50 ppm No data 500 ppm

NOTES: PEL = Permissible Exposure 8 hours TWA
 STEL = Short Term Exposure Limit
 IDLH = Immediately Dangerous to Life and Health
 ppb = parts per billion
 C = Ceiling
 ACGIH = American Conference of Gov. Ind. Hygienists
 IARC = International Agency for Research on Cancer

NR = Not Reported
 TLV/TWA = Threshold Limit Value/ 8 hours Time-Weighted Average
 AL = Action Level
 ppm = parts per million
 Cal/OSHA = California Occupational Safety and Health Administration
 NTP = National Toxicology Program

6.2 CHEMICAL HAZARDS

Physical and chemical properties, routes of exposure, target organs, adverse health effects, carcinogenicity, and exposure limits of prominent chemical hazards that may be encountered during operations at the subject site are summarized in Table 1 on the previous page. It is important to note that this is not an exhaustive list of chemical hazards and other chemical hazards may be present on the site.

6.3 HEAT STRESS/WEATHER CONDITIONS

The climate at the site is characterized by summers with frequent hot days, and mild winters. High/low temperatures are as follows:

Mean high (°F)	74
Mean low (°F)	60

Given the ambient temperatures in California, workers wearing protective clothing may experience varying degrees of heat stress if precautions are not taken. All project participants will be trained to recognize the following forms of heat stress and associated symptoms:

- Heat Rash can be caused by continuous exposure to hot and/or humid air. The condition is characterized by a localized red skin rash and reduced sweating.
- Heat Cramps can be caused by profuse perspiration with inadequate fluid intake and salt replacement. This condition is characterized by muscle spasm and pain in the extremities and abdomen. To care for heat cramps, have the person lie in a cool place and give cool water or a sport's drink. Lightly stretch the muscle.
- Heat Exhaustion, a mild form of shock, can be caused by substantial physical activity in heat and profuse perspiration without adequate fluid and salt replacement. Symptoms include weak pulse; shallow breathing; pale, cool, moist skin; profuse sweating; dizziness; and fatigue.
- Heat Stroke, the most severe form of heat stress, can be fatal. Symptoms include red, hot, dry skin; body temperature of 105°F or greater; no perspiration; nausea; dizziness and confusion; strong rapid pulse; coma; and death. Heat stroke is a true medical emergency.

Should a worker appear to be suffering from any of these conditions, attempts should be made to reduce the individual's body core temperature. First, remove the victim out of the heat. Apply cool water to their skin with a cloth and have him/her drink cool (but not ice cold) water. Do not let the victim drink too quickly. Refusing water, vomiting, and changes in breathing rhythm indicates that the victim's condition is getting worse. The victim must be immediately transported to a medical care facility.

6.4 SOLAR RADIATION HAZARD

Ultraviolet rays (UV) from the sun can damage the exposed areas of the skin and cause the skin to become hot or even burn. The American Conference of Governmental Industrial Hygienists (ACGIH) has established UV guidelines. Tanned individuals can tolerate skin exposure in excess of the threshold limit value (TLV) without experiencing inflammatory redness of the skin.

However, such conditioning may not protect persons from exposure to skin cancer. Therefore, personnel of ECOBILITY will be required to apply a sunscreen designed to protect the exposed areas of the skin from the sun. ECOBILITY personnel should also wear UV protective safety lenses (sunglasses) to prevent sun damage to eyes that might result in the formation of cataracts.

6.5 BIOLOGICAL HAZARDS

6.5.1 Black Widow Spider

The black widow spider (*Latrodectus*) can be present in dark areas at the subject site. The clinical symptoms are a sharp pinprick-like bite followed by a dull, occasionally numbing pain in the affected extremity, and by pain and some cramps in one or several of the large muscle masses. Involuntary contractions or twitching of muscles can frequently be seen within 30 minutes of the bite. Sweating is common, and the person may complain of weakness and pain in the regional lymph nodes. Pain in the lower back, thighs, or lower or abdomen is a common complaint and the rigidity of the abdominal muscles is seen in most severe cases. There is no effective first-aid treatment and a physician should see the victim.

6.5.2 Hantavirus

An outbreak of an unexplained illness has occurred in the southwestern part of the United States. Laboratory findings from the Centers of Disease Control and Prevention have shown that the illness is caused by the Hantavirus. Available data indicate that the common deer mouse is the main host, but the virus can also be found in pinion mice, brush mice, and western chipmunks. Human infection may occur when infective saliva or excreta are inhaled as aerosols produced directly from the animal. Transmission may also occur when dried materials contaminated by rodent excreta are disturbed, directly introduced into the broken skin, introduced into the eyes, or, possibly, ingested in contaminated food or water. Persons can also be infected after being bitten by rodents. The symptoms of Hantavirus-associated disease including fever, muscle aches, headache, cough, and progress rapidly to severe lung disease, often requiring intensive-care treatment. Personnel of ECOBILITY and its subcontractors who have had contact with potentially Hantavirus-containing materials shall seek medical attention within 45 days of the last potential exposure.

6.5.3 Snakes

Snake venoms are complex mixtures, chiefly proteins, a number of which have enzymatic activities. In general, rattlesnake venoms produce alterations in the resistances and, often, the integrity of the blood vessels; changes in the blood cells and blood coagulation mechanisms; direct or indirect changes in cardiac and pulmonary dynamics; alterations in the nervous system; and changes in respiration. Clinical experience indicates that death in humans occurs between less than 1 hour to several days, with most deaths occurring within between 18 and 32 hours. For these reasons, personnel of ECOBILITY and its subcontractors will seek immediate

medical attention.

6.5.4 Ticks

Ticks are vectors of many diseases and poisonings. Symptoms and signs of exposure include anorexia, lethargy, muscle weakness, uncoordination, irregular movement of the eyes, and ascending flaccid paralysis. The bites of some *Ornithodoros* ("pajaroello") ticks found in southwestern United States cause local vesiculation, pustulation, rupture, ulceration, and scab, with varying degrees of local swelling and pain. Ticks are best removed by slowly withdrawing the arthropod with forceps or other similar tool. Care should be taken not to leave the capitulum in the wound, as it may induce chronic inflammation or may migrate into deeper tissues and give rise to a granuloma (small or granular nodule of the skin). Pajaroello tick lesions should be cleansed, soaked in 1:20 Burow's solution, and debrided by a trained physician.

7.0 OVERVIEW OF GENERAL SAFE WORK PRACTICES

All site participants will be trained on the contents of this H&SP. The following measures are designed to augment the specific health and safety guidelines provided in this plan:

- Under no circumstances may ECOBILITY personnel enter any confined spaces without approval by the SHSO and issuance of a confined-space entry permit.
- Avoidance of contact with chemicals or chemical products is of the utmost importance. Whenever possible, avoid contact with chemically impacted (or potentially chemically impacted) surfaces or materials. Walk around (not through) puddles and discolored surfaces. Avoid sitting, kneeling, or resting equipment on chemically impacted surfaces.
- Eating, drinking, chewing gum or tobacco, smoking, applying sunscreen, lip balm or cosmetics or any practice that increases the probability of hand-to-mouth transfer of materials is prohibited in the exclusion zone and contamination reduction zone.
- Hands and face must be thoroughly washed upon leaving the work area before eating, drinking, or any other activities.
- Beards and other facial hair that interfere with respirator fit are prohibited for those individuals who may be required to use respiratory protection.
- The use of alcohol or illegal drugs is prohibited during field operations. Personnel deemed mentally or physically impaired by alcohol or any illegal drug(s) will be prohibited from participating in field operations by the SHSO. (Medicine and alcohol can exacerbate the effects of exposure to potentially toxic chemicals. If an individual is taking prescribed drugs, he or she should contact ECOBILITY's occupational doctor at Memorial Occupational Medical Services (telephone 310/433-0085) to determine whether there is potential conflict. If there is, the individual should not work at the site while taking the prescribed medication.
- No sparks or open flames will be permitted during site operations.
- Safety equipment described in this H&SP will be required for all field personnel unless otherwise approved by the ECOBILITY PHSO.
- Unauthorized personnel shall remain outside the exclusion zone at all times.
- All site participants will be informed of the hazards due to mechanical equipment or machinery (e.g., overhead falling objects; faulty wiring [electrocution]) as well as the causes of hazardous trip/slip/fall accidents.

7.1 SITE CONTROL

All personnel entering the exclusion zone will be required to sign the Health and Safety sign-in

sheet prior to entry. All ECOBILITY personnel and subcontractors will be required to wear appropriate PPE in the exclusion zone (see Section 9.0).

Most activities in contaminated or otherwise hazardous areas will be conducted with a buddy who is able to:

- Provide his or her partner with assistance,
- Observe his or her partner for signs of chemical or heat exposure, and
- Periodically check the integrity of his or her partner's protective clothing.

All personnel in the exclusion zone will use the "buddy system". The "buddy system" may also be necessary during decontamination procedures described in Section 10.0.

The "buddy system" alone may not be sufficient to ensure that help will be provided in an emergency. At all times, ECOBILITY and subcontractors in the exclusion zone should be in line-of-sight contact or communications contact with the SHSO or backup person.

Hand signals shall be employed by field operations personnel to communicate emergency information if the individual's voice is overcome by noise from equipment operations. The hand signals will be taught to all field personnel before commencement of field operations and shall be reviewed during the daily on-site safety briefings. In addition, the "buddy system" shall be employed during field activities so that communication does not deteriorate.

The following hand signals will be used when operating heavy equipment:

<u>Signal</u>	<u>Meaning</u>
Hand grabbing throat	Out of air, cannot breathe.
Grip the partner's wrist	Leave area immediately, no debate.
Hands on top of head	Need assistance.
Thumbs up	OK, I am all right, I understand.
Thumbs down	No, negative.

7.2 SECURITY

Site security is necessary to:

- Prevent the exposure of unauthorized, unprotected people to site hazards,
- Avoid the increased hazards from vandals or persons seeking to abandon other wastes on the site,
- Prevent theft, and
- Avoid interference with safe working procedures.

To maintain site security during working hours, ECOBILITY will conduct the following tasks:

- Erect barricades around the perimeter of the exclusion zones, and
- Periodically monitor the perimeter for spectators and explain to them "we are performing a subsurface investigation." No other reference to the site is necessary unless approved by the PM.

Site activities will be limited to only authorized personnel. During site hours, all visitors will be required to sign the H&SP sign-off sheet to document their presence and the nature of their business (Appendix C).

8.0 EXPOSURE MONITORING PLAN

8.1 AREA AND PERSONAL MONITORING

A photo-ionization detector (PID) will be used during the site investigation to monitor ambient air for toxic gases and vapors. Photo-ionization detector technology allows dependable, linear, part-per-million range readings for many toxic gases and vapors that are effectively undetectable by any other means. A PID is well suited for the measurement of volatile organic compounds (VOC's) such as gasoline, benzene, paints, degreasers, jet fuel, and most organic solvents.

A continuous sample of air is drawn through the instrument, where it passes in front of an ultraviolet lamp (photo). The specific energy of this lamp releases positive and negative ions (ionization) from VOC's, which are in turn counted by the Detector. When encountering mixtures of chemical vapors, the PID cannot distinguish one ionizable gas from another. Therefore, if there is more than one compound present, the PID will not provide an accurate concentration of any one particular gas. It will give an approximate reading of total gas concentration.

When the specific compound is known, pre-programmed correction factors enable ECOBILITY to quantify a large number of chemicals using only a single calibration gas, typically isobutylene. Further, each measured gas has a specific Ionization Potential (IP). This is measured by the number of Electron Volts (eV) necessary to knock ions off the compound.

8.2 ACTION LEVELS

Dependent on hazardous substances under consideration. Concentrations shall be compared to state and federal levels for ambient air samples.

9.0 PERSONAL PROTECTIVE EQUIPMENT (PPE)

Personal protective equipment selection shall be based on an evaluation of PPE performance characteristics relative to the potential physical and chemical hazards, along with requirements and limitations of the site. The selection of level of PPE for personnel of ECOBILITY and its subcontractors is dictated by the probability of encountering potential hazards.

9.1 RESPIRATORY PROTECTION

None.

9.2 OTHER PROTECTIVE EQUIPMENT

Level D is defined in CCR Title 8, 5192, Appendix B as a work uniform affording minimal protection that is only used for nuisance contamination. The following protective equipment identifies Modified Level D protection and will be required to be worn in the exclusion zone:

- Cotton clothing,
- Work gloves,

- Steel toed work boots (ANSI approved),
- Safety glasses with side shields or UV protected goggles (ANSI approved),
- Fluorescent vest, and
- Hardhat (ANSI approved).

Level C attire is described in CCR Title 8, 5192, Appendix B. According to this code, Level C is used when (1) the atmospheric contaminants, liquid splashes, or other direct contact will not adversely affect or be absorbed through any exposed skin; (2) the types of air contaminants have been identified, concentrations measured, and an air-purifying respirator is available that can remove the contaminants; and (3) all criteria for the use of air-purifying respirators are met. The following protective equipment identifies modified Level C protection and shall be required to be immediately available on the subject site:

- Half-face or full-face respirator (NIOSH approved),
- HEPA cartridges (TC-21C-XXX),
- Saranex coveralls (if there is potential contact with petroleum product),
- Latex or polyvinyl chloride (PVC) inner gloves,
- Nitrile outer gloves,
- Chemical-resistant (Neoprene) steel-toed boots (ANSI approved),
- Latex/PVC over boots (only if potential contact with free product or contaminated soil is present),
- Fluorescent vest (in traffic situations),
- Hard hat (ANSI approved), and
- Splash goggles/safety glasses with side shields (ANSI approved).

10.0 PERSONNEL AND EQUIPMENT DECONTAMINATION

Standard Operating Procedures will be followed for the decontamination of all personnel and equipment used during this project. Decontamination setup shall be provided on site if there is contact with petroleum fuels or other substances. A minimum of four basin wash/rinse stations shall be placed in the contamination-reduction area to facilitate cleaning and removal of PPE. The four-wash rinse station shall be used by workers to clean and rinse boots and gloves. The ground beneath these basins shall be covered with plastic sheeting so that the ground is not contaminated with basin rinse water. In the absence of free product, a drum or other container shall be used for disposal of PPE that will not be reused. In the absence of PPE decontamination, all personnel must follow the appropriate order for removal during decontamination (i.e., boots, coveralls, and respiratory equipment).

Direct contact with contaminated PPE can be avoided by following the proper decontamination sequence. To avoid a potential inhalation hazard during decontamination, respirators, if used, are the last items to be removed before leaving the contaminated area. Equipment decontamination procedures shall consist of washing in Alconox or similar detergent in water, and a tap-water rinse followed by a final rinse in deionized water. Water shall be available for cleaning of hands and face before breaks, eating, and drinking at all sites.

All water used for decontamination activities shall be collected from the washbasins and discarded in labeled 55-gallon drums. The drums shall be removed from the site following the investigation. Attire that will not be reused shall be placed in labeled plastic bags and disposed of following site operations. The SHSO shall be responsible for coordinating decontamination

and off-site disposal, and shall contact the facility regarding proper disposal of substances.

11.0 MEDICAL SURVEILLANCE/TRAINING REQUIREMENTS

All personnel must meet the training and medical surveillance requirements specified in Title 8 CCR, 5192(e) and (f). All on-site personnel must have completed the specified 40 hours of initial health and safety training and 8 hours of refresher training, as well as 3 days of on-site training, within the last year. Managers or supervisors of personnel performing such activities must have completed the specified 8 hours of management training and 3 days of on-site training. The 3 days of on-site training for personnel and managers/supervisors shall have been under the direction of a skilled supervisor. In addition, such personnel must have completed and passed, without restrictions, an annual and/or baseline occupational medical surveillance examination within the last year. The medical examinations shall have been conducted by or under the supervision of a certified occupational medical physician who is aware of the site-specific hazards. ECOBILITY personnel and subcontractors entering the exclusion zone must be trained in the potential hazards therein, and in safe work procedures. Copies of training certificates shall be available for review upon request.

12.0 EMERGENCY RESPONSE/ACCIDENT INVESTIGATION PROCEDURES

The telephone numbers of the police and fire departments, ambulance service, local hospital, and ECOBILITY representatives are provided in the emergency reference sheet in Section 1.0. Directions to the hospital are also provided on this sheet and a copy of the hospital route is provided in Figure 1. **A copy of this information must be posted in a visible location at the project location before operations commence.** Directions to the hospital are repeated below:

HOSPITAL: **HOAG MEMORIAL HOSPITAL
1 HOAG DRIVE
NEWPORT BEACH, CALIFORNIA
(949) 764-4624**

DIRECTIONS TO HOSPITAL:

Distance: 0.6 Miles

Approximate Travel Time: 3 minutes

Any accident/incident resulting in an OSHA-reportable injury or illness, treatment at a hospital or physician's office, property damage, or a near-accident requires that an accident/incident investigation and report be completed by the PHSO with assistance from the SHSO and PM. The investigation shall be initiated as soon as emergency conditions are under control. The purpose of this investigation is not to attribute blame, but rather to assess the pertinent facts so that repeat or similar occurrences can be avoided. ECOBILITY shall assure that accidents/injuries are reported to the appropriate local, and State authorities. Serious injuries or illnesses resulting in lost time are required to be reported to CAL/OSHA within 8 hours (includes fatalities).

12.1 PLANNING

Prior to conducting the investigation, the SHSO shall plan emergency actions and discuss them with personnel conducting project work. Initial planning includes establishing the best means for evacuation from the area in case of a catastrophe (e.g., explosion, fire, or earthquake). Before project activities begin, the SHSO shall locate safe places of refuge should an emergency or accident occur, and advise personnel of these locations during the on-site health and safety meeting. Refer to Sections 12.2, 12.3, 12.6, and 12.7 for a review of emergency procedures.

12.2 EMERGENCY SERVICES

A tested system must exist for rapid and clear distress communications. The SHSO will use an alarm system in the form of a car horn to notify personnel of the emergency. One long blast (at least 5 seconds) requires evacuation and two short blasts that all is clear. The SHSO shall corroborate that all personnel working at the site know how to communicate with the appropriate local emergency response units, and shall provide adequate and clear directions between ECOBILITY work locations and the location of those units before commencing any facility investigation or operations. The ECOBILITY or subcontractor vehicle shall have a cellular

telephone for obtaining assistance in an emergency.

12.3 GENERAL EVACUATION PROCEDURES

If a fire, explosion, or toxic vapor release occurs and a site evacuation is ordered by the SHSO, the SHSO shall:

- Announce the evacuation using a car horn.
- Evaluate the immediate situation and downwind direction. All personnel will evacuate in the upwind direction (see site plan for evacuation route).
- Assemble in an upwind area when the situation permits, and take a head count.
- Determine the extent of the problem and dial 911 to dispatch response teams to locate any missing personnel and/or correct the problem.

12.4 FIRST AID

Qualified personnel shall give first aid and stabilize any employee needing assistance. Life support techniques such as cardiopulmonary resuscitation (CPR) and treatment of life-threatening problems such as bleeding, airway maintenance, and shock shall be given top priority. Professional medical assistance shall be obtained at the earliest possible opportunity. **If assistance beyond first aid is required, dial 911 to request emergency medical assistance.**

A first-aid kit will be required on the subject site and an emergency portable eyewash (15 minutes of continuous flushing) may be required at the facility. Prior arrangements must be made to facilitate easy access (preferably within 10 seconds of the work area) to water.

Emergency first-aid procedures for organic compounds include the following:

<u>Exposure</u>	<u>Procedure</u>
Eyes	Flush eyes immediately with fresh warm water for at least 15 minutes while holding the eyelids open. If injury occurs or irritation persists, transport person to emergency room for medical attention as soon as possible.
Skin	Wash skin thoroughly with soap and water. See a doctor if any unusual signs, symptoms, or skin irritation occur. Launder chemically impacted clothing.
Inhalation	Move exposed person to fresh air. If breathing has stopped, apply artificial respiration. Call 911 immediately.
Ingestion	If a chemical compound is swallowed, DO NOT make the person vomit. Call the Poison Control Center immediately.

12.5 PROTECTION FROM BLOOD-BORNE PATHOGENS

Personnel of ECOBILITY its subcontractors who have direct exposure to blood and other potentially infectious materials while administering first aid run the risk of contracting blood-borne infections. These infections include hepatitis B virus (HBV); human immunodeficiency virus (HIV), which causes acquired immunodeficiency syndrome (AIDS); and other blood-borne pathogens. Although the risk of contracting the HIV through occupational exposure is minimal, wearing proper PPE can greatly reduce the potential exposure to blood-borne infections.

Personnel of ECOBILITY and its subcontractors shall adhere to the blood-borne pathogen standard as codified in Title 8, CCR 5193. If personnel must have contact with the victim's blood or other potentially infectious materials or contaminated surfaces, they must wear a pair of latex gloves and safety goggles at a minimum. If personnel are performing CPR, they must wear a pocket mask or equivalent level of protection.

If an employee's or subcontractor's skin or eyes come into contact with blood, the individual must wash the affected area with soap and water and/or continuously flush the eyes for 15 minutes as soon as possible. In addition, workers must wash their hands immediately or as soon as feasible after removing PPE. If soap and water are not immediately available, workers may use other hand-washing measures such as moist wipes. However, personnel of ECOBILITY or its subcontractors must wash their hands as soon as possible. Personnel should be referred to local medical care provider as soon as practical after exposure.

Personnel of ECOBILITY and its subcontractors must remove PPE before leaving the work area. If the clothing comes in contact with blood, workers must remove it immediately or as soon as feasible. Gloves or other forms of PPE that have potentially come into contact with blood shall be disposed of in a designated container and appropriately labeled as "potentially infectious waste." The SHSO shall contact a medical waste representative for proper disposal.

12.6 FIRE PROTECTION AND RESPONSE

To minimize fire and explosion hazards, plans and procedures must be coordinated with the local Fire Department.

Dial 911 in the event of any fire at either work location.

12.7 GUIDELINES FOR A RESPONSE

If any emergency involving actual or suspected personal injury occurs, the SHSO, the work supervisor, or the surviving person(s) on the site shall follow these steps:

- Remove the exposed or injured person(s) from immediate danger.
- Render first aid if necessary and are trained to do so. Decontaminate affected personnel.
- Obtain paramedic service or ambulance transport to local hospital by dialing 911 to get emergency response. Notify the gate guard of the site operations so that in case of an emergency, a quick response can be affected. A ECOBILITY field member will accompany any person to the medical facility and will remain with the person until

release or admittance is determined.

- Evacuate other personnel at the facility to a safe distance until the Fire Department determines that it is safe for work to resume.
- Contact the PM (or his designee) and the PHSO at the earliest time practicable, and relate details of the incident. Also, notify Mr. Michael Mooradian, Branch Manager of ECOBILITY. Mr. Mooradian will then make appropriate notifications to government agencies as appropriate and required by law, and notify client contacts.
- Any accident/incident resulting in an OSHA-reportable injury or illness, treatment at a hospital or physician's office, property damage, or a near-accident requires that an accident/incident report be completed and submitted to the PHSO.

12.8 GUIDELINES FOR A SPILL

Spills of petroleum fuels are of concern because such fuels are highly flammable and explosive and can result in toxic effects if ECOBILITY personnel or subcontractors are not adequately protected from exposure.

For a minor spill that is perceived not to involve an immediate threat to human health or property damage, do not respond to the spill unless it is safe to do so. Shut off all release valves. For a small spill, contain the spilled material with absorbent materials such as paper towels. Let the spilled materials evaporate from the towel(s) before disposal (1 liter or less).

In the event of a major spill that is perceived to involve immediate threat to public health or the environment, or could result in substantial property damage, dike the spill away from any storm drains if safe to do so. Do not respond to cleanup; rather, notify the spill response team (911).

For any spill, call 911 when safe to do so and provide the following information:

- Your name, organization, phone number, and location;
- Number of injured personnel, if any, and nature of injuries, if known;
- Substance spilled;
- Source and cause of the spill;
- Approximate amount and extent of the spill;
- Approximate rate of release;
- Action taken so far;
- Approximate time spill occurred; and
- Any other pertinent information the operator requests.

APPENDIX A
ON-SITE CALIBRATION AND AIR MONITORING DATA

ON-SITE CALIBRATION AND AIR MONITORING DATA

Air monitoring data in the breathing zone shall be documented at the subject site. Please identify calibration dates prior to and after sampling, the type of instrumentation, calibration gas, span setting PID, location, and corresponding concentrations. Please sign your name as the person(s) responsible for calibration and air sampling.

CALIBRATION

[illegible]

CALIBRATION (CONTINUED)[illegible]

APPENDIX B
HEALTH AND SAFETY SIGN-OFF SHEET

HEALTH AND SAFETY SIGN-OFF SHEET

APPENDIX C

ACCIDENT/INCIDENT INVESTIGATION REPORT

ACCIDENT/INCIDENT INVESTIGATION REPORT

Month/Day/Year of report		Prepared by:		Title:	
Company name:		Address:		Phone number:	
Name of workers compensation:				Policy number:	
Name of employee:		Home address:		Social security number:	
Male or female:		Married or single:		No. of children:	
Date and time of accident/incident:				Did employee die?	
How did the accident/incident occur?					
What part(s) of the body were affected:					
Engaged in what type of task when injured?					

What was the source responsible for the injury?	
What hazardous conditions/methods or lack of protective device(s) that contributed to the accident/incident?	
What unsafe act caused the accident/incident?	
Medical services rendered?	Hospitalized?
Name of physician and address:	
Hospital Name, Address, and Phone Number:	
Note: To be submitted to the Project Health and Safety Officer.	

APPENDIX D
HOSPITAL MAP AND DIRECTIONS

**Directions to Hoag Memorial Hospital Presbyterian**

1 Hoag Dr, Newport Beach, CA 92663

0.6 mi – about **3 mins**

1560 Placentia Ave, Newport Beach, CA 92663

-
1. Head **south** on **Placentia Ave** toward **W 15th St**
About 1 min

go 0.4 mi
total 0.4 mi

2. Continue onto **Hoag Dr**
Destination will be on the right
About 2 mins

go 0.2 mi
total 0.6 mi**Hoag Memorial Hospital Presbyterian**

1 Hoag Dr, Newport Beach, CA 92663

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

Map data ©2014 Google

Directions weren't right? Please find your route on maps.google.com and click "Report a problem" at the bottom left.

APPENDIX B

LITHOLOGIC LOGS



BORING LOG - DIRECT PUSH

Boring Location Latitude: Longitude: Western portion of property							 North		ECOBILITY Project: 026-14-001-1 Project Name: EBB Tide Property			Boring Number: SB3/SG12		
									Location: 1560-1570 Placentia Avenue, Newport Beach, CA			Page: 1 of 1		
									Sampled By: V. Marshall			Start Date: 2/17/14		
									Contractor: Strongarm Environmental Field Services			End Date: 2/17/14		
									Type of Drilling: Direct Push Bit Diameter:			Prepared by: VM		
									Equipment Used: GeoProbe 5400			Reviewed by: SK		
									Water Level Depth:			Date/Time Measured:		
									Elevation:					

Inches Driven	Inches Recovered	PID (ppm)	Sheen	Odor	Chemical Analysis	Sample Interval	Contact & Group Symbol	Soil Description		Comments
								Surface Conditions: Asphalt		
						1				
						2				
	0.0		No	No		3		Clay, brown, slightly moist		
						4				
	0.0		No	No		5		Clay, brown, slightly moist		
						6				
						7				
						8				
						9				
						10				
						1				
						2				
						3				
						4				
	0.00		No	No		15		Fine sand, brown, slightly moist		Terminated - No groundwater Probes set at 5 & 15 feet
						6				
						7				
						8				
						9				
						20				

	Boring Number: SB6
Port Beach, CA	Page: 1 of 2
	Start Date: 2/17/14
es	End Date: 2/17/14
rometer:	Prepared by: MM
	Reviewed by: SK
Time Measured:	Elevation:

Boring Location		North		ECOBILITY Project: 026-14-001-1		Boring Number: SB6				
Latitude:				Project Name: EBB Tide Property						
Longitude:				Location: 1560-1570 Placentia Avenue, Newport Beach, CA		Page: 1 of 2				
East of SG3				Sampled By: M Mooradian		Start Date: 2/17/14				
				Contractor: Strongarm Environmental Field Services		End Date: 2/17/14				
				Type of Drilling: Direct Push Bit Diameter:		Prepared by: MM				
				Equipment Used: GeoProbe 6600		Reviewed by: SK				
				Water Level Depth:		Date/Time Measured:		Elevation:		
Inches Driven		PID (ppm)	Sheen	Odor	Chemical Analysis	Sample Interval	Contact & Group Symbol	Soil Description		Comments
Inches Recovered								Surface Conditions: Asphalt		
		0.0				1				
			No	No		2		Silty sand, dark brown, moist		
						3				
						4				
		0.0				5		Clay, brown, dry		
			No	No		6				
						7				
						8				
						9				
		0.1				10		Silty Clay, light brown, moist		
			No	No		11				
						12				
						13				
						14				
		0.1				15		Silty sand, yellow/golden, moist		
			No	No		16				
						17				
						18				
						19				
		0.0				20		Silty sand, yellow/golden, moist		
			No	No		21				
						22				
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BORING LOG - DIRECT PUSH

Boring Location Latitude: Longitude: East of SG3							 North		ECOBILITY Project: 026-14-001-1 Project Name: EBB Tide Property			Boring Number: SB6		
									Location: 1560-1570 Placentia Avenue, Newport Beach, CA			Page: 2 of 2		
									Sampled By: M Mooradian			Start Date: 2/17/14		
									Contractor: Strongarm Environmental Field Services			End Date: 2/17/14		
									Type of Drilling: Direct Push Bit Diameter:			Prepared by: MM		
									Equipment Used: GeoProbe 6600			Reviewed by: SK		
									Water Level Depth:			Date/Time Measured:		
									Elevation:					

Inches Driven	Inches Recovered	PID (ppm)	Sheen	Odor	Chemical Analysis	Sample Interval	Contact & Group Symbol	Soil Description		Comments
								Surface Conditions:		
						1				
						2				
						3				
						4				
	0.0		No	No		25		Fine sand, golden yellow, dry		
						6				
						7				
						8				
						9				
	1.6		No	No		30		Fine sand, golden yellow, dry		
						1				
						2				
						3				
						4				
	0.4		No	No		35		Fine sand, golden yellow, moist		Termination - No groundwater
						6				
						7				
						8				
						9				
						20				



BORING LOG - DIRECT PUSH

Boring Location Latitude: Longitude: Adjacent on site storm water sump along northern boundary of property	 North		ECOBILITY Project: 026-14-001-1		Boring Number: SG1
			Project Name: EBB Tide Property		
	Location: 1560-1570 Placentia Avenue, Newport Beach, CA		Page: 1 of 2		
	Sampled By: M Mooradian		Start Date: 2/17/14		
	Contractor: Strongarm Environmental Field Services		End Date: 2/17/14		
	Type of Drilling: Direct Push Bit Diameter:		Prepared by: MM		
	Equipment Used: GeoProbe 6600		Reviewed by: SK		
	Water Level Depth:		Date/Time Measured:		Elevation:

Inches Driven Inches Recovered	PID (ppm)	Sheen	Odor	Chemical Analysis	Sample Interval	Contact & Group Symbol	Soil Description	Comments
							Surface Conditions: Asphalt depression draining to sump	
	0.0				1			
		No	No		2		Clay, dark brown, dry	
					3			
	0.0				4			
		No	No		5		Silty clay, dark brown with light brown silt, dry	
					6			
					7			
					8			
	0.0				9			
		No	No		10		Silty clay, dark brown with light brown silt, dry	
					1			
					2			
					3			
					4			
	0.0							
		No	No		15		Silty fine sand, yellow/gold, dry	
					6			
					7			
					8			
					9			
	0.0							
		No	No		20		Silty fine sand, yellow/gold, dry	



BORING LOG - DIRECT PUSH

Boring Location Latitude: Longitude:  North Adjacent on site storm water sump along northern boundary of property						ECOBILITY Project: 026-14-001-1		Boring Number: SG1	
						Project Name: EBB Tide Property			
						Location: 1560-1570 Placentia Avenue, Newport Beach, CA		Page: 2 of 2	
						Sampled By: M Mooradian		Start Date: 2/17/14	
						Contractor: Strongarm Environmental Field Services		End Date: 2/17/14	
						Type of Drilling: Direct Push Bit Diameter:		Prepared by: MM	
						Equipment Used: GeoProbe 6600		Reviewed by: SK	
Water Level Depth:		Date/Time Measured:		Elevation:					
Inches Driven	PID (ppm)	Sheen	Odor	Chemical Analysis	Sample Interval	Contact & Group Symbol	Soil Description	Comments	
Inches Recovered							Surface Conditions: Asphalt depression draining to sump		
					1				
					2				
					3				
					4				
	0.0	No	No		25		Silty fine sand, golden, damp		
					6				
					7				
					8				
					9				
	0.0	No	No		30		Silty fine sand, golden, damp		
					1				
					2				
					3				
					4				
	0.0	No	No		35		Fine sand, light brown, dry	Termination - No groundwater	
					6			Probes set at 5 & 15 feet	
					7				
					8				
					9				
					40				

	Boring Number: SG2
Port Beach, CA	Page: 1 of 2
	Start Date: 2/17/14
	End Date: 2/17/14
meter:	Prepared by: MM
	Reviewed by: SK
Time Measured:	Elevation:

Boring Location							ECOBILITY Project: 026-14-001-1		Boring Number: SG2	
Latitude: Longitude:							Project Name: EBB Tide Property			
Adjacent to northern property boundary in proximity to off site sump							Location: 1560-1570 Placentia Avenue, Newport Beach, CA		Page: 1 of 2	
							Sampled By: M Mooradian		Start Date: 2/17/14	
							Contractor: Strongarm Environmental Field Services		End Date: 2/17/14	
							Type of Drilling: Direct Push Bit Diameter:		Prepared by: MM	
							Equipment Used: GeoProbe 6600		Reviewed by: SK	
							Water Level Depth:		Date/Time Measured:	
Inches Driven	PID (ppm)	Sheen	Odor	Chemical Analysis	Sample Interval	Contact & Group Symbol	Soil Description		Comments	
Inches Recovered							Surface Conditions: Asphalt			
	0.0				1					
		No	No		2		Silty clay, dark brown, dry			
					3					
	0.0				4					
		No	No		5		Silty clay, dark brown, moist			
					6					
					7					
					8					
	0.0				9					
		No	No		10		Silty sand, brown, moist			
					1					
					2					
					3					
	0.0				4					
		No	No		15		Clay, light brown to gray, dry			
					6					
					7					
					8					
	0.0				9					
		No	No		20		Silty fine sand - yellow/gold, dry			



BORING LOG - DIRECT PUSH

Boring Location Latitude: Longitude: Adjacent to northern property boundary in proximity to off site sump							ECOBILITY Project: 026-14-001-1 Project Name: EBB Tide Property Location: 1560-1570 Placentia Avenue, Newport Beach, CA Sampled By: M Mooradian Contractor: Strongarm Environmental Field Services Type of Drilling: Direct Push Bit Diameter: Equipment Used: GeoProbe 6600 Water Level Depth: Date/Time Measured:		Boring Number: SG2 Page: 2 of 2 Start Date: 2/17/14 End Date: 2/17/14 Prepared by: MM Reviewed by: SK Elevation:	
Inches Driven / Inches Recovered	PID (ppm)	Sheen	Odor	Chemical Analysis	Sample Interval	Contact & Group Symbol	Soil Description	Comments		
					1					
					2					
					3					
					4					
	0.0	No	No		25		Silty Clay, light brown, dry			
					6					
					7					
					8					
					9					
	0.0	No	No		30		Fine sand, golden, moist			
					1					
					2					
					3					
					4					
	0.0	No	No		35		Fine sand, light brown, moist	Termination - No groundwater		
					6			Probes set at 5 & 15 feet		
					7					
					8					
					9					
					40					

	Boring Number: SG3
Port Beach, CA	Page: 1 of 2
	Start Date: 2/17/14
es	End Date: 2/17/14
rometer:	Prepared by: MM
	Reviewed by: SK
Time Measured:	Elevation:

[illegible]



BORING LOG - DIRECT PUSH

Boring Location Latitude: Longitude: South of SG1							 North		ECOBILITY Project: 026-14-001-1 Project Name: EBB Tide Property			Boring Number: SG3		
									Location: 1560-1570 Placentia Avenue, Newport Beach, CA			Page: 2 of 2		
									Sampled By: M Mooradian			Start Date: 2/17/14		
									Contractor: Strongarm Environmental Field Services			End Date: 2/17/14		
									Type of Drilling: Direct Push Bit Diameter:			Prepared by: MM		
									Equipment Used: GeoProbe 6600			Reviewed by: SK		
									Water Level Depth:			Date/Time Measured:		
									Elevation:					

Inches Driven	Inches Recovered	PID (ppm)	Sheen	Odor	Chemical Analysis	Sample Interval	Contact & Group Symbol	Soil Description		Comments
								Surface Conditions: Asphalt		
						1				
						2				
						3				
						4				
	0.0		No	No		25		Silty fine sand, yellow/golden, dry		
						6				
						7				
						8				
						9				
	0.0		No	No		30		Silty fine sand, yellow/golden, dry		
						1				
						2				
						3				
						4				
	0.0		No	No		35		Fine sand, yellow/golden, dry		Termination - No groundwater
						6				Probes set at 5 & 15 feet
						7				
						8				
						9				
						40				



BORING LOG - DIRECT PUSH

Boring Location Latitude: Longitude: South of SG3							 North		ECOBILITY Project: 026-14-001-1 Project Name: EBB Tide Property			Boring Number: SG4		
									Location: 1560-1570 Placentia Avenue, Newport Beach, CA			Page: 1 of 1		
									Sampled By: M Mooradian			Start Date: 2/17/14		
									Contractor: Strongarm Environmental Field Services			End Date: 2/17/14		
									Type of Drilling: Direct Push Bit Diameter:			Prepared by: MM		
									Equipment Used: GeoProbe 6600			Reviewed by: SK		
									Water Level Depth:			Date/Time Measured:		
									Elevation:					

Inches Driven	Inches Recovered	PID (ppm)	Sheen	Odor	Chemical Analysis	Sample Interval	Contact & Group Symbol	Soil Description		Comments
								Surface Conditions: Asphalt		
						1				
						2				
	0.0		No	No		3		Silty clay, dark brown, moist		
						4				
	0.0		No	No		5		Silty clay, brown, dry		
						6				
						7				
	0.0		No	No		8		Silty clay, brown, dry		
						9				
	0.0		No	No		10		Silty clay, brown, dry		
						1				
						2				
						3				
						4				
	0.0		No	No		15		Silty clay, brown and yellow, dry		Termination - No groundwater
						6				
						7				
						8				
						9				
						20				



BORING LOG - DIRECT PUSH

Boring Location Latitude: Longitude: West of SG5							 North		ECOBILITY Project: 026-14-001-1 Project Name: EBB Tide Property			Boring Number: SG6A		
									Location: 1560-1570 Placentia Avenue, Newport Beach, CA			Page: 1 of 1		
									Sampled By: M Mooradian			Start Date: 2/17/14		
									Contractor: Strongarm Environmental Field Services			End Date: 2/17/14		
									Type of Drilling: Direct Push Bit Diameter:			Prepared by: MM		
									Equipment Used: GeoProbe 6600			Reviewed by: SK		
									Water Level Depth:			Date/Time Measured:		
									Elevation:					

Inches Driven	Inches Recovered	PID (ppm)	Sheen	Odor	Chemical Analysis	Sample Interval	Contact & Group Symbol	Soil Description		Comments
								Surface Conditions: Asphalt		
						1				
						2				
	0.0		No	No		3		Clayey silt, brown, moist		
						4				
	0.0		No	No		5		Clayey, silty fine sand, reddish brown, dry		
						6				
						7				
	0.0		No	No		8		Clayey, silty fine sand, reddish brown, dry		
						9				
	0.0		No	No		10		Clayey, silty fine sand, reddish brown, dry		
						1				
						2				
						3				
						4				
	0.0		No	No		15		Clayey, silty fine sand, reddish brown, dry		Termination - No groundwater
						6				
						7				
						8				
						9				
						20				



BORING LOG - DIRECT PUSH

Boring Location Latitude: Longitude: East of SG3							 North		ECOBILITY Project: 026-14-001-1 Project Name: EBB Tide Property			Boring Number: SG6		
									Location: 1560-1570 Placentia Avenue, Newport Beach, CA			Page: 1 of 1		
									Sampled By: M Mooradian			Start Date: 2/17/14		
									Contractor: Strongarm Environmental Field Services			End Date: 2/17/14		
									Type of Drilling: Direct Push Bit Diameter:			Prepared by: MM		
									Equipment Used: GeoProbe 6600			Reviewed by: SK		
									Water Level Depth:			Date/Time Measured:		
									Elevation:					

Inches Driven	Inches Recovered	PID (ppm)	Sheen	Odor	Chemical Analysis	Sample Interval	Contact & Group Symbol	Soil Description		Comments
								Surface Conditions: Asphalt		
						1				
						2				
	0.0		No	No		3		Silty clay, brown, dry		
						4				
	0.0		No	No		5		Fine sand, yellow/golden, dry		
						6				
						7				
	0.0		No	No		8		Fine sand, yellow/golden, dry		
						9				
	0.0		No	No		10		Fine sand, yellow/golden, dry		
						1				
						2				
						3				
						4				
	0.0		No	No		15		Clay, light gray, dry		Termination - No groundwater
						6				
						7				
						8				
						9				
						20				



BORING LOG - DIRECT PUSH

Boring Location Latitude: Longitude: Northeast corner of property							 North		ECOBILITY Project: 026-14-001-1 Project Name: EBB Tide Property			Boring Number: SG7		
							Location: 1560-1570 Placentia Avenue, Newport Beach, CA			Page: 1 of 1				
							Sampled By: M Mooradian			Start Date: 2/17/14				
							Contractor: Strongarm Environmental Field Services			End Date: 2/17/14				
							Type of Drilling: Direct Push Bit Diameter:			Prepared by: MM				
							Equipment Used: GeoProbe 6600			Reviewed by: SK				
							Water Level Depth:			Date/Time Measured:				
										Elevation:				

Inches Driven / Inches Recovered	PID (ppm)	Sheen	Odor	Chemical Analysis	Sample Interval	Contact & Group Symbol	Soil Description		Comments
							Surface Conditions: Asphalt		
					1				
					2				
	0.0	No	No		3		Fine sand with some silt, reddish brown, dry		
					4				
	0.0	No	No		5		Fine sand with some silt, reddish brown, dry		
					6				
					7				
	0.0	No	No		8		Fine sand with some silt, reddish brown, dry		
					9				
	0.0	No	No		10		Fine sand, yellow/golden, dry		
					1				
					2				
					3				
					4				
	0.0	No	No		15		Fine sand, yellow/golden, dry		Termination - No groundwater
					6				
					7				
					8				
					9				
					20				



BORING LOG - DIRECT PUSH

Boring Location Latitude: Longitude: Eastern portion of property							 North		ECOBILITY Project: 026-14-001-1 Project Name: EBB Tide Property			Boring Number: SG8		
									Location: 1560-1570 Placentia Avenue, Newport Beach, CA			Page: 1 of 1		
									Sampled By: V. Marshall			Start Date: 2/17/14		
									Contractor: Strongarm Environmental Field Services			End Date: 2/17/14		
									Type of Drilling: Direct Push Bit Diameter:			Prepared by: VM		
									Equipment Used: GeoProbe 5400			Reviewed by: SK		
									Water Level Depth:			Date/Time Measured:		
									Elevation:					

Inches Driven	Inches Recovered	PID (ppm)	Sheen	Odor	Chemical Analysis	Sample Interval	Contact & Group Symbol	Soil Description		Comments
								Surface Conditions: Asphalt		
						1				
						2				
	0.0		No	No		3		Clayey silt and fine sand, brown, moist		
						4				
						5				
						6				
						7				
	0.0		No	No		8		Fine sand, brown, contains asphalt particulates, slightly moist		
						9				
						10				
						1				
						2				
						3				
						4				
	0.0		No	No		15		Fine sand with some clay, brown, slightly moist		Terminated - No groundwater
										Probes set at 5 & 15 feet
						6				
						7				
						8				
						9				
						20				



BORING LOG - DIRECT PUSH

Boring Location Latitude: Longitude: East Central portion of property							 North		ECOBILITY Project: 026-14-001-1 Project Name: EBB Tide Property			Boring Number: SG9		
									Location: 1560-1570 Placentia Avenue, Newport Beach, CA			Page: 1 of 1		
									Sampled By: V. Marshall			Start Date: 2/17/14		
									Contractor: Strongarm Environmental Field Services			End Date: 2/17/14		
									Type of Drilling: Direct Push Bit Diameter:			Prepared by: VM		
									Equipment Used: GeoProbe 5400			Reviewed by: SK		
									Water Level Depth:			Date/Time Measured:		
									Elevation:					

Inches Driven	Inches Recovered	PID (ppm)	Sheen	Odor	Chemical Analysis	Sample Interval	Contact & Group Symbol	Soil Description		Comments
								Surface Conditions: Asphalt		
						1				
						2				
	0.0		No	No		3		Clay, brown, slightly moist		
						4				
						5				
						6				
						7				
	0.0		No	No		8		Fine sand, brown, contains asphalt particulates, slightly moist		
						9				
						10				
						1				
						2				
						3				
						4				
	0.0		No	No		15		Fine sand with some clay, brown, slightly moist		Terminated - No groundwater
										Probes set at 5 & 15 feet
						6				
						7				
						8				
						9				
						20				

	Boring Number: SG10
Port Beach, CA	Page: 1 of 1
	Start Date: 2/17/14
	End Date: 2/17/14
Parameter:	Prepared by: VM
	Reviewed by: SK
Time Measured:	Elevation:

Boring Location		 North		ECOBILITY Project: 026-14-001-1		Boring Number: SG10																																																																																																																																																																																																																																																																
Latitude: Longitude:				Project Name: EBB Tide Property																																																																																																																																																																																																																																																																		
West Central portion of property				Location: 1560-1570 Placentia Avenue, Newport Beach, CA		Page: 1 of 1																																																																																																																																																																																																																																																																
				Sampled By: V. Marshall		Start Date: 2/17/14																																																																																																																																																																																																																																																																
				Contractor: Strongarm Environmental Field Services		End Date: 2/17/14																																																																																																																																																																																																																																																																
				Type of Drilling: Direct Push Bit Diameter:		Prepared by: VM																																																																																																																																																																																																																																																																
				Equipment Used: GeoProbe 5400		Reviewed by: SK																																																																																																																																																																																																																																																																
				Water Level Depth:		Date/Time Measured:		Elevation:																																																																																																																																																																																																																																																														
<table border="1"><thead><tr><th rowspan="2">Inches Driven</th><th rowspan="2">Inches Recovered</th><th rowspan="2">PID (ppm)</th><th rowspan="2">Sheen</th><th rowspan="2">Odor</th><th rowspan="2">Chemical Analysis</th><th rowspan="2">Sample Interval</th><th rowspan="2">Contact & Group Symbol</th><th colspan="2">Soil Description</th><th rowspan="2">Comments</th></tr><tr><th>Surface Conditions: Asphalt</th><th></th></tr></thead><tbody><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td>2</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>0.0</td><td></td><td>No</td><td>No</td><td></td><td>3</td><td></td><td>Clay, brown, slightly moist</td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td>4</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td>5</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td>6</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td>7</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>0.0</td><td></td><td>No</td><td>No</td><td></td><td>8</td><td></td><td>Fine sand with some clay, brown, contains asphalt particulates, slightly moist</td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td>9</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td>10</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td>2</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td>3</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td>4</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td>0.0</td><td></td><td>No</td><td>No</td><td></td><td>15</td><td></td><td>Fine sand with some clay, brown, slightly moist</td><td></td><td>Terminated - No groundwater</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Probes set at 5 & 15 feet</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td>6</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td>7</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td>8</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td>9</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td>20</td><td></td><td></td><td></td><td></td></tr></tbody></table>								Inches Driven	Inches Recovered	PID (ppm)	Sheen	Odor	Chemical Analysis	Sample Interval	Contact & Group Symbol	Soil Description		Comments	Surface Conditions: Asphalt																			1											2						0.0		No	No		3		Clay, brown, slightly moist									4											5											6											7						0.0		No	No		8		Fine sand with some clay, brown, contains asphalt particulates, slightly moist									9											10											1											2											3											4						0.0		No	No		15		Fine sand with some clay, brown, slightly moist		Terminated - No groundwater											Probes set at 5 & 15 feet							6											7											8											9											20				
Inches Driven	Inches Recovered	PID (ppm)	Sheen	Odor	Chemical Analysis	Sample Interval	Contact & Group Symbol									Soil Description			Comments																																																																																																																																																																																																																																																			
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	Boring Number: SG11
Port Beach, CA	Page: 1 of 1
	Start Date: 2/17/14
es	End Date: 2/17/14
rometer:	Prepared by: VM
	Reviewed by: SK
Time Measured:	Elevation:

Boring Location		North		ECOBILITY Project: 026-14-001-1		Boring Number: SG11			
Latitude:				Project Name: EBB Tide Property					
Longitude:				Location: 1560-1570 Placentia Avenue, Newport Beach, CA		Page: 1 of 1			
Western portion of property				Sampled By: V. Marshall		Start Date: 2/17/14			
				Contractor: Strongarm Environmental Field Services		End Date: 2/17/14			
				Type of Drilling: Direct Push Bit Diameter:		Prepared by: VM			
				Equipment Used: GeoProbe 5400		Reviewed by: SK			
				Water Level Depth:		Date/Time Measured:		Elevation:	
Inches Driven									
Inches Recovered		PID (ppm)	Sheen	Odor	Chemical Analysis	Sample Interval	Contact & Group Symbol	Soil Description	Comments
								Surface Conditions: Asphalt	
						1			
						2			
		0.0	No	No		3		Clay, brown, slightly moist	
						4			
						5			
						6			
						7			
		0.0	No	No		8		Sandy clay, brown, slightly moist	
						9			
						10			
						1			
						2			
						3			
						4			
		0.0	No	No		15		Fine sand, brown, slightly moist	Terminated - No groundwater
						6			Probes set at 5 & 15 feet
						7			
						8			
						9			
						20			



BORING LOG - DIRECT PUSH

Boring Location Latitude: Longitude: Southeast portion of property							 North		ECOBILITY Project: 026-14-001-1 Project Name: EBB Tide Property			Boring Number: SG13		
							Location: 1560-1570 Placentia Avenue, Newport Beach, CA		Page: 1 of 1					
							Sampled By: V. Marshall		Start Date: 2/17/14					
							Contractor: Strongarm Environmental Field Services		End Date: 2/17/14					
							Type of Drilling: Direct Push Bit Diameter:		Prepared by: VM					
							Equipment Used: GeoProbe 5400		Reviewed by: SK					
							Water Level Depth:		Date/Time Measured:		Elevation:			
Inches Driven Inches Recovered							PID (ppm)	Sheen	Odor	Chemical Analysis	Sample Interval	Contact & Group Symbol	Soil Description Surface Conditions: Asphalt	Comments
							0.0	No	No		1			
											2			
											3		Fine silty sand, brown, dry	
											4			
											5		Fine silty sand, brown, dry	
											6			
											7			
											8			
							0.0	No	No		9			
											10		Fine silty sand, brown, dry	
											1			
											2			
											3			
											4			
							0.0	No	No		15		Fine silty sand, brown, dry	Terminated - No groundwater
											6			Probe set at 5 feet
											7			
											8			
											9			
											20			



BORING LOG - DIRECT PUSH

Boring Location Latitude: Longitude: Southern portion of property							 North		ECOBILITY Project: 026-14-001-1 Project Name: EBB Tide Property			Boring Number: SG14		
							Location: 1560-1570 Placentia Avenue, Newport Beach, CA		Page: 1 of 1					
							Sampled By: V. Marshall		Start Date: 2/17/14					
							Contractor: Strongarm Environmental Field Services		End Date: 2/17/14					
							Type of Drilling: Direct Push Bit Diameter:		Prepared by: VM					
							Equipment Used: GeoProbe 5400		Reviewed by: SK					
							Water Level Depth:		Date/Time Measured:		Elevation:			
Inches Driven														
							Soil Description					Comments		
							Surface Conditions: Asphalt							
PID (ppm) Sheen Odor Chemical Analysis Sample Interval Contact & Group Symbol														
0.0 No No							1							
0.0 No No							2							
0.0 No No							3					Fine silty sand, brown, moist		
0.0 No No							4							
0.0 No No							5							
0.0 No No							6							
0.0 No No							7							
0.0 No No							8					Silty sand, brown, moist		
0.0 No No							9							
0.0 No No							10					Fine silty sand, brown, dry		
0.0 No No							11							
0.0 No No							12							
0.0 No No							13							
0.0 No No							14							
0.0 No No							15					Medium silty sand, brown, dry		
0.0 No No							16					Terminated - No groundwater Probes set at 5 & 15 feet		
0.0 No No							17							
0.0 No No							18							
0.0 No No							19							
0.0 No No							20							



BORING LOG - DIRECT PUSH

Boring Location Latitude: Longitude: Southwestern portion of property							 North		ECOBILITY Project: 026-14-001-1 Project Name: EBB Tide Property			Boring Number: SG15		
									Location: 1560-1570 Placentia Avenue, Newport Beach, CA			Page: 1 of 1		
									Sampled By: V. Marshall			Start Date: 2/17/14		
									Contractor: Strongarm Environmental Field Services			End Date: 2/17/14		
									Type of Drilling: Direct Push Bit Diameter:			Prepared by: VM		
									Equipment Used: GeoProbe 5400			Reviewed by: SK		
									Water Level Depth:			Date/Time Measured:		
									Elevation:					

Inches Driven	Inches Recovered	PID (ppm)	Sheen	Odor	Chemical Analysis	Sample Interval	Contact & Group Symbol	Soil Description		Comments
								Surface Conditions: Asphalt		
						1				
						2				
	0.0		No	No		3		Medium sand, brown, slightly moist		
						4				
						5				
						6				
						7				
	0.0		No	No		8		Medium sand with some silt with black asphalt particles, brown, slightly moist		
						9				
						10				
						1				
						2				
						3				
						4				
	0.0		No	No		15		Fine sand with some silt, brown, slightly moist		Terminated - No groundwater Probes set at 5 & 15 feet
						6				
						7				
						8				
						9				
						20				

APPENDIX C

**LABORATORY RESULTS AND CHAIN OF CUSTODY
DOCUMENTATION**



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20 February 2014

Valeri Marshall
Ecobility Corp.
PO Box 2651
Pales Verdes Peninsula, CA 90274
RE: MBK Homes - Newport Beach

Enclosed are the results of analyses for samples received by the laboratory on 02/17/14 16:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads 'Katherine RunningCrane'. The signature is written in a cursive style with a large, stylized 'K' and 'C'.

Katherine RunningCrane
Project Manager



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Ecobility Corp.
PO Box 2651
Pales Verdes Peninsula CA, 90274

Project: MBK Homes - Newport Beach
Project Number: 026-14-001
Project Manager: Valeri Marshall

Reported:
02/20/14 13:59

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB1-2FT	T140295-01	Soil	02/17/14 00:00	02/17/14 16:00
SB1-5	T140295-02	Soil	02/17/14 00:00	02/17/14 16:00
SB2-2	T140295-03	Soil	02/17/14 00:00	02/17/14 16:00
SB2-5	T140295-04	Soil	02/17/14 00:00	02/17/14 16:00
SB3/SG12-2	T140295-05	Soil	02/17/14 00:00	02/17/14 16:00
SB3/SG12-5	T140295-06	Soil	02/17/14 00:00	02/17/14 16:00
SB4-2	T140295-08	Soil	02/17/14 00:00	02/17/14 16:00
SB4-5	T140295-09	Soil	02/17/14 00:00	02/17/14 16:00
SB5-2	T140295-10	Soil	02/17/14 00:00	02/17/14 16:00
SB5-5	T140295-11	Soil	02/17/14 00:00	02/17/14 16:00

DETECTIONS SUMMARY

Sample ID: SB1-2FT

Laboratory ID: T140295-01

No Results Detected

Sample ID: SB1-5

Laboratory ID: T140295-02

No Results Detected

Sample ID: SB2-2

Laboratory ID: T140295-03

No Results Detected

SunStar Laboratories, Inc.

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Katherine RunningCrane

Katherine RunningCrane, Project Manager



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Project: MBK Homes - Newport Beach
Project Number: 026-14-001
Project Manager: Valeri Marshall

Reported:
02/20/14 13:59

Sample ID: SB2-5

Laboratory ID: T140295-04

No Results Detected

Sample ID: SB3/SG12-2

Laboratory ID: T140295-05

No Results Detected

Sample ID: SB3/SG12-5

Laboratory ID: T140295-06

No Results Detected

Sample ID: SB4-2

Laboratory ID: T140295-08

No Results Detected

Sample ID: SB4-5

Laboratory ID: T140295-09

No Results Detected

Sample ID: SB5-2

Laboratory ID: T140295-10

No Results Detected

Sample ID: SB5-5

Laboratory ID: T140295-11

No Results Detected

SunStar Laboratories, Inc.

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Katherine RunningCrane, Project Manager



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Project: MBK Homes - Newport Beach
Project Number: 026-14-001
Project Manager: Valeri Marshall

Reported:
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Project: MBK Homes - Newport Beach
Project Number: 026-14-001
Project Manager: Valeri Marshall

Reported:
02/20/14 13:59

SB1-2FT
T140295-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Organochlorine Pesticides by EPA Method 8081A

alpha-BHC	ND	5.0	ug/kg	1	4021808	02/18/14	02/19/14	EPA 8081A
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"
beta-BHC	ND	5.0	"	"	"	"	"	"
delta-BHC	ND	5.0	"	"	"	"	"	"
Heptachlor	ND	5.0	"	"	"	"	"	"
Aldrin	ND	5.0	"	"	"	"	"	"
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"
gamma-Chlordane	ND	5.0	"	"	"	"	"	"
alpha-Chlordane	ND	5.0	"	"	"	"	"	"
Endosulfan I	ND	5.0	"	"	"	"	"	"
4,4'-DDE	ND	5.0	"	"	"	"	"	"
Dieldrin	ND	5.0	"	"	"	"	"	"
Endrin	ND	5.0	"	"	"	"	"	"
4,4'-DDD	ND	5.0	"	"	"	"	"	"
Endosulfan II	ND	5.0	"	"	"	"	"	"
4,4'-DDT	ND	5.0	"	"	"	"	"	"
Endrin aldehyde	ND	5.0	"	"	"	"	"	"
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"
Methoxychlor	ND	10	"	"	"	"	"	"
Endrin ketone	ND	5.0	"	"	"	"	"	"
Toxaphene	ND	200	"	"	"	"	"	"
Chlordane (tech)	ND	50	"	"	"	"	"	"
Surrogate: Tetrachloro-meta-xylene		73.3 %	35-140		"	"	"	"

SunStar Laboratories, Inc.

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Katherine RunningCrane

Katherine RunningCrane, Project Manager



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Project: MBK Homes - Newport Beach
Project Number: 026-14-001
Project Manager: Valeri Marshall

Reported:
02/20/14 13:59

SB1-5
T140295-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Organochlorine Pesticides by EPA Method 8081A

alpha-BHC	ND	5.0	ug/kg	1	4021808	02/18/14	02/19/14	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4'-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4'-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4'-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	10	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	200	"	"	"	"	"	"	
Chlordane (tech)	ND	50	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		75.8 %	35-140		"	"	"	"	

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Katherine RunningCrane

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001
Project Manager: Valeri Marshall

Reported:
02/20/14 13:59

SB2-2
T140295-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Organochlorine Pesticides by EPA Method 8081A

alpha-BHC	ND	5.0	ug/kg	1	4021808	02/18/14	02/19/14	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4'-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4'-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4'-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	10	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	200	"	"	"	"	"	"	
Chlordane (tech)	ND	50	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		65.6 %		35-140	"	"	"	"	

SunStar Laboratories, Inc.

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Katherine RunningCrane

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001
Project Manager: Valeri Marshall

Reported:
02/20/14 13:59

SB2-5
T140295-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Organochlorine Pesticides by EPA Method 8081A

alpha-BHC	ND	5.0	ug/kg	1	4021808	02/18/14	02/19/14	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4'-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4'-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4'-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	10	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	200	"	"	"	"	"	"	
Chlordane (tech)	ND	50	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		36.2 %		35-140	"	"	"	"	

SunStar Laboratories, Inc.

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Katherine RunningCrane

Katherine RunningCrane, Project Manager



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Project: MBK Homes - Newport Beach
Project Number: 026-14-001
Project Manager: Valeri Marshall

Reported:
02/20/14 13:59

SB3/SG12-2
T140295-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Organochlorine Pesticides by EPA Method 8081A

alpha-BHC	ND	5.0	ug/kg	1	4021808	02/18/14	02/19/14	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4'-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4'-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4'-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	10	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	200	"	"	"	"	"	"	
Chlordane (tech)	ND	50	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		60.5 %	35-140		"	"	"	"	

SunStar Laboratories, Inc.

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Katherine RunningCrane

Katherine RunningCrane, Project Manager



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Project: MBK Homes - Newport Beach
Project Number: 026-14-001
Project Manager: Valeri Marshall

Reported:
02/20/14 13:59

SB3/SG12-5
T140295-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Organochlorine Pesticides by EPA Method 8081A

alpha-BHC	ND	5.0	ug/kg	1	4021808	02/18/14	02/19/14	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4'-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4'-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4'-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	10	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	200	"	"	"	"	"	"	
Chlordane (tech)	ND	50	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		76.7 %	35-140		"	"	"	"	

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	5.0	ug/kg	1	4021811	02/18/14	02/18/14	EPA 8260B/5035	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001
Project Manager: Valeri Marshall

Reported:
02/20/14 13:59

SB3/SG12-5
T140295-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

tert-Butylbenzene	ND	5.0	ug/kg	1	4021811	02/18/14	02/18/14	EPA 8260B/5035	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	

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Project Number: 026-14-001
Project Manager: Valeri Marshall

Reported:
02/20/14 13:59

SB3/SG12-5
T140295-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Naphthalene	ND	5.0	ug/kg	1	4021811	02/18/14	02/18/14	EPA 8260B/5035	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	20	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Di-isopropyl ether	ND	20	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	20	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	20	"	"	"	"	"	"	
Surrogate: Toluene-d8		101 %	85.5-116		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		108 %	81.2-123		"	"	"	"	
Surrogate: Dibromofluoromethane		139 %	95.7-135		"	"	"	"	S-GC

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001
Project Manager: Valeri Marshall

Reported:
02/20/14 13:59

SB4-2
T140295-08 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Organochlorine Pesticides by EPA Method 8081A

alpha-BHC	ND	5.0	ug/kg	1	4021808	02/18/14	02/19/14	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4'-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4'-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4'-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	10	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	200	"	"	"	"	"	"	
Chlordane (tech)	ND	50	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		61.4 %		35-140	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001
Project Manager: Valeri Marshall

Reported:
02/20/14 13:59

SB4-5
T140295-09 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Organochlorine Pesticides by EPA Method 8081A

alpha-BHC	ND	5.0	ug/kg	1	4021808	02/18/14	02/19/14	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4'-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4'-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4'-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	10	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	200	"	"	"	"	"	"	
Chlordane (tech)	ND	50	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		54.3 %		35-140	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001
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Reported:
02/20/14 13:59

SB5-2
T140295-10 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Organochlorine Pesticides by EPA Method 8081A

alpha-BHC	ND	5.0	ug/kg	1	4021808	02/18/14	02/19/14	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4'-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4'-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4'-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	10	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	200	"	"	"	"	"	"	
Chlordane (tech)	ND	50	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		46.2 %		35-140	"	"	"	"	

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Project Manager: Valeri Marshall

Reported:
02/20/14 13:59

SB5-5
T140295-11 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Organochlorine Pesticides by EPA Method 8081A

alpha-BHC	ND	5.0	ug/kg	1	4021808	02/18/14	02/19/14	EPA 8081A	
gamma-BHC (Lindane)	ND	5.0	"	"	"	"	"	"	
beta-BHC	ND	5.0	"	"	"	"	"	"	
delta-BHC	ND	5.0	"	"	"	"	"	"	
Heptachlor	ND	5.0	"	"	"	"	"	"	
Aldrin	ND	5.0	"	"	"	"	"	"	
Heptachlor epoxide	ND	5.0	"	"	"	"	"	"	
gamma-Chlordane	ND	5.0	"	"	"	"	"	"	
alpha-Chlordane	ND	5.0	"	"	"	"	"	"	
Endosulfan I	ND	5.0	"	"	"	"	"	"	
4,4'-DDE	ND	5.0	"	"	"	"	"	"	
Dieldrin	ND	5.0	"	"	"	"	"	"	
Endrin	ND	5.0	"	"	"	"	"	"	
4,4'-DDD	ND	5.0	"	"	"	"	"	"	
Endosulfan II	ND	5.0	"	"	"	"	"	"	
4,4'-DDT	ND	5.0	"	"	"	"	"	"	
Endrin aldehyde	ND	5.0	"	"	"	"	"	"	
Endosulfan sulfate	ND	5.0	"	"	"	"	"	"	
Methoxychlor	ND	10	"	"	"	"	"	"	
Endrin ketone	ND	5.0	"	"	"	"	"	"	
Toxaphene	ND	200	"	"	"	"	"	"	
Chlordane (tech)	ND	50	"	"	"	"	"	"	
Surrogate: Tetrachloro-meta-xylene		43.0 %		35-140	"	"	"	"	

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02/20/14 13:59

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch 4021808 - EPA 3550 ECD/GCMS

Blank (4021808-BLK1)

Prepared: 02/18/14 Analyzed: 02/19/14

alpha-BHC	ND	5.0	ug/kg
gamma-BHC (Lindane)	ND	5.0	"
beta-BHC	ND	5.0	"
delta-BHC	ND	5.0	"
Heptachlor	ND	5.0	"
Aldrin	ND	5.0	"
Heptachlor epoxide	ND	5.0	"
gamma-Chlordane	ND	5.0	"
alpha-Chlordane	ND	5.0	"
Endosulfan I	ND	5.0	"
4,4'-DDE	ND	5.0	"
Dieldrin	ND	5.0	"
Endrin	ND	5.0	"
4,4'-DDD	ND	5.0	"
Endosulfan II	ND	5.0	"
4,4'-DDT	ND	5.0	"
Endrin aldehyde	ND	5.0	"
Endosulfan sulfate	ND	5.0	"
Methoxychlor	ND	10	"
Endrin ketone	ND	5.0	"
Toxaphene	ND	200	"
Chlordane (tech)	ND	50	"

Surrogate: Tetrachloro-meta-xylene 6.94 " 10.0 69.4 35-140

LCS (4021808-BS1)

Prepared: 02/18/14 Analyzed: 02/19/14

gamma-BHC (Lindane)	77.1	5.0	ug/kg	100	77.1	40-120
Heptachlor	82.9	5.0	"	100	82.9	40-120
Aldrin	69.1	5.0	"	100	69.1	40-120
Dieldrin	86.9	5.0	"	100	86.9	40-120
Endrin	86.1	5.0	"	100	86.1	40-120
4,4'-DDT	79.1	5.0	"	100	79.1	33-147

Surrogate: Tetrachloro-meta-xylene 9.15 " 10.0 91.5 35-140

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Project Manager: Valeri Marshall

Reported:
02/20/14 13:59

Organochlorine Pesticides by EPA Method 8081A - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch 4021808 - EPA 3550 ECD/GCMS

Matrix Spike (4021808-MS1)

Source: T140295-01

Prepared: 02/18/14 Analyzed: 02/19/14

gamma-BHC (Lindane)	73.3	5.0	ug/kg	99.8	ND	73.5	30-120			
Heptachlor	82.3	5.0	"	99.8	ND	82.5	30-120			
Aldrin	67.9	5.0	"	99.8	ND	68.0	30-120			
Dieldrin	89.4	5.0	"	99.8	ND	89.6	30-120			
Endrin	91.8	5.0	"	99.8	ND	92.0	30-120			
4,4'-DDT	73.4	5.0	"	99.8	ND	73.6	30-120			
Surrogate: Tetrachloro-meta-xylene	6.49		"	9.98		65.0	35-140			

Matrix Spike Dup (4021808-MSD1)

Source: T140295-01

Prepared: 02/18/14 Analyzed: 02/19/14

gamma-BHC (Lindane)	76.2	5.0	ug/kg	99.7	ND	76.5	30-120	3.99	30	
Heptachlor	22.2	5.0	"	99.7	ND	22.2	30-120	115	30	QM-07
Aldrin	69.0	5.0	"	99.7	ND	69.2	30-120	1.73	30	
Dieldrin	92.0	5.0	"	99.7	ND	92.3	30-120	2.96	30	
Endrin	92.0	5.0	"	99.7	ND	92.2	30-120	0.265	30	
4,4'-DDT	82.7	5.0	"	99.7	ND	83.0	30-120	12.0	30	
Surrogate: Tetrachloro-meta-xylene	7.17		"	9.97		71.9	35-140			

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Project Manager: Valeri Marshall

Reported:
02/20/14 13:59

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch 4021811 - EPA 5035 GCMS

Blank (4021811-BLK1)

Prepared & Analyzed: 02/18/14

Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	"
Bromodichloromethane	ND	5.0	"
Bromoform	ND	5.0	"
Bromomethane	ND	5.0	"
n-Butylbenzene	ND	5.0	"
sec-Butylbenzene	ND	5.0	"
tert-Butylbenzene	ND	5.0	"
Carbon tetrachloride	ND	5.0	"
Chlorobenzene	ND	5.0	"
Chloroethane	ND	5.0	"
Chloroform	ND	5.0	"
Chloromethane	ND	5.0	"
2-Chlorotoluene	ND	5.0	"
4-Chlorotoluene	ND	5.0	"
Dibromochloromethane	ND	5.0	"
1,2-Dibromo-3-chloropropane	ND	10	"
1,2-Dibromoethane (EDB)	ND	5.0	"
Dibromomethane	ND	5.0	"
1,2-Dichlorobenzene	ND	5.0	"
1,3-Dichlorobenzene	ND	5.0	"
1,4-Dichlorobenzene	ND	5.0	"
Dichlorodifluoromethane	ND	5.0	"
1,1-Dichloroethane	ND	5.0	"
1,2-Dichloroethane	ND	5.0	"
1,1-Dichloroethene	ND	5.0	"
cis-1,2-Dichloroethene	ND	5.0	"
trans-1,2-Dichloroethene	ND	5.0	"
1,2-Dichloropropane	ND	5.0	"
1,3-Dichloropropane	ND	5.0	"
2,2-Dichloropropane	ND	5.0	"
1,1-Dichloropropene	ND	5.0	"
cis-1,3-Dichloropropene	ND	5.0	"
trans-1,3-Dichloropropene	ND	5.0	"
Hexachlorobutadiene	ND	5.0	"
Isopropylbenzene	ND	5.0	"

SunStar Laboratories, Inc.

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Katherine RunningCrane

Katherine RunningCrane, Project Manager



25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Ecobility Corp.
PO Box 2651
Pales Verdes Peninsula CA, 90274

Project: MBK Homes - Newport Beach
Project Number: 026-14-001
Project Manager: Valeri Marshall

Reported:
02/20/14 13:59

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch 4021811 - EPA 5035 GCMS

Blank (4021811-BLK1)

Prepared & Analyzed: 02/18/14

p-Isopropyltoluene	ND	5.0	ug/kg							
Methylene chloride	ND	5.0	"							
Naphthalene	ND	5.0	"							
n-Propylbenzene	ND	5.0	"							
Styrene	ND	5.0	"							
1,1,2,2-Tetrachloroethane	ND	5.0	"							
1,1,1,2-Tetrachloroethane	ND	5.0	"							
Tetrachloroethene	ND	5.0	"							
1,2,3-Trichlorobenzene	ND	5.0	"							
1,2,4-Trichlorobenzene	ND	5.0	"							
1,1,2-Trichloroethane	ND	5.0	"							
1,1,1-Trichloroethane	ND	5.0	"							
Trichloroethene	ND	5.0	"							
Trichlorofluoromethane	ND	5.0	"							
1,2,3-Trichloropropane	ND	5.0	"							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
Vinyl chloride	ND	5.0	"							
Benzene	ND	5.0	"							
Toluene	ND	5.0	"							
Ethylbenzene	ND	5.0	"							
m,p-Xylene	ND	10	"							
o-Xylene	ND	5.0	"							
Tert-amyl methyl ether	ND	20	"							
Tert-butyl alcohol	ND	50	"							
Di-isopropyl ether	ND	20	"							
Ethyl tert-butyl ether	ND	20	"							
Methyl tert-butyl ether	ND	20	"							
Surrogate: Toluene-d8	40.2		"	40.0		101	85.5-116			
Surrogate: 4-Bromofluorobenzene	43.0		"	40.0		108	81.2-123			
Surrogate: Dibromofluoromethane	43.6		"	40.0		109	95.7-135			

SunStar Laboratories, Inc.

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Katherine RunningCrane, Project Manager



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PO Box 2651
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Project: MBK Homes - Newport Beach
Project Number: 026-14-001
Project Manager: Valeri Marshall

Reported:
02/20/14 13:59

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch 4021811 - EPA 5035 GCMS

LCS (4021811-BS1)

Prepared & Analyzed: 02/18/14

Chlorobenzene	90.0	5.0	ug/kg	100		90.0	75-125			
1,1-Dichloroethene	86.0	5.0	"	100		86.0	75-125			
Trichloroethene	92.3	5.0	"	100		92.3	75-125			
Benzene	96.8	5.0	"	100		96.8	75-125			
Toluene	98.0	5.0	"	100		98.0	75-125			
Surrogate: Toluene-d8	41.6		"	40.0		104	85.5-116			
Surrogate: 4-Bromofluorobenzene	41.9		"	40.0		105	81.2-123			
Surrogate: Dibromofluoromethane	45.4		"	40.0		114	95.7-135			

LCS Dup (4021811-BSD1)

Prepared & Analyzed: 02/18/14

Chlorobenzene	89.6	5.0	ug/kg	100		89.6	75-125	0.501	20	
1,1-Dichloroethene	84.2	5.0	"	100		84.2	75-125	2.23	20	
Trichloroethene	85.6	5.0	"	100		85.6	75-125	7.53	20	
Benzene	91.2	5.0	"	100		91.2	75-125	5.85	20	
Toluene	93.0	5.0	"	100		93.0	75-125	5.29	20	
Surrogate: Toluene-d8	40.0		"	40.0		99.9	85.5-116			
Surrogate: 4-Bromofluorobenzene	41.0		"	40.0		102	81.2-123			
Surrogate: Dibromofluoromethane	44.6		"	40.0		112	95.7-135			

SunStar Laboratories, Inc.

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Katherine RunningCrane, Project Manager



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PO Box 2651
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Project: MBK Homes - Newport Beach
Project Number: 026-14-001
Project Manager: Valeri Marshall

Reported:
02/20/14 13:59

Notes and Definitions

S-GC Surrogate recovery outside of established control limits. The data was accepted based on valid recovery of the remaining surrogate(s).

QM-07 The spike recovery and or RPD was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

SunStar Laboratories, Inc.

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Katherine RunningCrane

Katherine RunningCrane, Project Manager

Chain of Custody Record

SunStar Laboratories, Inc.
25712 Commerce Dr
Lake Forest, CA 92630
949-297-5020

Client: Ecobility Corp.
Address: PO Box 2651
Phone: (310) 910.1499 Fax: 310 377-3745
Project Manager: V. MASHALL

Date: 2/17/14 Page: 1 of 1
Project Name: MGT HOMES - NEUBER BEACH PROTECT
Collector: Batch # T140295
EDF #: 026-14-001

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	8081	Laboratory ID #	Comments/Preservative	Total # of containers
SB1-2FT	2/17/14		SOIL	ACETATE SLEEVE											01	ACETATE SLEEVE	1
SB1-5															02		1
SB2-2															03		1
SB2-5															04		1
SB3/SG12-2															05	HOLD FOR 5035 ONLY	1
SB3/SG12-5															06	"	1
SB3/SG12-15															07	"	1
SB4-2															08		1
SB4-5															09		1
SB5-2															10		1
SB5-5															11		1
Relinquished by: (signature) <u>[Signature]</u> Date / Time <u>2/17/14 4:00 PM</u> Received by: (signature) <u>[Signature]</u> Date / Time <u>2/17/14 10:00 AM</u> Relinquished by: (signature) <u>[Signature]</u> Date / Time <u>2/17/14 4:00 PM</u> Received by: (signature) <u>[Signature]</u> Date / Time <u>2/17/14 10:00 AM</u> Relinquished by: (signature) <u>[Signature]</u> Date / Time <u>2/17/14 4:00 PM</u> Received by: (signature) <u>[Signature]</u> Date / Time <u>2/17/14 10:00 AM</u>																	

**SAMPLE RECEIVING REVIEW SHEET**BATCH # T140295Client Name: EcobilityProject: MBK Homes - Newport BeachReceived by: PatrickDate/Time Received: 2/17/14 1600Delivered by: ☐ Client ☒ SunStar Courier ☐ GSO ☐ FedEx ☐ Other _____Total number of coolers received 1Temp criteria = 6°C > 0°C (no frozen containers)Temperature: cooler #1 4.8 °C +/- the CF (-0.2°C) = 4.6 °C corrected temperature

cooler #2 _____ °C +/- the CF (-0.2°C) = _____ °C corrected temperature

cooler #3 _____ °C +/- the CF (-0.2°C) = _____ °C corrected temperature

Samples outside temp. but received on ice, w/in 6 hours of final sampling. ☒ Yes ☐ No* ☐ N/ACustody Seals Intact on Cooler/Sample ☐ Yes ☐ No* ☒ N/ASample Containers Intact ☒ Yes ☐ No*Sample labels match COC ID's ☒ Yes ☐ No*Total number of containers received match COC ☐ Yes ☒ No*Proper containers received for analyses requested on COC ☐ Yes ☒ No*Proper preservative indicated on COC/containers for analyses requested ☒ Yes ☐ No* ☐ N/AComplete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times. ☐ Yes ☒ No*

* Complete Non-Conformance Receiving Sheet if checked

Cooler/Sample Review - Initials and date DM 2/17/14

Comments:

See page 2

H: HCL, S: H2SO4, N: HNO3, V: VOA, SL, Sleeve, E: Encore, T: Terracore, PB: Poly Bottle, CGB: Clear Glass Bottle, AGJ: Amber Glass Jar, AGB: Amber Glass Bottle, n/f:l:HNO3-Lab filtered, n/f:HNO3-Field filtered, znn: Zinc Acetate/Sodium Hydroxide, Na2s2o3: sodium thiosulfate

T140295



SunStar Laboratories, Inc.

PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

Company: Ecobility		Name: Mike	
Item:		Quantity:	
2 oz jars 24/CS			
4 oz jars 24/CS			
8 oz jars 12/CS			
40 ml unp. Voas 72/BOX			
40 ml HCL Voas 72/BOX			
250 ml Poly 60/CS			
1 Liter Poly 30/CS			
500 ml Poly 16/CS			
500 ml Amber Bottle Wide 12/CS			
1 Liter Amber Bottle 12/CS			
1 Gallon Poly 4/BOX			
5035 kits:(2)Sodium Bisulfate Voas 72/BOX		208	CHARGE FOR 9
(1) Methanol Voa 72/BOX		104	
(1)Syringe 50/PACK		154	CHARGE FOR 3
Lock-N-Load Handle 1/PACK		2	
Tedlar Bags 10/PACK			
Manifold,Inst Sampler,Gauge, V. sampler			
Sub Slab Insert w/ washer			
Soil Gas Drop Tubes			
Gas extraction fittings			
Soil Gas Filters			
B.C. Summa Cans	400cc:		
	1L:		
	3L:		
	6L:		
Certified Summa Cans	400cc:		
	1L:		
	3L:		
	6L:		
Cooler (S,MED,LRG) Number & Quantity		2	
Swagelok Fittings: Ferrules,Unions, Nuts			
Other: Poly Tube, Tools, etc			
Prepared By: BRIAN		Date : 2-12-14	



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20 February 2014

Valeri Marshall
Ecobility Corp.
PO Box 2651
Pales Verdes Peninsula, CA 90274
RE: MBK Homes - Newport Beach

Enclosed are the results of analyses for samples received by the laboratory on 02/17/14 16:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads 'Katherine RunningCrane'. The signature is written in a cursive, flowing style.

Katherine RunningCrane
Project Manager



25712 Commercentre Drive
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949.297.5020 Phone
949.297.5027 Fax

Ecobility Corp.
PO Box 2651
Pales Verdes Peninsula CA, 90274

Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SG1-2	T140296-01	Soil	02/17/14 00:00	02/17/14 16:00
SG1-5	T140296-02	Soil	02/17/14 00:00	02/17/14 16:00
SG1-15	T140296-04	Soil	02/17/14 00:00	02/17/14 16:00
SG1-25	T140296-06	Soil	02/17/14 00:00	02/17/14 16:00
SG1-35	T140296-08	Soil	02/17/14 00:00	02/17/14 16:00
SG2-2	T140296-09	Soil	02/17/14 00:00	02/17/14 16:00
SG2-5	T140296-10	Soil	02/17/14 00:00	02/17/14 16:00
SG2-15	T140296-12	Soil	02/17/14 00:00	02/17/14 16:00
SG2-25	T140296-14	Soil	02/17/14 00:00	02/17/14 16:00
SG2-35	T140296-16	Soil	02/17/14 00:00	02/17/14 16:00
SG3-2	T140296-17	Soil	02/17/14 00:00	02/17/14 16:00
SG3-5	T140296-18	Soil	02/17/14 00:00	02/17/14 16:00
SG3-15	T140296-20	Soil	02/17/14 00:00	02/17/14 16:00
SG3-25	T140296-22	Soil	02/17/14 00:00	02/17/14 16:00
SG3-35	T140296-24	Soil	02/17/14 00:00	02/17/14 16:00
SG4-3	T140296-25	Soil	02/17/14 00:00	02/17/14 16:00
SG4-15	T140296-27	Soil	02/17/14 00:00	02/17/14 16:00
SG5-3	T140296-28	Soil	02/17/14 00:00	02/17/14 16:00
SG5-15	T140296-30	Soil	02/17/14 00:00	02/17/14 16:00
SG6-3	T140296-31	Soil	02/17/14 00:00	02/17/14 16:00
SG6-15	T140296-33	Soil	02/17/14 00:00	02/17/14 16:00
SG6A-3	T140296-34	Soil	02/17/14 00:00	02/17/14 16:00
SG6A-15	T140296-36	Soil	02/17/14 00:00	02/17/14 16:00
SG7-3	T140296-37	Soil	02/17/14 00:00	02/17/14 16:00
SG7-15	T140296-39	Soil	02/17/14 00:00	02/17/14 16:00
SB6-2	T140296-40	Soil	02/17/14 00:00	02/17/14 16:00

SunStar Laboratories, Inc.

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Katherine RunningCrane

Katherine RunningCrane, Project Manager



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Ecobility Corp.
PO Box 2651
Pales Verdes Peninsula CA, 90274

Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB6-5	T140296-41	Soil	02/17/14 00:00	02/17/14 16:00
SB6-15	T140296-43	Soil	02/17/14 00:00	02/17/14 16:00
SB6-25	T140296-45	Soil	02/17/14 00:00	02/17/14 16:00
SB6-35	T140296-47	Soil	02/17/14 00:00	02/17/14 16:00

DETECTIONS SUMMARY

Sample ID: SG1-2

Laboratory ID: T140296-01

Analyte	Reporting		Units	Method	Notes
	Result	Limit			
Barium	71	1.0	mg/kg	EPA 6010B	
Chromium	10	2.0	mg/kg	EPA 6010B	
Cobalt	8.3	2.0	mg/kg	EPA 6010B	
Copper	6.3	1.0	mg/kg	EPA 6010B	
Lead	4.3	3.0	mg/kg	EPA 6010B	
Nickel	7.8	2.0	mg/kg	EPA 6010B	
Vanadium	22	5.0	mg/kg	EPA 6010B	
Zinc	26	1.0	mg/kg	EPA 6010B	

Sample ID: SG1-5

Laboratory ID: T140296-02

No Results Detected

Sample ID: SG1-15

Laboratory ID: T140296-04

No Results Detected

SunStar Laboratories, Inc.

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PO Box 2651
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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

Sample ID: SG1-25

Laboratory ID: T140296-06

Analyte	Reporting		Units	Method	Notes
	Result	Limit			
Trichloroethene	7.9	6.1	ug/kg	EPA 8260B/5035	
Tert-butyl alcohol	210	61	ug/kg	EPA 8260B/5035	

Sample ID: SG1-35

Laboratory ID: T140296-08

No Results Detected

Sample ID: SG2-2

Laboratory ID: T140296-09

Analyte	Reporting		Units	Method	Notes
	Result	Limit			
Barium	90	1.0	mg/kg	EPA 6010B	
Chromium	18	2.0	mg/kg	EPA 6010B	
Cobalt	9.9	2.0	mg/kg	EPA 6010B	
Copper	13	1.0	mg/kg	EPA 6010B	
Lead	6.3	3.0	mg/kg	EPA 6010B	
Nickel	12	2.0	mg/kg	EPA 6010B	
Vanadium	39	5.0	mg/kg	EPA 6010B	
Zinc	43	1.0	mg/kg	EPA 6010B	
Tetrachloroethene	6.2	4.3	ug/kg	EPA 8260B/5035	

Sample ID: SG2-5

Laboratory ID: T140296-10

No Results Detected

Sample ID: SG2-15

Laboratory ID: T140296-12

Analyte	Reporting		Units	Method	Notes
	Result	Limit			
Tetrachloroethene	130	7.5	ug/kg	EPA 8260B/5035	
Trichloroethene	21	7.5	ug/kg	EPA 8260B/5035	

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Katherine RunningCrane

Katherine RunningCrane, Project Manager



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Ecobility Corp.
PO Box 2651
Pales Verdes Peninsula CA, 90274

Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

Sample ID: SG2-25

Laboratory ID: T140296-14

Analyte	Reporting		Units	Method	Notes
	Result	Limit			
Tetrachloroethene	32	5.0	ug/kg	EPA 8260B/5035	
Trichloroethene	13	5.0	ug/kg	EPA 8260B/5035	
Tert-butyl alcohol	51	50	ug/kg	EPA 8260B/5035	

Sample ID: SG2-35

Laboratory ID: T140296-16

Analyte	Reporting		Units	Method	Notes
	Result	Limit			
Tetrachloroethene	7.2	5.0	ug/kg	EPA 8260B/5035	
Trichloroethene	15	5.0	ug/kg	EPA 8260B/5035	

Sample ID: SG3-2

Laboratory ID: T140296-17

Analyte	Reporting		Units	Method	Notes
	Result	Limit			
Barium	59	1.0	mg/kg	EPA 6010B	
Chromium	13	2.0	mg/kg	EPA 6010B	
Cobalt	5.8	2.0	mg/kg	EPA 6010B	
Copper	6.6	1.0	mg/kg	EPA 6010B	
Lead	4.4	3.0	mg/kg	EPA 6010B	
Nickel	10	2.0	mg/kg	EPA 6010B	
Vanadium	27	5.0	mg/kg	EPA 6010B	
Zinc	35	1.0	mg/kg	EPA 6010B	

Sample ID: SG3-5

Laboratory ID: T140296-18

No Results Detected

Sample ID: SG3-15

Laboratory ID: T140296-20

Analyte	Reporting		Units	Method	Notes
	Result	Limit			
Trichloroethene	10	5.0	ug/kg	EPA 8260B/5035	

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Katherine RunningCrane

Katherine RunningCrane, Project Manager



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PO Box 2651
Pales Verdes Peninsula CA, 90274

Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

Sample ID: SG3-25

Laboratory ID: T140296-22

No Results Detected

Sample ID: SG3-35

Laboratory ID: T140296-24

Analyte	Reporting		Units	Method	Notes
	Result	Limit			
Tetrachloroethene	10	5.0	ug/kg	EPA 8260B/5035	
Trichloroethene	42	5.0	ug/kg	EPA 8260B/5035	

Sample ID: SG4-3

Laboratory ID: T140296-25

No Results Detected

Sample ID: SG4-15

Laboratory ID: T140296-27

No Results Detected

Sample ID: SG5-3

Laboratory ID: T140296-28

No Results Detected

Sample ID: SG5-15

Laboratory ID: T140296-30

No Results Detected

Sample ID: SG6-3

Laboratory ID: T140296-31

SunStar Laboratories, Inc.

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Katherine RunningCrane

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PO Box 2651
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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

Sample ID: SG6-3

Laboratory ID: T140296-31

No Results Detected

Sample ID: SG6-15

Laboratory ID: T140296-33

Analyte	Result	Reporting	Units	Method	Notes
		Limit			
Trichloroethene	29	5.0	ug/kg	EPA 8260B/5035	

Sample ID: SG6A-3

Laboratory ID: T140296-34

No Results Detected

Sample ID: SG6A-15

Laboratory ID: T140296-36

No Results Detected

Sample ID: SG7-3

Laboratory ID: T140296-37

No Results Detected

Sample ID: SG7-15

Laboratory ID: T140296-39

Analyte	Result	Reporting	Units	Method	Notes
		Limit			
Trichloroethene	6.2	5.0	ug/kg	EPA 8260B/5035	

Sample ID: SB6-2

Laboratory ID: T140296-40

Analyte	Result	Reporting	Units	Method	Notes
		Limit			
Barium	41	1.0	mg/kg	EPA 6010B	

SunStar Laboratories, Inc.

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Katherine RunningCrane

Katherine RunningCrane, Project Manager



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Ecobility Corp.
PO Box 2651
Pales Verdes Peninsula CA, 90274

Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

Sample ID: SB6-2

Laboratory ID: T140296-40

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Chromium	7.9	2.0		mg/kg	EPA 6010B	
Cobalt	9.4	2.0		mg/kg	EPA 6010B	
Copper	5.6	1.0		mg/kg	EPA 6010B	
Lead	4.6	3.0		mg/kg	EPA 6010B	
Nickel	4.2	2.0		mg/kg	EPA 6010B	
Vanadium	26	5.0		mg/kg	EPA 6010B	
Zinc	19	1.0		mg/kg	EPA 6010B	

Sample ID: SB6-5

Laboratory ID: T140296-41

No Results Detected

Sample ID: SB6-15

Laboratory ID: T140296-43

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Tetrachloroethene	6.0	4.5		ug/kg	EPA 8260B/5035	
Trichloroethene	6.1	4.5		ug/kg	EPA 8260B/5035	

Sample ID: SB6-25

Laboratory ID: T140296-45

No Results Detected

Sample ID: SB6-35

Laboratory ID: T140296-47

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Trichloroethene	12	5.0		ug/kg	EPA 8260B/5035	

SunStar Laboratories, Inc.

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Katherine RunningCrane

Katherine RunningCrane, Project Manager



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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG1-2
T140296-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Extractable Petroleum Hydrocarbons by 8015C

C6-C12 (GRO)	ND	10	mg/kg	1	4021809	02/18/14	02/18/14	EPA 8015C	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: <i>p</i> -Terphenyl		111 %	65-135		"	"	"	"	

Metals by EPA 6010B

Antimony	ND	3.0	mg/kg	1	4021806	02/18/14	02/18/14	EPA 6010B	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	71	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	10	2.0	"	"	"	"	"	"	
Cobalt	8.3	2.0	"	"	"	"	"	"	
Copper	6.3	1.0	"	"	"	"	"	"	
Lead	4.3	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	7.8	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	22	5.0	"	"	"	"	"	"	
Zinc	26	1.0	"	"	"	"	"	"	

Cold Vapor Extraction EPA 7470/7471

Mercury	ND	0.10	mg/kg	1	4021807	02/18/14	02/18/14	EPA 7471A Soil	

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Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG1-2
T140296-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	4.1	ug/kg	1	4021810	02/18/14	02/18/14	EPA 8260B/5035	
Bromochloromethane	ND	4.1	"	"	"	"	"	"	
Bromodichloromethane	ND	4.1	"	"	"	"	"	"	
Bromoform	ND	4.1	"	"	"	"	"	"	
Bromomethane	ND	4.1	"	"	"	"	"	"	
n-Butylbenzene	ND	4.1	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.1	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.1	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.1	"	"	"	"	"	"	
Chlorobenzene	ND	4.1	"	"	"	"	"	"	
Chloroethane	ND	4.1	"	"	"	"	"	"	
Chloroform	ND	4.1	"	"	"	"	"	"	
Chloromethane	ND	4.1	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.1	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.1	"	"	"	"	"	"	
Dibromochloromethane	ND	4.1	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	8.3	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.1	"	"	"	"	"	"	
Dibromomethane	ND	4.1	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.1	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.1	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.1	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.1	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.1	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.1	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.1	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.1	"	"	"	"	"	"	
1,2-Dichloropropane	ND	4.1	"	"	"	"	"	"	
1,3-Dichloropropane	ND	4.1	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.1	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG1-2
T140296-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	4.1	ug/kg	1	4021810	02/18/14	02/18/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	4.1	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.1	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.1	"	"	"	"	"	"	
Isopropylbenzene	ND	4.1	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.1	"	"	"	"	"	"	
Methylene chloride	ND	4.1	"	"	"	"	"	"	
Naphthalene	ND	4.1	"	"	"	"	"	"	
n-Propylbenzene	ND	4.1	"	"	"	"	"	"	
Styrene	ND	4.1	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.1	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.1	"	"	"	"	"	"	
Tetrachloroethene	ND	4.1	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.1	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.1	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.1	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.1	"	"	"	"	"	"	
Trichloroethene	ND	4.1	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.1	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.1	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.1	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.1	"	"	"	"	"	"	
Vinyl chloride	ND	4.1	"	"	"	"	"	"	
Benzene	ND	4.1	"	"	"	"	"	"	
Toluene	ND	4.1	"	"	"	"	"	"	
Ethylbenzene	ND	4.1	"	"	"	"	"	"	
m,p-Xylene	ND	8.3	"	"	"	"	"	"	
o-Xylene	ND	4.1	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	17	"	"	"	"	"	"	
Tert-butyl alcohol	ND	41	"	"	"	"	"	"	
Di-isopropyl ether	ND	17	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG1-2
T140296-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Ethyl tert-butyl ether	ND	17	ug/kg	1	4021810	02/18/14	02/18/14	EPA 8260B/5035	
Methyl tert-butyl ether	ND	17	"	"	"	"	"	"	
Surrogate: Toluene-d8		93.8 %	85.5-116		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	81.2-123		"	"	"	"	
Surrogate: Dibromofluoromethane		128 %	95.7-135		"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG1-5
T140296-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Extractable Petroleum Hydrocarbons by 8015C

C6-C12 (GRO)	ND	10	mg/kg	1	4021809	02/18/14	02/18/14	EPA 8015C	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	

Surrogate: *p*-Terphenyl 120 % 65-135 " " " "

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	5.0	ug/kg	1	4021810	02/18/14	02/18/14	EPA 8260B/5035	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG1-5
T140296-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

cis-1,2-Dichloroethene	ND	5.0	ug/kg	1	4021810	02/18/14	02/18/14	EPA 8260B/5035	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloropropene	ND	5.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG1-5
T140296-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

m,p-Xylene	ND	10	ug/kg	1	4021810	02/18/14	02/18/14	EPA 8260B/5035	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	20	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Di-isopropyl ether	ND	20	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	20	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	20	"	"	"	"	"	"	
Surrogate: Toluene-d8		96.0 %	85.5-116		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	81.2-123		"	"	"	"	
Surrogate: Dibromofluoromethane		131 %	95.7-135		"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG1-15
T140296-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	5.0	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG1-15
T140296-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	5.0	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	20	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Di-isopropyl ether	ND	20	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Katherine RunningCrane

Katherine RunningCrane, Project Manager



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Ecobility Corp.
PO Box 2651
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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG1-15
T140296-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Ethyl tert-butyl ether	ND	20	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
Methyl tert-butyl ether	ND	20	"	"	"	"	"	"	
Surrogate: Toluene-d8		95.1 %	85.5-116		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.3 %	81.2-123		"	"	"	"	
Surrogate: Dibromofluoromethane		127 %	95.7-135		"	"	"	"	

SunStar Laboratories, Inc.

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG1-25
T140296-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	6.1	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
Bromochloromethane	ND	6.1	"	"	"	"	"	"	
Bromodichloromethane	ND	6.1	"	"	"	"	"	"	
Bromoform	ND	6.1	"	"	"	"	"	"	
Bromomethane	ND	6.1	"	"	"	"	"	"	
n-Butylbenzene	ND	6.1	"	"	"	"	"	"	
sec-Butylbenzene	ND	6.1	"	"	"	"	"	"	
tert-Butylbenzene	ND	6.1	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.1	"	"	"	"	"	"	
Chlorobenzene	ND	6.1	"	"	"	"	"	"	
Chloroethane	ND	6.1	"	"	"	"	"	"	
Chloroform	ND	6.1	"	"	"	"	"	"	
Chloromethane	ND	6.1	"	"	"	"	"	"	
2-Chlorotoluene	ND	6.1	"	"	"	"	"	"	
4-Chlorotoluene	ND	6.1	"	"	"	"	"	"	
Dibromochloromethane	ND	6.1	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	12	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	6.1	"	"	"	"	"	"	
Dibromomethane	ND	6.1	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	6.1	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	6.1	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	6.1	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	6.1	"	"	"	"	"	"	
1,1-Dichloroethane	ND	6.1	"	"	"	"	"	"	
1,2-Dichloroethane	ND	6.1	"	"	"	"	"	"	
1,1-Dichloroethene	ND	6.1	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	6.1	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	6.1	"	"	"	"	"	"	
1,2-Dichloropropane	ND	6.1	"	"	"	"	"	"	
1,3-Dichloropropane	ND	6.1	"	"	"	"	"	"	
2,2-Dichloropropane	ND	6.1	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG1-25
T140296-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	6.1	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	6.1	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	6.1	"	"	"	"	"	"	
Hexachlorobutadiene	ND	6.1	"	"	"	"	"	"	
Isopropylbenzene	ND	6.1	"	"	"	"	"	"	
p-Isopropyltoluene	ND	6.1	"	"	"	"	"	"	
Methylene chloride	ND	6.1	"	"	"	"	"	"	
Naphthalene	ND	6.1	"	"	"	"	"	"	
n-Propylbenzene	ND	6.1	"	"	"	"	"	"	
Styrene	ND	6.1	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	6.1	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	6.1	"	"	"	"	"	"	
Tetrachloroethene	ND	6.1	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	6.1	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	6.1	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	6.1	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	6.1	"	"	"	"	"	"	
Trichloroethene	7.9	6.1	"	"	"	"	"	"	
Trichlorofluoromethane	ND	6.1	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	6.1	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	6.1	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	6.1	"	"	"	"	"	"	
Vinyl chloride	ND	6.1	"	"	"	"	"	"	
Benzene	ND	6.1	"	"	"	"	"	"	
Toluene	ND	6.1	"	"	"	"	"	"	
Ethylbenzene	ND	6.1	"	"	"	"	"	"	
m,p-Xylene	ND	12	"	"	"	"	"	"	
o-Xylene	ND	6.1	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	24	"	"	"	"	"	"	
Tert-butyl alcohol	210	61	"	"	"	"	"	"	
Di-isopropyl ether	ND	24	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	24	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG1-25

T140296-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Methyl tert-butyl ether	ND	24	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
<i>Surrogate: Toluene-d8</i>		91.9 %	85.5-116		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		96.8 %	81.2-123		"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		128 %	95.7-135		"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG1-35
T140296-08 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	5.8	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
Bromochloromethane	ND	5.8	"	"	"	"	"	"	
Bromodichloromethane	ND	5.8	"	"	"	"	"	"	
Bromoform	ND	5.8	"	"	"	"	"	"	
Bromomethane	ND	5.8	"	"	"	"	"	"	
n-Butylbenzene	ND	5.8	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.8	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.8	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.8	"	"	"	"	"	"	
Chlorobenzene	ND	5.8	"	"	"	"	"	"	
Chloroethane	ND	5.8	"	"	"	"	"	"	
Chloroform	ND	5.8	"	"	"	"	"	"	
Chloromethane	ND	5.8	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.8	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.8	"	"	"	"	"	"	
Dibromochloromethane	ND	5.8	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	12	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.8	"	"	"	"	"	"	
Dibromomethane	ND	5.8	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.8	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.8	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.8	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.8	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.8	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.8	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.8	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.8	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.8	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.8	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.8	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.8	"	"	"	"	"	"	

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Katherine RunningCrane, Project Manager



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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG1-35
T140296-08 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	5.8	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	5.8	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.8	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.8	"	"	"	"	"	"	
Isopropylbenzene	ND	5.8	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.8	"	"	"	"	"	"	
Methylene chloride	ND	5.8	"	"	"	"	"	"	
Naphthalene	ND	5.8	"	"	"	"	"	"	
n-Propylbenzene	ND	5.8	"	"	"	"	"	"	
Styrene	ND	5.8	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.8	"	"	"	"	"	"	
Tetrachloroethene	ND	5.8	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.8	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.8	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.8	"	"	"	"	"	"	
Trichloroethene	ND	5.8	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.8	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.8	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.8	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.8	"	"	"	"	"	"	
Vinyl chloride	ND	5.8	"	"	"	"	"	"	
Benzene	ND	5.8	"	"	"	"	"	"	
Toluene	ND	5.8	"	"	"	"	"	"	
Ethylbenzene	ND	5.8	"	"	"	"	"	"	
m,p-Xylene	ND	12	"	"	"	"	"	"	
o-Xylene	ND	5.8	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	23	"	"	"	"	"	"	
Tert-butyl alcohol	ND	58	"	"	"	"	"	"	
Di-isopropyl ether	ND	23	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG1-35
T140296-08 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Ethyl tert-butyl ether	ND	23	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
Methyl tert-butyl ether	ND	23	"	"	"	"	"	"	
Surrogate: Toluene-d8		96.8 %	85.5-116		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.9 %	81.2-123		"	"	"	"	
Surrogate: Dibromofluoromethane		134 %	95.7-135		"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG2-2
T140296-09 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Extractable Petroleum Hydrocarbons by 8015C

C6-C12 (GRO)	ND	10	mg/kg	1	4021809	02/18/14	02/18/14	EPA 8015C	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	
Surrogate: p-Terphenyl		106 %	65-135		"	"	"	"	

Metals by EPA 6010B

Antimony	ND	3.0	mg/kg	1	4021806	02/18/14	02/18/14	EPA 6010B	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	90	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	02/18/14	"	
Cadmium	ND	2.0	"	"	"	"	02/18/14	"	
Chromium	18	2.0	"	"	"	"	"	"	
Cobalt	9.9	2.0	"	"	"	"	"	"	
Copper	13	1.0	"	"	"	"	"	"	
Lead	6.3	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	12	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	39	5.0	"	"	"	"	"	"	
Zinc	43	1.0	"	"	"	"	"	"	

Cold Vapor Extraction EPA 7470/7471

Mercury	ND	0.10	mg/kg	1	4021807	02/18/14	02/18/14	EPA 7471A Soil	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG2-2
T140296-09 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	4.3	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
Bromochloromethane	ND	4.3	"	"	"	"	"	"	
Bromodichloromethane	ND	4.3	"	"	"	"	"	"	
Bromoform	ND	4.3	"	"	"	"	"	"	
Bromomethane	ND	4.3	"	"	"	"	"	"	
n-Butylbenzene	ND	4.3	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.3	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.3	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.3	"	"	"	"	"	"	
Chlorobenzene	ND	4.3	"	"	"	"	"	"	
Chloroethane	ND	4.3	"	"	"	"	"	"	
Chloroform	ND	4.3	"	"	"	"	"	"	
Chloromethane	ND	4.3	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.3	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.3	"	"	"	"	"	"	
Dibromochloromethane	ND	4.3	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	8.7	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.3	"	"	"	"	"	"	
Dibromomethane	ND	4.3	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.3	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.3	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.3	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.3	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.3	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.3	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.3	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.3	"	"	"	"	"	"	
1,2-Dichloropropane	ND	4.3	"	"	"	"	"	"	
1,3-Dichloropropane	ND	4.3	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.3	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Katherine RunningCrane

Katherine RunningCrane, Project Manager



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PO Box 2651
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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG2-2
T140296-09 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	4.3	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	4.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.3	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.3	"	"	"	"	"	"	
Isopropylbenzene	ND	4.3	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.3	"	"	"	"	"	"	
Methylene chloride	ND	4.3	"	"	"	"	"	"	
Naphthalene	ND	4.3	"	"	"	"	"	"	
n-Propylbenzene	ND	4.3	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.3	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.3	"	"	"	"	"	"	
Tetrachloroethene	6.2	4.3	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.3	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.3	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.3	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.3	"	"	"	"	"	"	
Trichloroethene	ND	4.3	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.3	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.3	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.3	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.3	"	"	"	"	"	"	
Vinyl chloride	ND	4.3	"	"	"	"	"	"	
Benzene	ND	4.3	"	"	"	"	"	"	
Toluene	ND	4.3	"	"	"	"	"	"	
Ethylbenzene	ND	4.3	"	"	"	"	"	"	
m,p-Xylene	ND	8.7	"	"	"	"	"	"	
o-Xylene	ND	4.3	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	17	"	"	"	"	"	"	
Tert-butyl alcohol	ND	43	"	"	"	"	"	"	
Di-isopropyl ether	ND	17	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG2-2
T140296-09 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Ethyl tert-butyl ether	ND	17	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
Methyl tert-butyl ether	ND	17	"	"	"	"	"	"	
Surrogate: Toluene-d8		93.0 %	85.5-116		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.4 %	81.2-123		"	"	"	"	
Surrogate: Dibromofluoromethane		126 %	95.7-135		"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG2-5
T140296-10 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Extractable Petroleum Hydrocarbons by 8015C

C6-C12 (GRO)	ND	10	mg/kg	1	4021809	02/18/14	02/18/14	EPA 8015C	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	

Surrogate: *p*-Terphenyl 108 % 65-135 " " " "

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	3.8	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
Bromochloromethane	ND	3.8	"	"	"	"	"	"	
Bromodichloromethane	ND	3.8	"	"	"	"	"	"	
Bromoform	ND	3.8	"	"	"	"	"	"	
Bromomethane	ND	3.8	"	"	"	"	"	"	
n-Butylbenzene	ND	3.8	"	"	"	"	"	"	
sec-Butylbenzene	ND	3.8	"	"	"	"	"	"	
tert-Butylbenzene	ND	3.8	"	"	"	"	"	"	
Carbon tetrachloride	ND	3.8	"	"	"	"	"	"	
Chlorobenzene	ND	3.8	"	"	"	"	"	"	
Chloroethane	ND	3.8	"	"	"	"	"	"	
Chloroform	ND	3.8	"	"	"	"	"	"	
Chloromethane	ND	3.8	"	"	"	"	"	"	
2-Chlorotoluene	ND	3.8	"	"	"	"	"	"	
4-Chlorotoluene	ND	3.8	"	"	"	"	"	"	
Dibromochloromethane	ND	3.8	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	7.6	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	3.8	"	"	"	"	"	"	
Dibromomethane	ND	3.8	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	3.8	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	3.8	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	3.8	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	3.8	"	"	"	"	"	"	
1,1-Dichloroethane	ND	3.8	"	"	"	"	"	"	
1,2-Dichloroethane	ND	3.8	"	"	"	"	"	"	
1,1-Dichloroethene	ND	3.8	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG2-5
T140296-10 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

cis-1,2-Dichloroethene	ND	3.8	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
trans-1,2-Dichloroethene	ND	3.8	"	"	"	"	"	"	
1,2-Dichloropropane	ND	3.8	"	"	"	"	"	"	
1,3-Dichloropropane	ND	3.8	"	"	"	"	"	"	
2,2-Dichloropropane	ND	3.8	"	"	"	"	"	"	
1,1-Dichloropropene	ND	3.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	3.8	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	3.8	"	"	"	"	"	"	
Hexachlorobutadiene	ND	3.8	"	"	"	"	"	"	
Isopropylbenzene	ND	3.8	"	"	"	"	"	"	
p-Isopropyltoluene	ND	3.8	"	"	"	"	"	"	
Methylene chloride	ND	3.8	"	"	"	"	"	"	
Naphthalene	ND	3.8	"	"	"	"	"	"	
n-Propylbenzene	ND	3.8	"	"	"	"	"	"	
Styrene	ND	3.8	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	3.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	3.8	"	"	"	"	"	"	
Tetrachloroethene	ND	3.8	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	3.8	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	3.8	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	3.8	"	"	"	"	"	"	
Trichloroethene	ND	3.8	"	"	"	"	"	"	
Trichlorofluoromethane	ND	3.8	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	3.8	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	3.8	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	3.8	"	"	"	"	"	"	
Vinyl chloride	ND	3.8	"	"	"	"	"	"	
Benzene	ND	3.8	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
Ethylbenzene	ND	3.8	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG2-5
T140296-10 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

m,p-Xylene	ND	7.6	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
o-Xylene	ND	3.8	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	15	"	"	"	"	"	"	
Tert-butyl alcohol	ND	38	"	"	"	"	"	"	
Di-isopropyl ether	ND	15	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	15	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	15	"	"	"	"	"	"	
Surrogate: Toluene-d8		93.7 %	85.5-116		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.5 %	81.2-123		"	"	"	"	
Surrogate: Dibromofluoromethane		118 %	95.7-135		"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG2-15
T140296-12 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	7.5	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
Bromochloromethane	ND	7.5	"	"	"	"	"	"	
Bromodichloromethane	ND	7.5	"	"	"	"	"	"	
Bromoform	ND	7.5	"	"	"	"	"	"	
Bromomethane	ND	7.5	"	"	"	"	"	"	
n-Butylbenzene	ND	7.5	"	"	"	"	"	"	
sec-Butylbenzene	ND	7.5	"	"	"	"	"	"	
tert-Butylbenzene	ND	7.5	"	"	"	"	"	"	
Carbon tetrachloride	ND	7.5	"	"	"	"	"	"	
Chlorobenzene	ND	7.5	"	"	"	"	"	"	
Chloroethane	ND	7.5	"	"	"	"	"	"	
Chloroform	ND	7.5	"	"	"	"	"	"	
Chloromethane	ND	7.5	"	"	"	"	"	"	
2-Chlorotoluene	ND	7.5	"	"	"	"	"	"	
4-Chlorotoluene	ND	7.5	"	"	"	"	"	"	
Dibromochloromethane	ND	7.5	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	15	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.5	"	"	"	"	"	"	
Dibromomethane	ND	7.5	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	7.5	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	7.5	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	7.5	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	7.5	"	"	"	"	"	"	
1,1-Dichloroethane	ND	7.5	"	"	"	"	"	"	
1,2-Dichloroethane	ND	7.5	"	"	"	"	"	"	
1,1-Dichloroethene	ND	7.5	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	7.5	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	7.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	7.5	"	"	"	"	"	"	
1,3-Dichloropropane	ND	7.5	"	"	"	"	"	"	
2,2-Dichloropropane	ND	7.5	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG2-15
T140296-12 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	7.5	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	7.5	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	7.5	"	"	"	"	"	"	
Hexachlorobutadiene	ND	7.5	"	"	"	"	"	"	
Isopropylbenzene	ND	7.5	"	"	"	"	"	"	
p-Isopropyltoluene	ND	7.5	"	"	"	"	"	"	
Methylene chloride	ND	7.5	"	"	"	"	"	"	
Naphthalene	ND	7.5	"	"	"	"	"	"	
n-Propylbenzene	ND	7.5	"	"	"	"	"	"	
Styrene	ND	7.5	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.5	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.5	"	"	"	"	"	"	
Tetrachloroethene	130	7.5	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	7.5	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	7.5	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	7.5	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	7.5	"	"	"	"	"	"	
Trichloroethene	21	7.5	"	"	"	"	"	"	
Trichlorofluoromethane	ND	7.5	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	7.5	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	7.5	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	7.5	"	"	"	"	"	"	
Vinyl chloride	ND	7.5	"	"	"	"	"	"	
Benzene	ND	7.5	"	"	"	"	"	"	
Toluene	ND	7.5	"	"	"	"	"	"	
Ethylbenzene	ND	7.5	"	"	"	"	"	"	
m,p-Xylene	ND	15	"	"	"	"	"	"	
o-Xylene	ND	7.5	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	30	"	"	"	"	"	"	
Tert-butyl alcohol	ND	75	"	"	"	"	"	"	
Di-isopropyl ether	ND	30	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	30	"	"	"	"	"	"	

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Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG2-15
T140296-12 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Methyl tert-butyl ether	ND	30	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
<i>Surrogate: Toluene-d8</i>		96.3 %	85.5-116		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		96.5 %	81.2-123		"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		146 %	95.7-135		"	"	"	"	S-GC

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG2-25

T140296-14 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	5.0	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Katherine RunningCrane

Katherine RunningCrane, Project Manager



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PO Box 2651
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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG2-25
T140296-14 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	5.0	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	32	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	13	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	20	"	"	"	"	"	"	
Tert-butyl alcohol	51	50	"	"	"	"	"	"	
Di-isopropyl ether	ND	20	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	20	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG2-25

T140296-14 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Methyl tert-butyl ether	ND	20	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
<i>Surrogate: Toluene-d8</i>		89.9 %	85.5-116		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		87.1 %	81.2-123		"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		129 %	95.7-135		"	"	"	"	

SunStar Laboratories, Inc.

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG2-35
T140296-16 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	5.0	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG2-35
T140296-16 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	5.0	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	7.2	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	15	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	20	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Di-isopropyl ether	ND	20	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	20	"	"	"	"	"	"	

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Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG2-35

T140296-16 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Methyl tert-butyl ether	ND	20	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
Surrogate: Toluene-d8	93.0 %	85.5-116			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	91.5 %	81.2-123			"	"	"	"	
Surrogate: Dibromofluoromethane	142 %	95.7-135			"	"	"	"	S-GC

SunStar Laboratories, Inc.

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG3-2
T140296-17 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Extractable Petroleum Hydrocarbons by 8015C

C6-C12 (GRO)	ND	10	mg/kg	1	4021809	02/18/14	02/18/14	EPA 8015C	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	

Surrogate: *p*-Terphenyl 106 % 65-135 " " " "

Metals by EPA 6010B

Antimony	ND	3.0	mg/kg	1	4021806	02/18/14	02/18/14	EPA 6010B	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	59	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	02/18/14	"	
Cadmium	ND	2.0	"	"	"	"	02/18/14	"	
Chromium	13	2.0	"	"	"	"	"	"	
Cobalt	5.8	2.0	"	"	"	"	"	"	
Copper	6.6	1.0	"	"	"	"	"	"	
Lead	4.4	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	10	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	27	5.0	"	"	"	"	"	"	
Zinc	35	1.0	"	"	"	"	"	"	

Cold Vapor Extraction EPA 7470/7471

Mercury	ND	0.10	mg/kg	1	4021807	02/18/14	02/18/14	EPA 7471A Soil	

SunStar Laboratories, Inc.

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02/20/14 14:00

SG3-2

T140296-17 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	5.0	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG3-2

T140296-17 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	5.0	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	20	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Di-isopropyl ether	ND	20	"	"	"	"	"	"	

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Katherine RunningCrane, Project Manager



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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG3-2
T140296-17 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Ethyl tert-butyl ether	ND	20	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
Methyl tert-butyl ether	ND	20	"	"	"	"	"	"	
Surrogate: Toluene-d8		89.4 %	85.5-116		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		78.5 %	81.2-123		"	"	"	"	S-GC
Surrogate: Dibromofluoromethane		146 %	95.7-135		"	"	"	"	S-GC

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG3-5
T140296-18 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Extractable Petroleum Hydrocarbons by 8015C

C6-C12 (GRO)	ND	10	mg/kg	1	4021809	02/18/14	02/18/14	EPA 8015C	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	

Surrogate: *p*-Terphenyl 117 % 65-135 " " " "

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	3.7	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
Bromochloromethane	ND	3.7	"	"	"	"	"	"	
Bromodichloromethane	ND	3.7	"	"	"	"	"	"	
Bromoform	ND	3.7	"	"	"	"	"	"	
Bromomethane	ND	3.7	"	"	"	"	"	"	
n-Butylbenzene	ND	3.7	"	"	"	"	"	"	
sec-Butylbenzene	ND	3.7	"	"	"	"	"	"	
tert-Butylbenzene	ND	3.7	"	"	"	"	"	"	
Carbon tetrachloride	ND	3.7	"	"	"	"	"	"	
Chlorobenzene	ND	3.7	"	"	"	"	"	"	
Chloroethane	ND	3.7	"	"	"	"	"	"	
Chloroform	ND	3.7	"	"	"	"	"	"	
Chloromethane	ND	3.7	"	"	"	"	"	"	
2-Chlorotoluene	ND	3.7	"	"	"	"	"	"	
4-Chlorotoluene	ND	3.7	"	"	"	"	"	"	
Dibromochloromethane	ND	3.7	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	7.3	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	3.7	"	"	"	"	"	"	
Dibromomethane	ND	3.7	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	3.7	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	3.7	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	3.7	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	3.7	"	"	"	"	"	"	
1,1-Dichloroethane	ND	3.7	"	"	"	"	"	"	
1,2-Dichloroethane	ND	3.7	"	"	"	"	"	"	
1,1-Dichloroethene	ND	3.7	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Katherine RunningCrane, Project Manager



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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG3-5
T140296-18 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

cis-1,2-Dichloroethene	ND	3.7	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
trans-1,2-Dichloroethene	ND	3.7	"	"	"	"	"	"	
1,2-Dichloropropane	ND	3.7	"	"	"	"	"	"	
1,3-Dichloropropane	ND	3.7	"	"	"	"	"	"	
2,2-Dichloropropane	ND	3.7	"	"	"	"	"	"	
1,1-Dichloropropene	ND	3.7	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	3.7	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	3.7	"	"	"	"	"	"	
Hexachlorobutadiene	ND	3.7	"	"	"	"	"	"	
Isopropylbenzene	ND	3.7	"	"	"	"	"	"	
p-Isopropyltoluene	ND	3.7	"	"	"	"	"	"	
Methylene chloride	ND	3.7	"	"	"	"	"	"	
Naphthalene	ND	3.7	"	"	"	"	"	"	
n-Propylbenzene	ND	3.7	"	"	"	"	"	"	
Styrene	ND	3.7	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	3.7	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	3.7	"	"	"	"	"	"	
Tetrachloroethene	ND	3.7	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	3.7	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	3.7	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	3.7	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	3.7	"	"	"	"	"	"	
Trichloroethene	ND	3.7	"	"	"	"	"	"	
Trichlorofluoromethane	ND	3.7	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	3.7	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	3.7	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	3.7	"	"	"	"	"	"	
Vinyl chloride	ND	3.7	"	"	"	"	"	"	
Benzene	ND	3.7	"	"	"	"	"	"	
Toluene	ND	3.7	"	"	"	"	"	"	
Ethylbenzene	ND	3.7	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG3-5
T140296-18 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

m,p-Xylene	ND	7.3	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
o-Xylene	ND	3.7	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	15	"	"	"	"	"	"	
Tert-butyl alcohol	ND	37	"	"	"	"	"	"	
Di-isopropyl ether	ND	15	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	15	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	15	"	"	"	"	"	"	
Surrogate: Toluene-d8		91.0 %	85.5-116		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		89.4 %	81.2-123		"	"	"	"	
Surrogate: Dibromofluoromethane		133 %	95.7-135		"	"	"	"	

SunStar Laboratories, Inc.

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG3-15
T140296-20 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	5.0	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	

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Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG3-15
T140296-20 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	5.0	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	10	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	20	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Di-isopropyl ether	ND	20	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG3-15
T140296-20 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Ethyl tert-butyl ether	ND	20	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
Methyl tert-butyl ether	ND	20	"	"	"	"	"	"	
Surrogate: Toluene-d8		89.6 %	85.5-116		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		92.8 %	81.2-123		"	"	"	"	
Surrogate: Dibromofluoromethane		139 %	95.7-135		"	"	"	"	S-GC

SunStar Laboratories, Inc.

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG3-25
T140296-22 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	7.4	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
Bromochloromethane	ND	7.4	"	"	"	"	"	"	
Bromodichloromethane	ND	7.4	"	"	"	"	"	"	
Bromoform	ND	7.4	"	"	"	"	"	"	
Bromomethane	ND	7.4	"	"	"	"	"	"	
n-Butylbenzene	ND	7.4	"	"	"	"	"	"	
sec-Butylbenzene	ND	7.4	"	"	"	"	"	"	
tert-Butylbenzene	ND	7.4	"	"	"	"	"	"	
Carbon tetrachloride	ND	7.4	"	"	"	"	"	"	
Chlorobenzene	ND	7.4	"	"	"	"	"	"	
Chloroethane	ND	7.4	"	"	"	"	"	"	
Chloroform	ND	7.4	"	"	"	"	"	"	
Chloromethane	ND	7.4	"	"	"	"	"	"	
2-Chlorotoluene	ND	7.4	"	"	"	"	"	"	
4-Chlorotoluene	ND	7.4	"	"	"	"	"	"	
Dibromochloromethane	ND	7.4	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	15	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.4	"	"	"	"	"	"	
Dibromomethane	ND	7.4	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	7.4	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	7.4	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	7.4	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	7.4	"	"	"	"	"	"	
1,1-Dichloroethane	ND	7.4	"	"	"	"	"	"	
1,2-Dichloroethane	ND	7.4	"	"	"	"	"	"	
1,1-Dichloroethene	ND	7.4	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	7.4	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	7.4	"	"	"	"	"	"	
1,2-Dichloropropane	ND	7.4	"	"	"	"	"	"	
1,3-Dichloropropane	ND	7.4	"	"	"	"	"	"	
2,2-Dichloropropane	ND	7.4	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG3-25
T140296-22 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	7.4	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	7.4	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	7.4	"	"	"	"	"	"	
Hexachlorobutadiene	ND	7.4	"	"	"	"	"	"	
Isopropylbenzene	ND	7.4	"	"	"	"	"	"	
p-Isopropyltoluene	ND	7.4	"	"	"	"	"	"	
Methylene chloride	ND	7.4	"	"	"	"	"	"	
Naphthalene	ND	7.4	"	"	"	"	"	"	
n-Propylbenzene	ND	7.4	"	"	"	"	"	"	
Styrene	ND	7.4	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.4	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.4	"	"	"	"	"	"	
Tetrachloroethene	ND	7.4	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	7.4	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	7.4	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	7.4	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	7.4	"	"	"	"	"	"	
Trichloroethene	ND	7.4	"	"	"	"	"	"	
Trichlorofluoromethane	ND	7.4	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	7.4	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	7.4	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	7.4	"	"	"	"	"	"	
Vinyl chloride	ND	7.4	"	"	"	"	"	"	
Benzene	ND	7.4	"	"	"	"	"	"	
Toluene	ND	7.4	"	"	"	"	"	"	
Ethylbenzene	ND	7.4	"	"	"	"	"	"	
m,p-Xylene	ND	15	"	"	"	"	"	"	
o-Xylene	ND	7.4	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	30	"	"	"	"	"	"	
Tert-butyl alcohol	ND	74	"	"	"	"	"	"	
Di-isopropyl ether	ND	30	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG3-25
T140296-22 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Ethyl tert-butyl ether	ND	30	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
Methyl tert-butyl ether	ND	30	"	"	"	"	"	"	
Surrogate: Toluene-d8		94.4 %	85.5-116		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.4 %	81.2-123		"	"	"	"	
Surrogate: Dibromofluoromethane		141 %	95.7-135		"	"	"	"	S-GC

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG3-35
T140296-24 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	5.0	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Katherine RunningCrane

Katherine RunningCrane, Project Manager



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Ecobility Corp.
PO Box 2651
Pales Verdes Peninsula CA, 90274

Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG3-35
T140296-24 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	5.0	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	10	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	42	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	20	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Di-isopropyl ether	ND	20	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	20	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Katherine RunningCrane, Project Manager



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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG3-35

T140296-24 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Methyl tert-butyl ether	ND	20	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
Surrogate: Toluene-d8	93.8 %	85.5-116			"	"	"	"	
Surrogate: 4-Bromofluorobenzene	90.9 %	81.2-123			"	"	"	"	
Surrogate: Dibromofluoromethane	137 %	95.7-135			"	"	"	"	S-GC

SunStar Laboratories, Inc.

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG4-3

T140296-25 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	5.0	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG4-3

T140296-25 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	5.0	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	20	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Di-isopropyl ether	ND	20	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Katherine RunningCrane

Katherine RunningCrane, Project Manager



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PO Box 2651
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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG4-3

T140296-25 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Ethyl tert-butyl ether	ND	20	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
Methyl tert-butyl ether	ND	20	"	"	"	"	"	"	
Surrogate: Toluene-d8		90.0 %	85.5-116		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		85.0 %	81.2-123		"	"	"	"	
Surrogate: Dibromofluoromethane		135 %	95.7-135		"	"	"	"	

SunStar Laboratories, Inc.

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG4-15
T140296-27 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	5.0	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG4-15
T140296-27 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	5.0	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	20	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Di-isopropyl ether	ND	20	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Katherine RunningCrane, Project Manager



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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG4-15
T140296-27 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Ethyl tert-butyl ether	ND	20	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
Methyl tert-butyl ether	ND	20	"	"	"	"	"	"	
Surrogate: Toluene-d8		89.5 %	85.5-116		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		91.9 %	81.2-123		"	"	"	"	
Surrogate: Dibromofluoromethane		151 %	95.7-135		"	"	"	"	S-GC

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG5-3

T140296-28 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	5.0	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Katherine RunningCrane

Katherine RunningCrane, Project Manager



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Ecobility Corp.
PO Box 2651
Pales Verdes Peninsula CA, 90274

Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG5-3

T140296-28 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	5.0	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	20	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Di-isopropyl ether	ND	20	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Katherine RunningCrane

Katherine RunningCrane, Project Manager



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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG5-3

T140296-28 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Ethyl tert-butyl ether	ND	20	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
Methyl tert-butyl ether	ND	20	"	"	"	"	"	"	
Surrogate: Toluene-d8		91.8 %	85.5-116		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		85.8 %	81.2-123		"	"	"	"	
Surrogate: Dibromofluoromethane		138 %	95.7-135		"	"	"	"	S-GC

SunStar Laboratories, Inc.

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG5-15
T140296-30 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	5.0	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG5-15
T140296-30 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	5.0	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	20	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Di-isopropyl ether	ND	20	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG5-15
T140296-30 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Ethyl tert-butyl ether	ND	20	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
Methyl tert-butyl ether	ND	20	"	"	"	"	"	"	
Surrogate: Toluene-d8		95.4 %	85.5-116		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		94.6 %	81.2-123		"	"	"	"	
Surrogate: Dibromofluoromethane		154 %	95.7-135		"	"	"	"	S-GC

SunStar Laboratories, Inc.

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG6-3

T140296-31 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	4.1	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
Bromochloromethane	ND	4.1	"	"	"	"	"	"	
Bromodichloromethane	ND	4.1	"	"	"	"	"	"	
Bromoform	ND	4.1	"	"	"	"	"	"	
Bromomethane	ND	4.1	"	"	"	"	"	"	
n-Butylbenzene	ND	4.1	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.1	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.1	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.1	"	"	"	"	"	"	
Chlorobenzene	ND	4.1	"	"	"	"	"	"	
Chloroethane	ND	4.1	"	"	"	"	"	"	
Chloroform	ND	4.1	"	"	"	"	"	"	
Chloromethane	ND	4.1	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.1	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.1	"	"	"	"	"	"	
Dibromochloromethane	ND	4.1	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	8.1	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.1	"	"	"	"	"	"	
Dibromomethane	ND	4.1	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.1	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.1	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.1	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.1	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.1	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.1	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.1	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.1	"	"	"	"	"	"	
1,2-Dichloropropane	ND	4.1	"	"	"	"	"	"	
1,3-Dichloropropane	ND	4.1	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.1	"	"	"	"	"	"	

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Katherine RunningCrane, Project Manager



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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG6-3
T140296-31 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	4.1	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	4.1	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.1	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.1	"	"	"	"	"	"	
Isopropylbenzene	ND	4.1	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.1	"	"	"	"	"	"	
Methylene chloride	ND	4.1	"	"	"	"	"	"	
Naphthalene	ND	4.1	"	"	"	"	"	"	
n-Propylbenzene	ND	4.1	"	"	"	"	"	"	
Styrene	ND	4.1	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.1	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.1	"	"	"	"	"	"	
Tetrachloroethene	ND	4.1	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.1	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.1	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.1	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.1	"	"	"	"	"	"	
Trichloroethene	ND	4.1	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.1	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.1	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.1	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.1	"	"	"	"	"	"	
Vinyl chloride	ND	4.1	"	"	"	"	"	"	
Benzene	ND	4.1	"	"	"	"	"	"	
Toluene	ND	4.1	"	"	"	"	"	"	
Ethylbenzene	ND	4.1	"	"	"	"	"	"	
m,p-Xylene	ND	8.1	"	"	"	"	"	"	
o-Xylene	ND	4.1	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	16	"	"	"	"	"	"	
Tert-butyl alcohol	ND	41	"	"	"	"	"	"	
Di-isopropyl ether	ND	16	"	"	"	"	"	"	

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Katherine RunningCrane, Project Manager



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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG6-3

T140296-31 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Ethyl tert-butyl ether	ND	16	ug/kg	1	4021810	02/18/14	02/19/14	EPA 8260B/5035	
Methyl tert-butyl ether	ND	16	"	"	"	"	"	"	
Surrogate: Toluene-d8		90.9 %	85.5-116		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		83.5 %	81.2-123		"	"	"	"	
Surrogate: Dibromofluoromethane		134 %	95.7-135		"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG6-15
T140296-33 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	5.0	ug/kg	1	4021811	02/18/14	02/18/14	EPA 8260B/5035	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Katherine RunningCrane

Katherine RunningCrane, Project Manager



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PO Box 2651
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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG6-15
T140296-33 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	5.0	ug/kg	1	4021811	02/18/14	02/18/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	29	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	20	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Di-isopropyl ether	ND	20	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Katherine RunningCrane, Project Manager



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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG6-15
T140296-33 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Ethyl tert-butyl ether	ND	20	ug/kg	1	4021811	02/18/14	02/18/14	EPA 8260B/5035	
Methyl tert-butyl ether	ND	20	"	"	"	"	"	"	
Surrogate: Toluene-d8		99.2 %	85.5-116		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		106 %	81.2-123		"	"	"	"	
Surrogate: Dibromofluoromethane		123 %	95.7-135		"	"	"	"	

SunStar Laboratories, Inc.

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG6A-3
T140296-34 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	4.3	ug/kg	1	4021811	02/18/14	02/18/14	EPA 8260B/5035	
Bromochloromethane	ND	4.3	"	"	"	"	"	"	
Bromodichloromethane	ND	4.3	"	"	"	"	"	"	
Bromoform	ND	4.3	"	"	"	"	"	"	
Bromomethane	ND	4.3	"	"	"	"	"	"	
n-Butylbenzene	ND	4.3	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.3	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.3	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.3	"	"	"	"	"	"	
Chlorobenzene	ND	4.3	"	"	"	"	"	"	
Chloroethane	ND	4.3	"	"	"	"	"	"	
Chloroform	ND	4.3	"	"	"	"	"	"	
Chloromethane	ND	4.3	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.3	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.3	"	"	"	"	"	"	
Dibromochloromethane	ND	4.3	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	8.6	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.3	"	"	"	"	"	"	
Dibromomethane	ND	4.3	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.3	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.3	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.3	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.3	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.3	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.3	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.3	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.3	"	"	"	"	"	"	
1,2-Dichloropropane	ND	4.3	"	"	"	"	"	"	
1,3-Dichloropropane	ND	4.3	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.3	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG6A-3
T140296-34 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	4.3	ug/kg	1	4021811	02/18/14	02/18/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	4.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.3	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.3	"	"	"	"	"	"	
Isopropylbenzene	ND	4.3	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.3	"	"	"	"	"	"	
Methylene chloride	ND	4.3	"	"	"	"	"	"	
Naphthalene	ND	4.3	"	"	"	"	"	"	
n-Propylbenzene	ND	4.3	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.3	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.3	"	"	"	"	"	"	
Tetrachloroethene	ND	4.3	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.3	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.3	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.3	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.3	"	"	"	"	"	"	
Trichloroethene	ND	4.3	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.3	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.3	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.3	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.3	"	"	"	"	"	"	
Vinyl chloride	ND	4.3	"	"	"	"	"	"	
Benzene	ND	4.3	"	"	"	"	"	"	
Toluene	ND	4.3	"	"	"	"	"	"	
Ethylbenzene	ND	4.3	"	"	"	"	"	"	
m,p-Xylene	ND	8.6	"	"	"	"	"	"	
o-Xylene	ND	4.3	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	17	"	"	"	"	"	"	
Tert-butyl alcohol	ND	43	"	"	"	"	"	"	
Di-isopropyl ether	ND	17	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG6A-3
T140296-34 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Ethyl tert-butyl ether	ND	17	ug/kg	1	4021811	02/18/14	02/18/14	EPA 8260B/5035	
Methyl tert-butyl ether	ND	17	"	"	"	"	"	"	
Surrogate: Toluene-d8		95.2 %	85.5-116		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		103 %	81.2-123		"	"	"	"	
Surrogate: Dibromofluoromethane		126 %	95.7-135		"	"	"	"	

SunStar Laboratories, Inc.

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG6A-15
T140296-36 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	5.0	ug/kg	1	4021811	02/18/14	02/18/14	EPA 8260B/5035	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG6A-15
T140296-36 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	5.0	ug/kg	1	4021811	02/18/14	02/18/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	20	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Di-isopropyl ether	ND	20	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG6A-15
T140296-36 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Ethyl tert-butyl ether	ND	20	ug/kg	1	4021811	02/18/14	02/18/14	EPA 8260B/5035	
Methyl tert-butyl ether	ND	20	"	"	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		<i>100 %</i>	<i>85.5-116</i>		<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>		<i>104 %</i>	<i>81.2-123</i>		<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	
<i>Surrogate: Dibromofluoromethane</i>		<i>137 %</i>	<i>95.7-135</i>		<i>"</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>S-GC</i>

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG7-3

T140296-37 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	31	ug/kg	1	4021811	02/18/14	02/18/14	EPA 8260B/5035	
Bromochloromethane	ND	31	"	"	"	"	"	"	
Bromodichloromethane	ND	31	"	"	"	"	"	"	
Bromoform	ND	31	"	"	"	"	"	"	
Bromomethane	ND	31	"	"	"	"	"	"	
n-Butylbenzene	ND	31	"	"	"	"	"	"	
sec-Butylbenzene	ND	31	"	"	"	"	"	"	
tert-Butylbenzene	ND	31	"	"	"	"	"	"	
Carbon tetrachloride	ND	31	"	"	"	"	"	"	
Chlorobenzene	ND	31	"	"	"	"	"	"	
Chloroethane	ND	31	"	"	"	"	"	"	
Chloroform	ND	31	"	"	"	"	"	"	
Chloromethane	ND	31	"	"	"	"	"	"	
2-Chlorotoluene	ND	31	"	"	"	"	"	"	
4-Chlorotoluene	ND	31	"	"	"	"	"	"	
Dibromochloromethane	ND	31	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	62	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	31	"	"	"	"	"	"	
Dibromomethane	ND	31	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	31	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	31	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	31	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	31	"	"	"	"	"	"	
1,1-Dichloroethane	ND	31	"	"	"	"	"	"	
1,2-Dichloroethane	ND	31	"	"	"	"	"	"	
1,1-Dichloroethene	ND	31	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	31	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	31	"	"	"	"	"	"	
1,2-Dichloropropane	ND	31	"	"	"	"	"	"	
1,3-Dichloropropane	ND	31	"	"	"	"	"	"	
2,2-Dichloropropane	ND	31	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Katherine RunningCrane

Katherine RunningCrane, Project Manager



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PO Box 2651
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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG7-3
T140296-37 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	31	ug/kg	1	4021811	02/18/14	02/18/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	31	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	31	"	"	"	"	"	"	
Hexachlorobutadiene	ND	31	"	"	"	"	"	"	
Isopropylbenzene	ND	31	"	"	"	"	"	"	
p-Isopropyltoluene	ND	31	"	"	"	"	"	"	
Methylene chloride	ND	31	"	"	"	"	"	"	
Naphthalene	ND	31	"	"	"	"	"	"	
n-Propylbenzene	ND	31	"	"	"	"	"	"	
Styrene	ND	31	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	31	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	31	"	"	"	"	"	"	
Tetrachloroethene	ND	31	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	31	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	31	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	31	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	31	"	"	"	"	"	"	
Trichloroethene	ND	31	"	"	"	"	"	"	
Trichlorofluoromethane	ND	31	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	31	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	31	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	31	"	"	"	"	"	"	
Vinyl chloride	ND	31	"	"	"	"	"	"	
Benzene	ND	31	"	"	"	"	"	"	
Toluene	ND	31	"	"	"	"	"	"	
Ethylbenzene	ND	31	"	"	"	"	"	"	
m,p-Xylene	ND	62	"	"	"	"	"	"	
o-Xylene	ND	31	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	120	"	"	"	"	"	"	
Tert-butyl alcohol	ND	310	"	"	"	"	"	"	
Di-isopropyl ether	ND	120	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Katherine RunningCrane

Katherine RunningCrane, Project Manager



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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG7-3

T140296-37 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Ethyl tert-butyl ether	ND	120	ug/kg	1	4021811	02/18/14	02/18/14	EPA 8260B/5035	
Methyl tert-butyl ether	ND	120	"	"	"	"	"	"	
Surrogate: Toluene-d8		97.8 %	85.5-116		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.4 %	81.2-123		"	"	"	"	
Surrogate: Dibromofluoromethane		133 %	95.7-135		"	"	"	"	

SunStar Laboratories, Inc.

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Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG7-15
T140296-39 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	5.0	ug/kg	1	4021811	02/18/14	02/18/14	EPA 8260B/5035	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG7-15
T140296-39 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	5.0	ug/kg	1	4021811	02/18/14	02/18/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	6.2	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	20	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Di-isopropyl ether	ND	20	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SG7-15
T140296-39 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Ethyl tert-butyl ether	ND	20	ug/kg	1	4021811	02/18/14	02/18/14	EPA 8260B/5035	
Methyl tert-butyl ether	ND	20	"	"	"	"	"	"	
Surrogate: Toluene-d8		99.4 %	85.5-116		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		103 %	81.2-123		"	"	"	"	
Surrogate: Dibromofluoromethane		126 %	95.7-135		"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SB6-2
T140296-40 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Extractable Petroleum Hydrocarbons by 8015C

C6-C12 (GRO)	ND	10	mg/kg	1	4021809	02/18/14	02/18/14	EPA 8015C	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	

Surrogate: *p*-Terphenyl 109 % 65-135 " " " "

Metals by EPA 6010B

Antimony	ND	3.0	mg/kg	1	4021806	02/18/14	02/18/14	EPA 6010B	
Silver	ND	2.0	"	"	"	"	"	"	
Arsenic	ND	5.0	"	"	"	"	"	"	
Barium	41	1.0	"	"	"	"	"	"	
Beryllium	ND	1.0	"	"	"	"	"	"	
Cadmium	ND	2.0	"	"	"	"	"	"	
Chromium	7.9	2.0	"	"	"	"	"	"	
Cobalt	9.4	2.0	"	"	"	"	"	"	
Copper	5.6	1.0	"	"	"	"	"	"	
Lead	4.6	3.0	"	"	"	"	"	"	
Molybdenum	ND	5.0	"	"	"	"	"	"	
Nickel	4.2	2.0	"	"	"	"	"	"	
Selenium	ND	5.0	"	"	"	"	"	"	
Thallium	ND	2.0	"	"	"	"	"	"	
Vanadium	26	5.0	"	"	"	"	"	"	
Zinc	19	1.0	"	"	"	"	"	"	

Cold Vapor Extraction EPA 7470/7471

Mercury	ND	0.10	mg/kg	1	4021807	02/18/14	02/18/14	EPA 7471A Soil	

SunStar Laboratories, Inc.

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02/20/14 14:00

SB6-2
T140296-40 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	6.1	ug/kg	1	4021811	02/18/14	02/18/14	EPA 8260B/5035	
Bromochloromethane	ND	6.1	"	"	"	"	"	"	
Bromodichloromethane	ND	6.1	"	"	"	"	"	"	
Bromoform	ND	6.1	"	"	"	"	"	"	
Bromomethane	ND	6.1	"	"	"	"	"	"	
n-Butylbenzene	ND	6.1	"	"	"	"	"	"	
sec-Butylbenzene	ND	6.1	"	"	"	"	"	"	
tert-Butylbenzene	ND	6.1	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.1	"	"	"	"	"	"	
Chlorobenzene	ND	6.1	"	"	"	"	"	"	
Chloroethane	ND	6.1	"	"	"	"	"	"	
Chloroform	ND	6.1	"	"	"	"	"	"	
Chloromethane	ND	6.1	"	"	"	"	"	"	
2-Chlorotoluene	ND	6.1	"	"	"	"	"	"	
4-Chlorotoluene	ND	6.1	"	"	"	"	"	"	
Dibromochloromethane	ND	6.1	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	12	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	6.1	"	"	"	"	"	"	
Dibromomethane	ND	6.1	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	6.1	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	6.1	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	6.1	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	6.1	"	"	"	"	"	"	
1,1-Dichloroethane	ND	6.1	"	"	"	"	"	"	
1,2-Dichloroethane	ND	6.1	"	"	"	"	"	"	
1,1-Dichloroethene	ND	6.1	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	6.1	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	6.1	"	"	"	"	"	"	
1,2-Dichloropropane	ND	6.1	"	"	"	"	"	"	
1,3-Dichloropropane	ND	6.1	"	"	"	"	"	"	
2,2-Dichloropropane	ND	6.1	"	"	"	"	"	"	

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Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SB6-2
T140296-40 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	6.1	ug/kg	1	4021811	02/18/14	02/18/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	6.1	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	6.1	"	"	"	"	"	"	
Hexachlorobutadiene	ND	6.1	"	"	"	"	"	"	
Isopropylbenzene	ND	6.1	"	"	"	"	"	"	
p-Isopropyltoluene	ND	6.1	"	"	"	"	"	"	
Methylene chloride	ND	6.1	"	"	"	"	"	"	
Naphthalene	ND	6.1	"	"	"	"	"	"	
n-Propylbenzene	ND	6.1	"	"	"	"	"	"	
Styrene	ND	6.1	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	6.1	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	6.1	"	"	"	"	"	"	
Tetrachloroethene	ND	6.1	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	6.1	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	6.1	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	6.1	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	6.1	"	"	"	"	"	"	
Trichloroethene	ND	6.1	"	"	"	"	"	"	
Trichlorofluoromethane	ND	6.1	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	6.1	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	6.1	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	6.1	"	"	"	"	"	"	
Vinyl chloride	ND	6.1	"	"	"	"	"	"	
Benzene	ND	6.1	"	"	"	"	"	"	
Toluene	ND	6.1	"	"	"	"	"	"	
Ethylbenzene	ND	6.1	"	"	"	"	"	"	
m,p-Xylene	ND	12	"	"	"	"	"	"	
o-Xylene	ND	6.1	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	24	"	"	"	"	"	"	
Tert-butyl alcohol	ND	61	"	"	"	"	"	"	
Di-isopropyl ether	ND	24	"	"	"	"	"	"	

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Katherine RunningCrane, Project Manager



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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SB6-2
T140296-40 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Ethyl tert-butyl ether	ND	24	ug/kg	1	4021811	02/18/14	02/18/14	EPA 8260B/5035	
Methyl tert-butyl ether	ND	24	"	"	"	"	"	"	
Surrogate: Toluene-d8		96.0 %	85.5-116		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		77.6 %	81.2-123		"	"	"	"	S-GC
Surrogate: Dibromofluoromethane		127 %	95.7-135		"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SB6-5
T140296-41 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Extractable Petroleum Hydrocarbons by 8015C

C6-C12 (GRO)	ND	10	mg/kg	1	4021809	02/18/14	02/18/14	EPA 8015C	
C13-C28 (DRO)	ND	10	"	"	"	"	"	"	
C29-C40 (MORO)	ND	10	"	"	"	"	"	"	

Surrogate: *p*-Terphenyl 108 % 65-135 " " " "

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	4.1	ug/kg	1	4021811	02/18/14	02/18/14	EPA 8260B/5035	
Bromochloromethane	ND	4.1	"	"	"	"	"	"	
Bromodichloromethane	ND	4.1	"	"	"	"	"	"	
Bromoform	ND	4.1	"	"	"	"	"	"	
Bromomethane	ND	4.1	"	"	"	"	"	"	
n-Butylbenzene	ND	4.1	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.1	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.1	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.1	"	"	"	"	"	"	
Chlorobenzene	ND	4.1	"	"	"	"	"	"	
Chloroethane	ND	4.1	"	"	"	"	"	"	
Chloroform	ND	4.1	"	"	"	"	"	"	
Chloromethane	ND	4.1	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.1	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.1	"	"	"	"	"	"	
Dibromochloromethane	ND	4.1	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	8.2	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.1	"	"	"	"	"	"	
Dibromomethane	ND	4.1	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.1	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.1	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.1	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.1	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.1	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.1	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SB6-5
T140296-41 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

cis-1,2-Dichloroethene	ND	4.1	ug/kg	1	4021811	02/18/14	02/18/14	EPA 8260B/5035	
trans-1,2-Dichloroethene	ND	4.1	"	"	"	"	"	"	
1,2-Dichloropropane	ND	4.1	"	"	"	"	"	"	
1,3-Dichloropropane	ND	4.1	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.1	"	"	"	"	"	"	
1,1-Dichloropropene	ND	4.1	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.1	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.1	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.1	"	"	"	"	"	"	
Isopropylbenzene	ND	4.1	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.1	"	"	"	"	"	"	
Methylene chloride	ND	4.1	"	"	"	"	"	"	
Naphthalene	ND	4.1	"	"	"	"	"	"	
n-Propylbenzene	ND	4.1	"	"	"	"	"	"	
Styrene	ND	4.1	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.1	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.1	"	"	"	"	"	"	
Tetrachloroethene	ND	4.1	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.1	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.1	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.1	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.1	"	"	"	"	"	"	
Trichloroethene	ND	4.1	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.1	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.1	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.1	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.1	"	"	"	"	"	"	
Vinyl chloride	ND	4.1	"	"	"	"	"	"	
Benzene	ND	4.1	"	"	"	"	"	"	
Toluene	ND	4.1	"	"	"	"	"	"	
Ethylbenzene	ND	4.1	"	"	"	"	"	"	

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Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SB6-5
T140296-41 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

m,p-Xylene	ND	8.2	ug/kg	1	4021811	02/18/14	02/18/14	EPA 8260B/5035	
o-Xylene	ND	4.1	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	16	"	"	"	"	"	"	
Tert-butyl alcohol	ND	41	"	"	"	"	"	"	
Di-isopropyl ether	ND	16	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	16	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	16	"	"	"	"	"	"	
Surrogate: Toluene-d8		96.0 %	85.5-116		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		108 %	81.2-123		"	"	"	"	
Surrogate: Dibromofluoromethane		139 %	95.7-135		"	"	"	"	S-GC

SunStar Laboratories, Inc.

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Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SB6-15
T140296-43 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	4.5	ug/kg	1	4021811	02/18/14	02/18/14	EPA 8260B/5035	
Bromochloromethane	ND	4.5	"	"	"	"	"	"	
Bromodichloromethane	ND	4.5	"	"	"	"	"	"	
Bromoform	ND	4.5	"	"	"	"	"	"	
Bromomethane	ND	4.5	"	"	"	"	"	"	
n-Butylbenzene	ND	4.5	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.5	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.5	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.5	"	"	"	"	"	"	
Chlorobenzene	ND	4.5	"	"	"	"	"	"	
Chloroethane	ND	4.5	"	"	"	"	"	"	
Chloroform	ND	4.5	"	"	"	"	"	"	
Chloromethane	ND	4.5	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.5	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.5	"	"	"	"	"	"	
Dibromochloromethane	ND	4.5	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	9.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.5	"	"	"	"	"	"	
Dibromomethane	ND	4.5	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.5	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.5	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.5	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.5	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.5	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.5	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.5	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.5	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	4.5	"	"	"	"	"	"	
1,3-Dichloropropane	ND	4.5	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.5	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SB6-15
T140296-43 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	4.5	ug/kg	1	4021811	02/18/14	02/18/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	4.5	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.5	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.5	"	"	"	"	"	"	
Isopropylbenzene	ND	4.5	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.5	"	"	"	"	"	"	
Methylene chloride	ND	4.5	"	"	"	"	"	"	
Naphthalene	ND	4.5	"	"	"	"	"	"	
n-Propylbenzene	ND	4.5	"	"	"	"	"	"	
Styrene	ND	4.5	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.5	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.5	"	"	"	"	"	"	
Tetrachloroethene	6.0	4.5	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.5	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.5	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.5	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.5	"	"	"	"	"	"	
Trichloroethene	6.1	4.5	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.5	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.5	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.5	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.5	"	"	"	"	"	"	
Vinyl chloride	ND	4.5	"	"	"	"	"	"	
Benzene	ND	4.5	"	"	"	"	"	"	
Toluene	ND	4.5	"	"	"	"	"	"	
Ethylbenzene	ND	4.5	"	"	"	"	"	"	
m,p-Xylene	ND	9.0	"	"	"	"	"	"	
o-Xylene	ND	4.5	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	18	"	"	"	"	"	"	
Tert-butyl alcohol	ND	45	"	"	"	"	"	"	
Di-isopropyl ether	ND	18	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	18	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SB6-15
T140296-43 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Methyl tert-butyl ether	ND	18	ug/kg	1	4021811	02/18/14	02/18/14	EPA 8260B/5035	
<i>Surrogate: Toluene-d8</i>		97.0 %	85.5-116		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		97.8 %	81.2-123		"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		140 %	95.7-135		"	"	"	"	S-GC

SunStar Laboratories, Inc.

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SB6-25
T140296-45 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	5.7	ug/kg	1	4021811	02/18/14	02/18/14	EPA 8260B/5035	
Bromochloromethane	ND	5.7	"	"	"	"	"	"	
Bromodichloromethane	ND	5.7	"	"	"	"	"	"	
Bromoform	ND	5.7	"	"	"	"	"	"	
Bromomethane	ND	5.7	"	"	"	"	"	"	
n-Butylbenzene	ND	5.7	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.7	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.7	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.7	"	"	"	"	"	"	
Chlorobenzene	ND	5.7	"	"	"	"	"	"	
Chloroethane	ND	5.7	"	"	"	"	"	"	
Chloroform	ND	5.7	"	"	"	"	"	"	
Chloromethane	ND	5.7	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.7	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.7	"	"	"	"	"	"	
Dibromochloromethane	ND	5.7	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	11	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.7	"	"	"	"	"	"	
Dibromomethane	ND	5.7	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.7	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.7	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.7	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.7	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.7	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.7	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.7	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.7	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.7	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.7	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.7	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.7	"	"	"	"	"	"	

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Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SB6-25
T140296-45 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	5.7	ug/kg	1	4021811	02/18/14	02/18/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	5.7	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.7	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.7	"	"	"	"	"	"	
Isopropylbenzene	ND	5.7	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.7	"	"	"	"	"	"	
Methylene chloride	ND	5.7	"	"	"	"	"	"	
Naphthalene	ND	5.7	"	"	"	"	"	"	
n-Propylbenzene	ND	5.7	"	"	"	"	"	"	
Styrene	ND	5.7	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.7	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.7	"	"	"	"	"	"	
Tetrachloroethene	ND	5.7	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.7	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.7	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.7	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.7	"	"	"	"	"	"	
Trichloroethene	ND	5.7	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.7	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.7	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.7	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.7	"	"	"	"	"	"	
Vinyl chloride	ND	5.7	"	"	"	"	"	"	
Benzene	ND	5.7	"	"	"	"	"	"	
Toluene	ND	5.7	"	"	"	"	"	"	
Ethylbenzene	ND	5.7	"	"	"	"	"	"	
m,p-Xylene	ND	11	"	"	"	"	"	"	
o-Xylene	ND	5.7	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	23	"	"	"	"	"	"	
Tert-butyl alcohol	ND	57	"	"	"	"	"	"	
Di-isopropyl ether	ND	23	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SB6-25
T140296-45 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Ethyl tert-butyl ether	ND	23	ug/kg	1	4021811	02/18/14	02/18/14	EPA 8260B/5035	
Methyl tert-butyl ether	ND	23	"	"	"	"	"	"	
Surrogate: Toluene-d8		93.2 %	85.5-116		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.2 %	81.2-123		"	"	"	"	
Surrogate: Dibromofluoromethane		130 %	95.7-135		"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SB6-35
T140296-47 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	5.0	ug/kg	1	4021811	02/18/14	02/18/14	EPA 8260B/5035	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SB6-35
T140296-47 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	5.0	ug/kg	1	4021811	02/18/14	02/18/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	12	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	20	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Di-isopropyl ether	ND	20	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

SB6-35
T140296-47 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Ethyl tert-butyl ether	ND	20	ug/kg	1	4021811	02/18/14	02/18/14	EPA 8260B/5035	
Methyl tert-butyl ether	ND	20	"	"	"	"	"	"	
Surrogate: Toluene-d8		101 %	85.5-116		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		109 %	81.2-123		"	"	"	"	
Surrogate: Dibromofluoromethane		136 %	95.7-135		"	"	"	"	S-GC

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Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

Extractable Petroleum Hydrocarbons by 8015C - Quality Control
SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch 4021809 - EPA 3550B GC

Blank (4021809-BLK1)

Prepared & Analyzed: 02/18/14

C6-C12 (GRO)	ND	10	mg/kg							
C13-C28 (DRO)	ND	10	"							
C29-C40 (MORO)	ND	10	"							

Surrogate: <i>p</i> -Terphenyl	99.4		"	100		99.4	65-135			

LCS (4021809-BS1)

Prepared & Analyzed: 02/18/14

C13-C28 (DRO)	440	10	mg/kg	500		88.6	75-125			
Surrogate: <i>p</i> -Terphenyl	108		"	100		108	65-135			

Matrix Spike (4021809-MS1)

Source: T140296-01

Prepared & Analyzed: 02/18/14

C13-C28 (DRO)	430	10	mg/kg	500	ND	85.5	75-125			
Surrogate: <i>p</i> -Terphenyl	110		"	100		110	65-135			

Matrix Spike Dup (4021809-MSD1)

Source: T140296-01

Prepared & Analyzed: 02/18/14

C13-C28 (DRO)	430	10	mg/kg	498	ND	86.0	75-125	0.0927	20	
Surrogate: <i>p</i> -Terphenyl	113		"	99.5		113	65-135			

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Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch 4021806 - EPA 3051

Blank (4021806-BLK1)

Prepared & Analyzed: 02/18/14

Antimony	ND	3.0	mg/kg
Silver	ND	2.0	"
Arsenic	ND	5.0	"
Barium	ND	1.0	"
Beryllium	ND	1.0	"
Cadmium	ND	2.0	"
Chromium	ND	2.0	"
Cobalt	ND	2.0	"
Copper	ND	1.0	"
Lead	ND	3.0	"
Molybdenum	ND	5.0	"
Nickel	ND	2.0	"
Selenium	ND	5.0	"
Thallium	ND	2.0	"
Vanadium	ND	5.0	"
Zinc	ND	1.0	"

LCS (4021806-BS1)

Prepared & Analyzed: 02/18/14

Arsenic	107	5.0	mg/kg	100	107	75-125
Barium	101	1.0	"	100	101	75-125
Cadmium	99.4	2.0	"	100	99.4	75-125
Chromium	104	2.0	"	100	104	75-125
Lead	101	3.0	"	100	101	75-125

Matrix Spike (4021806-MS1)

Source: T140296-01

Prepared & Analyzed: 02/18/14

Arsenic	99.2	5.0	mg/kg	100	ND	99.2	75-125
Barium	178	1.0	"	100	70.5	107	75-125
Cadmium	97.1	2.0	"	100	0.133	96.9	75-125
Chromium	112	2.0	"	100	9.97	102	75-125
Lead	99.0	3.0	"	100	4.31	94.7	75-125

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Project Number: 026-14-001-1
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Reported:
02/20/14 14:00

Metals by EPA 6010B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch 4021806 - EPA 3051

Matrix Spike Dup (4021806-MSD1)	Source: T140296-01			Prepared & Analyzed: 02/18/14						
Arsenic	98.8	5.0	mg/kg	100	ND	98.8	75-125	0.419	20	
Barium	175	1.0	"	100	70.5	104	75-125	1.72	20	
Cadmium	93.7	2.0	"	100	0.133	93.6	75-125	3.52	20	
Chromium	108	2.0	"	100	9.97	98.1	75-125	3.23	20	
Lead	98.9	3.0	"	100	4.31	94.6	75-125	0.0854	20	

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Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

Cold Vapor Extraction EPA 7470/7471 - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch 4021807 - EPA 7471A Soil

Blank (4021807-BLK1)

Prepared & Analyzed: 02/18/14

Mercury	ND	0.10	mg/kg

LCS (4021807-BS1)

Prepared & Analyzed: 02/18/14

Mercury	0.408	0.10	mg/kg	0.417	97.9	80-120

Matrix Spike (4021807-MS1)

Source: T140296-01

Prepared & Analyzed: 02/18/14

Mercury	0.387	0.10	mg/kg	0.417	ND	93.0	75-125

Matrix Spike Dup (4021807-MSD1)

Source: T140296-01

Prepared & Analyzed: 02/18/14

Mercury	0.381	0.10	mg/kg	0.410	ND	92.9	75-125	1.75	20

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch 4021810 - EPA 5035 GCMS

Blank (4021810-BLK1)

Prepared & Analyzed: 02/18/14

Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	"
Bromodichloromethane	ND	5.0	"
Bromoform	ND	5.0	"
Bromomethane	ND	5.0	"
n-Butylbenzene	ND	5.0	"
sec-Butylbenzene	ND	5.0	"
tert-Butylbenzene	ND	5.0	"
Carbon tetrachloride	ND	5.0	"
Chlorobenzene	ND	5.0	"
Chloroethane	ND	5.0	"
Chloroform	ND	5.0	"
Chloromethane	ND	5.0	"
2-Chlorotoluene	ND	5.0	"
4-Chlorotoluene	ND	5.0	"
Dibromochloromethane	ND	5.0	"
1,2-Dibromo-3-chloropropane	ND	10	"
1,2-Dibromoethane (EDB)	ND	5.0	"
Dibromomethane	ND	5.0	"
1,2-Dichlorobenzene	ND	5.0	"
1,3-Dichlorobenzene	ND	5.0	"
1,4-Dichlorobenzene	ND	5.0	"
Dichlorodifluoromethane	ND	5.0	"
1,1-Dichloroethane	ND	5.0	"
1,2-Dichloroethane	ND	5.0	"
1,1-Dichloroethene	ND	5.0	"
cis-1,2-Dichloroethene	ND	5.0	"
trans-1,2-Dichloroethene	ND	5.0	"
1,2-Dichloropropane	ND	5.0	"
1,3-Dichloropropane	ND	5.0	"
2,2-Dichloropropane	ND	5.0	"
1,1-Dichloropropene	ND	5.0	"
cis-1,3-Dichloropropene	ND	5.0	"
trans-1,3-Dichloropropene	ND	5.0	"
Hexachlorobutadiene	ND	5.0	"
Isopropylbenzene	ND	5.0	"

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Project Number: 026-14-001-1
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02/20/14 14:00

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch 4021810 - EPA 5035 GCMS

Blank (4021810-BLK1)

Prepared & Analyzed: 02/18/14

p-Isopropyltoluene	ND	5.0	ug/kg							
Methylene chloride	ND	5.0	"							
Naphthalene	ND	5.0	"							
n-Propylbenzene	ND	5.0	"							
Styrene	ND	5.0	"							
1,1,2,2-Tetrachloroethane	ND	5.0	"							
1,1,1,2-Tetrachloroethane	ND	5.0	"							
Tetrachloroethene	ND	5.0	"							
1,2,3-Trichlorobenzene	ND	5.0	"							
1,2,4-Trichlorobenzene	ND	5.0	"							
1,1,2-Trichloroethane	ND	5.0	"							
1,1,1-Trichloroethane	ND	5.0	"							
Trichloroethene	ND	5.0	"							
Trichlorofluoromethane	ND	5.0	"							
1,2,3-Trichloropropane	ND	5.0	"							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
Vinyl chloride	ND	5.0	"							
Benzene	ND	5.0	"							
Toluene	ND	5.0	"							
Ethylbenzene	ND	5.0	"							
m,p-Xylene	ND	10	"							
o-Xylene	ND	5.0	"							
Tert-amyl methyl ether	ND	20	"							
Tert-butyl alcohol	ND	50	"							
Di-isopropyl ether	ND	20	"							
Ethyl tert-butyl ether	ND	20	"							
Methyl tert-butyl ether	ND	20	"							
Surrogate: Toluene-d8	40.0		"	40.0		100	85.5-116			
Surrogate: 4-Bromofluorobenzene	42.3		"	40.0		106	81.2-123			
Surrogate: Dibromofluoromethane	44.8		"	40.0		112	95.7-135			

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Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch 4021810 - EPA 5035 GCMS

LCS (4021810-BS1)

Prepared & Analyzed: 02/18/14

Chlorobenzene	89.6	5.0	ug/kg	100		89.6	75-125			
1,1-Dichloroethene	79.2	5.0	"	100		79.2	75-125			
Trichloroethene	86.8	5.0	"	100		86.8	75-125			
Benzene	90.8	5.0	"	100		90.8	75-125			
Toluene	95.6	5.0	"	100		95.6	75-125			
Surrogate: Toluene-d8	41.8		"	40.0		104	85.5-116			
Surrogate: 4-Bromofluorobenzene	42.8		"	40.0		107	81.2-123			
Surrogate: Dibromofluoromethane	44.8		"	40.0		112	95.7-135			

LCS Dup (4021810-BSD1)

Prepared & Analyzed: 02/18/14

Chlorobenzene	92.8	5.0	ug/kg	100		92.8	75-125	3.45	20	
1,1-Dichloroethene	89.5	5.0	"	100		89.5	75-125	12.3	20	
Trichloroethene	89.9	5.0	"	100		89.9	75-125	3.57	20	
Benzene	96.4	5.0	"	100		96.4	75-125	5.93	20	
Toluene	96.1	5.0	"	100		96.1	75-125	0.469	20	
Surrogate: Toluene-d8	40.3		"	40.0		101	85.5-116			
Surrogate: 4-Bromofluorobenzene	41.7		"	40.0		104	81.2-123			
Surrogate: Dibromofluoromethane	46.4		"	40.0		116	95.7-135			

Batch 4021811 - EPA 5035 GCMS

Blank (4021811-BLK1)

Prepared & Analyzed: 02/18/14

Bromobenzene	ND	5.0	ug/kg							
Bromochloromethane	ND	5.0	"							
Bromodichloromethane	ND	5.0	"							
Bromoform	ND	5.0	"							
Bromomethane	ND	5.0	"							
n-Butylbenzene	ND	5.0	"							
sec-Butylbenzene	ND	5.0	"							
tert-Butylbenzene	ND	5.0	"							
Carbon tetrachloride	ND	5.0	"							
Chlorobenzene	ND	5.0	"							
Chloroethane	ND	5.0	"							
Chloroform	ND	5.0	"							
Chloromethane	ND	5.0	"							
2-Chlorotoluene	ND	5.0	"							

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch 4021811 - EPA 5035 GCMS

Blank (4021811-BLK1)

Prepared & Analyzed: 02/18/14

4-Chlorotoluene	ND	5.0	ug/kg
Dibromochloromethane	ND	5.0	"
1,2-Dibromo-3-chloropropane	ND	10	"
1,2-Dibromoethane (EDB)	ND	5.0	"
Dibromomethane	ND	5.0	"
1,2-Dichlorobenzene	ND	5.0	"
1,3-Dichlorobenzene	ND	5.0	"
1,4-Dichlorobenzene	ND	5.0	"
Dichlorodifluoromethane	ND	5.0	"
1,1-Dichloroethane	ND	5.0	"
1,2-Dichloroethane	ND	5.0	"
1,1-Dichloroethene	ND	5.0	"
cis-1,2-Dichloroethene	ND	5.0	"
trans-1,2-Dichloroethene	ND	5.0	"
1,2-Dichloropropane	ND	5.0	"
1,3-Dichloropropane	ND	5.0	"
2,2-Dichloropropane	ND	5.0	"
1,1-Dichloropropene	ND	5.0	"
cis-1,3-Dichloropropene	ND	5.0	"
trans-1,3-Dichloropropene	ND	5.0	"
Hexachlorobutadiene	ND	5.0	"
Isopropylbenzene	ND	5.0	"
p-Isopropyltoluene	ND	5.0	"
Methylene chloride	ND	5.0	"
Naphthalene	ND	5.0	"
n-Propylbenzene	ND	5.0	"
Styrene	ND	5.0	"
1,1,2,2-Tetrachloroethane	ND	5.0	"
1,1,1,2-Tetrachloroethane	ND	5.0	"
Tetrachloroethene	ND	5.0	"
1,2,3-Trichlorobenzene	ND	5.0	"
1,2,4-Trichlorobenzene	ND	5.0	"
1,1,2-Trichloroethane	ND	5.0	"
1,1,1-Trichloroethane	ND	5.0	"
Trichloroethene	ND	5.0	"
Trichlorofluoromethane	ND	5.0	"

SunStar Laboratories, Inc.

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Katherine RunningCrane

Katherine RunningCrane, Project Manager



25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Ecobility Corp.
PO Box 2651
Pales Verdes Peninsula CA, 90274

Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch 4021811 - EPA 5035 GCMS

Blank (4021811-BLK1)

Prepared & Analyzed: 02/18/14

1,2,3-Trichloropropane	ND	5.0	ug/kg							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
Vinyl chloride	ND	5.0	"							
Benzene	ND	5.0	"							
Toluene	ND	5.0	"							
Ethylbenzene	ND	5.0	"							
m,p-Xylene	ND	10	"							
o-Xylene	ND	5.0	"							
Tert-amyl methyl ether	ND	20	"							
Tert-butyl alcohol	ND	50	"							
Di-isopropyl ether	ND	20	"							
Ethyl tert-butyl ether	ND	20	"							
Methyl tert-butyl ether	ND	20	"							
Surrogate: Toluene-d8	40.2		"	40.0		101	85.5-116			
Surrogate: 4-Bromofluorobenzene	43.0		"	40.0		108	81.2-123			
Surrogate: Dibromofluoromethane	43.6		"	40.0		109	95.7-135			

LCS (4021811-BS1)

Prepared & Analyzed: 02/18/14

Chlorobenzene	90.0	5.0	ug/kg	100		90.0	75-125			
1,1-Dichloroethene	86.0	5.0	"	100		86.0	75-125			
Trichloroethene	92.3	5.0	"	100		92.3	75-125			
Benzene	96.8	5.0	"	100		96.8	75-125			
Toluene	98.0	5.0	"	100		98.0	75-125			
Surrogate: Toluene-d8	41.6		"	40.0		104	85.5-116			
Surrogate: 4-Bromofluorobenzene	41.9		"	40.0		105	81.2-123			
Surrogate: Dibromofluoromethane	45.4		"	40.0		114	95.7-135			

SunStar Laboratories, Inc.

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Ecobility Corp.
PO Box 2651
Pales Verdes Peninsula CA, 90274

Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch 4021811 - EPA 5035 GCMS

LCS Dup (4021811-BSD1)

Prepared & Analyzed: 02/18/14

Chlorobenzene	89.6	5.0	ug/kg	100		89.6	75-125	0.501	20	
1,1-Dichloroethene	84.2	5.0	"	100		84.2	75-125	2.23	20	
Trichloroethene	85.6	5.0	"	100		85.6	75-125	7.53	20	
Benzene	91.2	5.0	"	100		91.2	75-125	5.85	20	
Toluene	93.0	5.0	"	100		93.0	75-125	5.29	20	
Surrogate: Toluene-d8	40.0		"	40.0		99.9	85.5-116			
Surrogate: 4-Bromofluorobenzene	41.0		"	40.0		102	81.2-123			
Surrogate: Dibromofluoromethane	44.6		"	40.0		112	95.7-135			

SunStar Laboratories, Inc.

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Katherine RunningCrane

Katherine RunningCrane, Project Manager



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Ecobility Corp.
PO Box 2651
Pales Verdes Peninsula CA, 90274

Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:00

Notes and Definitions

S-GC Surrogate recovery outside of established control limits. The data was accepted based on valid recovery of the remaining surrogate(s).
DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference

SunStar Laboratories, Inc.

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Katherine RunningCrane

Katherine RunningCrane, Project Manager

Chain of Custody Record

SunStar Laboratories, Inc.
25712 Commerce Centre Dr
Lake Forest, CA 92630
949-297-5020

Client: ECOBILITY Date: 2/17/14 Page: 1 of 4
Address: PO Box 2651 Palos Verdes Peninsula, CA 90274 Project Name: NEW POST
Phone: 310-910-1493 Fax: 310-377-3745 Collector: MOORADYAN Client Project #: 026-11-601-1
Project Manager: V MARSHALL Batch #: TW026 EDF #: _____

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	Laboratory ID #	Comments/Preservative	Total # of containers	
SC1-2	2/17/14		Soil	5035/5015	X	X						X	X	01	HOLD		
SC1-5					X	X						X	X	02	HOLD		
SC1-10					X	X								03	HOLD		
SC1-15					X	X								04	HOLD		
SC1-20					X	X								05	HOLD		
SC1-25					X	X								06	HOLD		
SC1-30					X	X								07	HOLD		
SC1-35					X	X								08	HOLD		
SC2-2					X	X						X	X	09	HOLD		
SC2-5					X	X								10	HOLD		
SC2-10					X	X								11	HOLD		
SC2-15					X	X								12	HOLD		
SC2-20					X	X								13	HOLD		
SC2-25					X	X								14	HOLD		
SC2-30	2/17/14				X	X								15	HOLD		
Relinquished by: (signature) <u>[Signature]</u>			Date / Time	4:00	Received by: (signature) <u>[Signature]</u>			Date / Time	16:00			Chain of Custody seals Y/N/NA			Seals intact? Y/N/NA		
Relinquished by: (signature) <u>[Signature]</u>			Date / Time		Received by: (signature) <u>[Signature]</u>			Date / Time				Received good condition/cold					
Relinquished by: (signature)			Date / Time		Received by: (signature)			Date / Time				Turn around time:					

Notes
48 HLR
RST

Chain of Custody Record

SunStar Laboratories, Inc.
25712 Commerce Dr
Lake Forest, CA 92630
949-297-5020

Client: ECOSYSTEM Date: 2/17/14 Page: 2 of 4
Address: PO Box 7651 Palos Verdes Pk, CA Project Name: VIEWPORT
Phone: 310 910 1499 Fax: 310 377-3745 Collector: MOOREHEAD Client Project #: 026-14-001
Project Manager: MAASIAK Batch #: TW0246 EDF #: _____

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	Laboratory ID #	Comments/Preservative	Total # of containers
562-35	2/12/14		501L	5035 blue	X	X						X	X	16		
563-3					X	X								17		
563-10					X	X								18		
563-15					X	X								19		
563-20					X	X								20		
563-25					X	X								21		
563-30					X	X								22		
563-35					X	X								23		
564-3					X	X								24		
564-8					X	X								25		
564-15					X	X								26		
565-3					X	X								27		
565-8					X	X								28		
565-15					X	X								29		
					X	X								30		

Relinquished by: (signature) [Signature] Date / Time 2/12/14 4:00 Received by: (signature) [Signature] Date / Time 2/12/14 16:00
Relinquished by: (signature) _____ Date / Time _____ Received by: (signature) _____ Date / Time _____
Relinquished by: (signature) _____ Date / Time _____ Received by: (signature) _____ Date / Time _____
Sample disposal instructions: Disposal @ \$2.00 each _____ Return to client _____ Pickup _____

COC 130764

Chain of Custody Record

Date: 2/12/14 Page: 3 of 4
Project Name: Newsport
Collector: McDonald Client Project # 626-14-001-1
Batch #: T140296 EDF #:

COC 130756

Chain of Custody Record

Date: 2/17/14 Page: 4 of 4
Project Name: Neacport
Collector: McDonnell Client Project #: 026-14-001-1
Batch #: T140296 EDF #: _____

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	Laboratory ID #	Comments/Preservative
SBC-30 SBC-35	2/17/14 2/19/14	2:45 2:50	SOL SOL	5035/5045 5035/BATE	X									46 47	HOLD
Relinquished by: (signature)	Date / Time		Received by: (signature)	Date / Time	Total # of containers	Chain of Custody seals Y/N/A	Seals intact? Y/N/A	Received good condition/cold	Turn around time:	Notes					
Michael Monday	2/17/14	4:00	[Signature]	2/17/14	16	OK				48 hr					
Relinquished by: (signature)	Date / Time		Received by: (signature)	Date / Time											
Relinquished by: (signature)	Date / Time		Received by: (signature)	Date / Time											

Pickup _____

COC 130755



SAMPLE RECEIVING REVIEW SHEET

BATCH # T1402a6Client Name: EcobilityProject: MBK Homes - Newport BeachReceived by: PatrickDate/Time Received: 2/17/14 1600Delivered by: ☐ Client ☒ SunStar Courier ☐ GSO ☐ FedEx ☐ Other _____Total number of coolers received 1Temp criteria = 6°C > 0°C (no frozen containers)Temperature: cooler #1 4.8 °C +/- the CF (- 0.2°C) = 4.6 °C corrected temperature

cooler #2 _____ °C +/- the CF (- 0.2°C) = _____ °C corrected temperature

cooler #3 _____ °C +/- the CF (- 0.2°C) = _____ °C corrected temperature

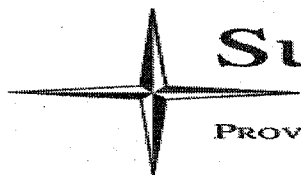
Samples outside temp. but received on ice, w/in 6 hours of final sampling. ☒ Yes ☐ No* ☐ N/ACustody Seals Intact on Cooler/Sample ☐ Yes ☐ No* ☒ N/ASample Containers Intact ☐ Yes ☐ No*Sample labels match COC ID's ☐ Yes ☐ No*Total number of containers received match COC ☐ Yes ☐ No*Proper containers received for analyses requested on COC ☒ Yes ☐ No*Proper preservative indicated on COC/containers for analyses requested ☒ Yes ☐ No* ☐ N/AComplete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times. ☐ Yes ☐ No*

* Complete Non-Conformance Receiving Sheet if checked

Cooler/Sample Review - Initials and date DM 2/17/14

Comments:

T140296



SunStar Laboratories, Inc.

PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

Company: Ecobility

Name: Mike

Item:		Quantity:	
2 oz jars 24/CS			
4 oz jars 24/CS			
8 oz jars 12/CS			
40 ml unp. Voas 72/BOX			
40 ml HCL Voas 72/BOX			
250 ml Poly 60/CS			
1 Liter Poly 30/CS			
500 ml Poly 16/CS			
500 ml Amber Bottle Wide 12/CS			
1 Liter Amber Bottle 12/CS			
1 Gallon Poly 4/BOX			
5035 kits:(2)Sodium Bisulfate Voas 72/BOX		208	CHARGE FOR 94
(1) Methanol Voa 72/BOX		104	CHARGE FOR 47
(1)Syringe 50/PACK		154	CHARGE FOR 47
Lock-N-Load Handle 1/PACK		2	
Tedlar Bags 10/PACK			
Manifold,Inst Sampler,Gauge, V. sampler			
Sub Slab Insert w/ washer			
Soil Gas Drop Tubes			
Gas extraction fittings			
Soil Gas Filters			
B.C. Summa Cans	400cc:		
	1L:		
	3L:		
	6L:		
Certified Summa Cans	400cc:		
	1L:		
	3L:		
	6L:		
Cooler (S,MED,LRG) Number & Quantity		2	
Swagelok Fittings: Ferrules,Unions, Nuts			
Other: Poly Tube, Tools, etc			
Prepared By: BRIAN		Date : 2-12-14	



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20 February 2014

Valeri Marshall
Ecobility Corp.
PO Box 2651
Pales Verdes Peninsula, CA 90274
RE: MBK Homes - Newport Beach

Enclosed are the results of analyses for samples received by the laboratory on 02/17/14 16:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads 'Katherine RunningCrane'. The signature is written in a cursive, flowing style.

Katherine RunningCrane
Project Manager



25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Ecobility Corp.
PO Box 2651
Pales Verdes Peninsula CA, 90274

Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SG8-3 FT	T140297-01	Soil	02/17/14 00:00	02/17/14 16:00
SG8-15	T140297-03	Soil	02/17/14 00:00	02/17/14 16:00
SG9-3	T140297-04	Soil	02/17/14 00:00	02/17/14 16:00
SG9-15	T140297-06	Soil	02/17/14 00:00	02/17/14 16:00
SG10-3	T140297-07	Soil	02/17/14 00:00	02/17/14 16:00
SG10-15	T140297-09	Soil	02/17/14 00:00	02/17/14 16:00
SG11-3	T140297-10	Soil	02/17/14 00:00	02/17/14 16:00
SG11-15	T140297-12	Soil	02/17/14 00:00	02/17/14 16:00
SG13-3	T140297-16	Soil	02/17/14 00:00	02/17/14 16:00
SG14-3	T140297-17	Soil	02/17/14 00:00	02/17/14 16:00
SG14-8	T140297-18	Soil	02/17/14 00:00	02/17/14 16:00
SG14-15	T140297-19	Soil	02/17/14 00:00	02/17/14 16:00
SG15-3	T140297-20	Soil	02/17/14 00:00	02/17/14 16:00

DETECTIONS SUMMARY

Sample ID: SG8-3 FT

Laboratory ID: T140297-01

No Results Detected

Sample ID: SG8-15

Laboratory ID: T140297-03

No Results Detected

SunStar Laboratories, Inc.

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Katherine RunningCrane

Katherine RunningCrane, Project Manager



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PO Box 2651
Pales Verdes Peninsula CA, 90274

Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

Sample ID: SG9-3

Laboratory ID: T140297-04

No Results Detected

Sample ID: SG9-15

Laboratory ID: T140297-06

No Results Detected

Sample ID: SG10-3

Laboratory ID: T140297-07

No Results Detected

Sample ID: SG10-15

Laboratory ID: T140297-09

No Results Detected

Sample ID: SG11-3

Laboratory ID: T140297-10

No Results Detected

Sample ID: SG11-15

Laboratory ID: T140297-12

No Results Detected

Sample ID: SG13-3

Laboratory ID: T140297-16

No Results Detected

SunStar Laboratories, Inc.

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

Sample ID: SG14-3

Laboratory ID: T140297-17

No Results Detected

Sample ID: SG14-8

Laboratory ID: T140297-18

No Results Detected

Sample ID: SG14-15

Laboratory ID: T140297-19

No Results Detected

Sample ID: SG15-3

Laboratory ID: T140297-20

No Results Detected

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PO Box 2651
Pales Verdes Peninsula CA, 90274

Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG8-3 FT
T140297-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	3.9	ug/kg	1	4021812	02/18/14	02/18/14	EPA 8260B/5035	
Bromochloromethane	ND	3.9	"	"	"	"	"	"	
Bromodichloromethane	ND	3.9	"	"	"	"	"	"	
Bromoform	ND	3.9	"	"	"	"	"	"	
Bromomethane	ND	3.9	"	"	"	"	"	"	
n-Butylbenzene	ND	3.9	"	"	"	"	"	"	
sec-Butylbenzene	ND	3.9	"	"	"	"	"	"	
tert-Butylbenzene	ND	3.9	"	"	"	"	"	"	
Carbon tetrachloride	ND	3.9	"	"	"	"	"	"	
Chlorobenzene	ND	3.9	"	"	"	"	"	"	
Chloroethane	ND	3.9	"	"	"	"	"	"	
Chloroform	ND	3.9	"	"	"	"	"	"	
Chloromethane	ND	3.9	"	"	"	"	"	"	
2-Chlorotoluene	ND	3.9	"	"	"	"	"	"	
4-Chlorotoluene	ND	3.9	"	"	"	"	"	"	
Dibromochloromethane	ND	3.9	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	7.7	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	3.9	"	"	"	"	"	"	
Dibromomethane	ND	3.9	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	3.9	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	3.9	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	3.9	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	3.9	"	"	"	"	"	"	
1,1-Dichloroethane	ND	3.9	"	"	"	"	"	"	
1,2-Dichloroethane	ND	3.9	"	"	"	"	"	"	
1,1-Dichloroethene	ND	3.9	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	3.9	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	3.9	"	"	"	"	"	"	
1,2-Dichloropropane	ND	3.9	"	"	"	"	"	"	
1,3-Dichloropropane	ND	3.9	"	"	"	"	"	"	
2,2-Dichloropropane	ND	3.9	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Katherine RunningCrane

Katherine RunningCrane, Project Manager



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949.297.5027 Fax

Ecobility Corp.
PO Box 2651
Pales Verdes Peninsula CA, 90274

Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG8-3 FT
T140297-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	3.9	ug/kg	1	4021812	02/18/14	02/18/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	3.9	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	3.9	"	"	"	"	"	"	
Hexachlorobutadiene	ND	3.9	"	"	"	"	"	"	
Isopropylbenzene	ND	3.9	"	"	"	"	"	"	
p-Isopropyltoluene	ND	3.9	"	"	"	"	"	"	
Methylene chloride	ND	3.9	"	"	"	"	"	"	
Naphthalene	ND	3.9	"	"	"	"	"	"	
n-Propylbenzene	ND	3.9	"	"	"	"	"	"	
Styrene	ND	3.9	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	3.9	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	3.9	"	"	"	"	"	"	
Tetrachloroethene	ND	3.9	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	3.9	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	3.9	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	3.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	3.9	"	"	"	"	"	"	
Trichloroethene	ND	3.9	"	"	"	"	"	"	
Trichlorofluoromethane	ND	3.9	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	3.9	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	3.9	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	3.9	"	"	"	"	"	"	
Vinyl chloride	ND	3.9	"	"	"	"	"	"	
Benzene	ND	3.9	"	"	"	"	"	"	
Toluene	ND	3.9	"	"	"	"	"	"	
Ethylbenzene	ND	3.9	"	"	"	"	"	"	
m,p-Xylene	ND	7.7	"	"	"	"	"	"	
o-Xylene	ND	3.9	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	15	"	"	"	"	"	"	
Tert-butyl alcohol	ND	39	"	"	"	"	"	"	
Di-isopropyl ether	ND	15	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Katherine RunningCrane

Katherine RunningCrane, Project Manager



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Ecobility Corp.
PO Box 2651
Pales Verdes Peninsula CA, 90274

Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG8-3 FT
T140297-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Ethyl tert-butyl ether	ND	15	ug/kg	1	4021812	02/18/14	02/18/14	EPA 8260B/5035	
Methyl tert-butyl ether	ND	15	"	"	"	"	"	"	
Surrogate: Toluene-d8		95.1 %	85.5-116		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		81.5 %	81.2-123		"	"	"	"	
Surrogate: Dibromofluoromethane		155 %	95.7-135		"	"	"	"	S-04

SunStar Laboratories, Inc.

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG8-15
T140297-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	5.0	ug/kg	1	4021812	02/18/14	02/18/14	EPA 8260B/5035	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Katherine RunningCrane

Katherine RunningCrane, Project Manager



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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG8-15
T140297-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	5.0	ug/kg	1	4021812	02/18/14	02/18/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	20	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Di-isopropyl ether	ND	20	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG8-15
T140297-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Ethyl tert-butyl ether	ND	20	ug/kg	1	4021812	02/18/14	02/18/14	EPA 8260B/5035	
Methyl tert-butyl ether	ND	20	"	"	"	"	"	"	
Surrogate: Toluene-d8		88.9 %	85.5-116		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		75.2 %	81.2-123		"	"	"	"	S-04
Surrogate: Dibromofluoromethane		159 %	95.7-135		"	"	"	"	S-04

SunStar Laboratories, Inc.

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG9-3

T140297-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	4.3	ug/kg	1	4021812	02/18/14	02/19/14	EPA 8260B/5035	
Bromochloromethane	ND	4.3	"	"	"	"	"	"	
Bromodichloromethane	ND	4.3	"	"	"	"	"	"	
Bromoform	ND	4.3	"	"	"	"	"	"	
Bromomethane	ND	4.3	"	"	"	"	"	"	
n-Butylbenzene	ND	4.3	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.3	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.3	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.3	"	"	"	"	"	"	
Chlorobenzene	ND	4.3	"	"	"	"	"	"	
Chloroethane	ND	4.3	"	"	"	"	"	"	
Chloroform	ND	4.3	"	"	"	"	"	"	
Chloromethane	ND	4.3	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.3	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.3	"	"	"	"	"	"	
Dibromochloromethane	ND	4.3	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	8.6	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.3	"	"	"	"	"	"	
Dibromomethane	ND	4.3	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.3	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.3	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.3	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.3	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.3	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.3	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.3	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.3	"	"	"	"	"	"	
1,2-Dichloropropane	ND	4.3	"	"	"	"	"	"	
1,3-Dichloropropane	ND	4.3	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.3	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG9-3

T140297-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	4.3	ug/kg	1	4021812	02/18/14	02/19/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	4.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.3	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.3	"	"	"	"	"	"	
Isopropylbenzene	ND	4.3	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.3	"	"	"	"	"	"	
Methylene chloride	ND	4.3	"	"	"	"	"	"	
Naphthalene	ND	4.3	"	"	"	"	"	"	
n-Propylbenzene	ND	4.3	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.3	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.3	"	"	"	"	"	"	
Tetrachloroethene	ND	4.3	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.3	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.3	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.3	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.3	"	"	"	"	"	"	
Trichloroethene	ND	4.3	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.3	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.3	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.3	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.3	"	"	"	"	"	"	
Vinyl chloride	ND	4.3	"	"	"	"	"	"	
Benzene	ND	4.3	"	"	"	"	"	"	
Toluene	ND	4.3	"	"	"	"	"	"	
Ethylbenzene	ND	4.3	"	"	"	"	"	"	
m,p-Xylene	ND	8.6	"	"	"	"	"	"	
o-Xylene	ND	4.3	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	17	"	"	"	"	"	"	
Tert-butyl alcohol	ND	43	"	"	"	"	"	"	
Di-isopropyl ether	ND	17	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG9-3

T140297-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Ethyl tert-butyl ether	ND	17	ug/kg	1	4021812	02/18/14	02/19/14	EPA 8260B/5035	
Methyl tert-butyl ether	ND	17	"	"	"	"	"	"	
Surrogate: Toluene-d8		96.5 %	85.5-116		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.6 %	81.2-123		"	"	"	"	
Surrogate: Dibromofluoromethane		171 %	95.7-135		"	"	"	"	S-04

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG9-15
T140297-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	5.0	ug/kg	1	4021812	02/18/14	02/19/14	EPA 8260B/5035	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG9-15
T140297-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	5.0	ug/kg	1	4021812	02/18/14	02/19/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	20	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Di-isopropyl ether	ND	20	"	"	"	"	"	"	

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Katherine RunningCrane

Katherine RunningCrane, Project Manager



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Ecobility Corp.
PO Box 2651
Pales Verdes Peninsula CA, 90274

Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG9-15
T140297-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Ethyl tert-butyl ether	ND	20	ug/kg	1	4021812	02/18/14	02/19/14	EPA 8260B/5035	
Methyl tert-butyl ether	ND	20	"	"	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		93.6 %	85.5-116		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		93.9 %	81.2-123		"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		179 %	95.7-135		"	"	"	"	S-04

SunStar Laboratories, Inc.

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG10-3
T140297-07 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	5.0	ug/kg	1	4021812	02/18/14	02/19/14	EPA 8260B/5035	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG10-3
T140297-07 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	5.0	ug/kg	1	4021812	02/18/14	02/19/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	20	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Di-isopropyl ether	ND	20	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG10-3
T140297-07 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Ethyl tert-butyl ether	ND	20	ug/kg	1	4021812	02/18/14	02/19/14	EPA 8260B/5035	
Methyl tert-butyl ether	ND	20	"	"	"	"	"	"	
Surrogate: Toluene-d8		90.4 %	85.5-116		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		86.0 %	81.2-123		"	"	"	"	
Surrogate: Dibromofluoromethane		158 %	95.7-135		"	"	"	"	S-04

SunStar Laboratories, Inc.

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG10-15
T140297-09 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	5.0	ug/kg	1	4021812	02/18/14	02/19/14	EPA 8260B/5035	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG10-15
T140297-09 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	5.0	ug/kg	1	4021812	02/18/14	02/19/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	20	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Di-isopropyl ether	ND	20	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG10-15
T140297-09 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Ethyl tert-butyl ether	ND	20	ug/kg	1	4021812	02/18/14	02/19/14	EPA 8260B/5035	
Methyl tert-butyl ether	ND	20	"	"	"	"	"	"	
Surrogate: Toluene-d8		105 %	85.5-116		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	81.2-123		"	"	"	"	
Surrogate: Dibromofluoromethane		169 %	95.7-135		"	"	"	"	S-04

SunStar Laboratories, Inc.

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Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG11-3
T140297-10 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	4.4	ug/kg	1	4021812	02/18/14	02/19/14	EPA 8260B/5035	
Bromochloromethane	ND	4.4	"	"	"	"	"	"	
Bromodichloromethane	ND	4.4	"	"	"	"	"	"	
Bromoform	ND	4.4	"	"	"	"	"	"	
Bromomethane	ND	4.4	"	"	"	"	"	"	
n-Butylbenzene	ND	4.4	"	"	"	"	"	"	
sec-Butylbenzene	ND	4.4	"	"	"	"	"	"	
tert-Butylbenzene	ND	4.4	"	"	"	"	"	"	
Carbon tetrachloride	ND	4.4	"	"	"	"	"	"	
Chlorobenzene	ND	4.4	"	"	"	"	"	"	
Chloroethane	ND	4.4	"	"	"	"	"	"	
Chloroform	ND	4.4	"	"	"	"	"	"	
Chloromethane	ND	4.4	"	"	"	"	"	"	
2-Chlorotoluene	ND	4.4	"	"	"	"	"	"	
4-Chlorotoluene	ND	4.4	"	"	"	"	"	"	
Dibromochloromethane	ND	4.4	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	8.7	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	4.4	"	"	"	"	"	"	
Dibromomethane	ND	4.4	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	4.4	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	4.4	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	4.4	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	4.4	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.4	"	"	"	"	"	"	
1,2-Dichloroethane	ND	4.4	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.4	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.4	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	4.4	"	"	"	"	"	"	
1,2-Dichloropropane	ND	4.4	"	"	"	"	"	"	
1,3-Dichloropropane	ND	4.4	"	"	"	"	"	"	
2,2-Dichloropropane	ND	4.4	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG11-3
T140297-10 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	4.4	ug/kg	1	4021812	02/18/14	02/19/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	4.4	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.4	"	"	"	"	"	"	
Hexachlorobutadiene	ND	4.4	"	"	"	"	"	"	
Isopropylbenzene	ND	4.4	"	"	"	"	"	"	
p-Isopropyltoluene	ND	4.4	"	"	"	"	"	"	
Methylene chloride	ND	4.4	"	"	"	"	"	"	
Naphthalene	ND	4.4	"	"	"	"	"	"	
n-Propylbenzene	ND	4.4	"	"	"	"	"	"	
Styrene	ND	4.4	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	4.4	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	4.4	"	"	"	"	"	"	
Tetrachloroethene	ND	4.4	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	4.4	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	4.4	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	4.4	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	4.4	"	"	"	"	"	"	
Trichloroethene	ND	4.4	"	"	"	"	"	"	
Trichlorofluoromethane	ND	4.4	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	4.4	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	4.4	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	4.4	"	"	"	"	"	"	
Vinyl chloride	ND	4.4	"	"	"	"	"	"	
Benzene	ND	4.4	"	"	"	"	"	"	
Toluene	ND	4.4	"	"	"	"	"	"	
Ethylbenzene	ND	4.4	"	"	"	"	"	"	
m,p-Xylene	ND	8.7	"	"	"	"	"	"	
o-Xylene	ND	4.4	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	17	"	"	"	"	"	"	
Tert-butyl alcohol	ND	44	"	"	"	"	"	"	
Di-isopropyl ether	ND	17	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG11-3
T140297-10 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Ethyl tert-butyl ether	ND	17	ug/kg	1	4021812	02/18/14	02/19/14	EPA 8260B/5035	
Methyl tert-butyl ether	ND	17	"	"	"	"	"	"	
Surrogate: Toluene-d8		92.7 %	85.5-116		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		85.9 %	81.2-123		"	"	"	"	
Surrogate: Dibromofluoromethane		149 %	95.7-135		"	"	"	"	S-04

SunStar Laboratories, Inc.

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Katherine RunningCrane

Katherine RunningCrane, Project Manager



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Ecobility Corp.
PO Box 2651
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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG11-15
T140297-12 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	5.0	ug/kg	1	4021812	02/18/14	02/19/14	EPA 8260B/5035	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG11-15
T140297-12 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	5.0	ug/kg	1	4021812	02/18/14	02/19/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	20	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Di-isopropyl ether	ND	20	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG11-15
T140297-12 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Ethyl tert-butyl ether	ND	20	ug/kg	1	4021812	02/18/14	02/19/14	EPA 8260B/5035	
Methyl tert-butyl ether	ND	20	"	"	"	"	"	"	
Surrogate: Toluene-d8		91.2 %	85.5-116		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.4 %	81.2-123		"	"	"	"	
Surrogate: Dibromofluoromethane		196 %	95.7-135		"	"	"	"	S-04

SunStar Laboratories, Inc.

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG13-3
T140297-16 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	5.0	ug/kg	1	4021812	02/18/14	02/19/14	EPA 8260B/5035	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG13-3
T140297-16 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	5.0	ug/kg	1	4021812	02/18/14	02/19/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	20	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Di-isopropyl ether	ND	20	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Katherine RunningCrane, Project Manager



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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG13-3
T140297-16 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Ethyl tert-butyl ether	ND	20	ug/kg	1	4021812	02/18/14	02/19/14	EPA 8260B/5035	
Methyl tert-butyl ether	ND	20	"	"	"	"	"	"	
Surrogate: Toluene-d8		87.4 %	85.5-116		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		75.7 %	81.2-123		"	"	"	"	S-04
Surrogate: Dibromofluoromethane		185 %	95.7-135		"	"	"	"	S-04

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG14-3
T140297-17 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	6.6	ug/kg	1	4021812	02/18/14	02/19/14	EPA 8260B/5035	
Bromochloromethane	ND	6.6	"	"	"	"	"	"	
Bromodichloromethane	ND	6.6	"	"	"	"	"	"	
Bromoform	ND	6.6	"	"	"	"	"	"	
Bromomethane	ND	6.6	"	"	"	"	"	"	
n-Butylbenzene	ND	6.6	"	"	"	"	"	"	
sec-Butylbenzene	ND	6.6	"	"	"	"	"	"	
tert-Butylbenzene	ND	6.6	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.6	"	"	"	"	"	"	
Chlorobenzene	ND	6.6	"	"	"	"	"	"	
Chloroethane	ND	6.6	"	"	"	"	"	"	
Chloroform	ND	6.6	"	"	"	"	"	"	
Chloromethane	ND	6.6	"	"	"	"	"	"	
2-Chlorotoluene	ND	6.6	"	"	"	"	"	"	
4-Chlorotoluene	ND	6.6	"	"	"	"	"	"	
Dibromochloromethane	ND	6.6	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	13	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	6.6	"	"	"	"	"	"	
Dibromomethane	ND	6.6	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	6.6	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	6.6	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	6.6	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	6.6	"	"	"	"	"	"	
1,1-Dichloroethane	ND	6.6	"	"	"	"	"	"	
1,2-Dichloroethane	ND	6.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	6.6	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	6.6	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	6.6	"	"	"	"	"	"	
1,2-Dichloropropane	ND	6.6	"	"	"	"	"	"	
1,3-Dichloropropane	ND	6.6	"	"	"	"	"	"	
2,2-Dichloropropane	ND	6.6	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG14-3
T140297-17 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	6.6	ug/kg	1	4021812	02/18/14	02/19/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	6.6	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	6.6	"	"	"	"	"	"	
Hexachlorobutadiene	ND	6.6	"	"	"	"	"	"	
Isopropylbenzene	ND	6.6	"	"	"	"	"	"	
p-Isopropyltoluene	ND	6.6	"	"	"	"	"	"	
Methylene chloride	ND	6.6	"	"	"	"	"	"	
Naphthalene	ND	6.6	"	"	"	"	"	"	
n-Propylbenzene	ND	6.6	"	"	"	"	"	"	
Styrene	ND	6.6	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	6.6	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	6.6	"	"	"	"	"	"	
Tetrachloroethene	ND	6.6	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	6.6	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	6.6	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	6.6	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	6.6	"	"	"	"	"	"	
Trichloroethene	ND	6.6	"	"	"	"	"	"	
Trichlorofluoromethane	ND	6.6	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	6.6	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	6.6	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	6.6	"	"	"	"	"	"	
Vinyl chloride	ND	6.6	"	"	"	"	"	"	
Benzene	ND	6.6	"	"	"	"	"	"	
Toluene	ND	6.6	"	"	"	"	"	"	
Ethylbenzene	ND	6.6	"	"	"	"	"	"	
m,p-Xylene	ND	13	"	"	"	"	"	"	
o-Xylene	ND	6.6	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	26	"	"	"	"	"	"	
Tert-butyl alcohol	ND	66	"	"	"	"	"	"	
Di-isopropyl ether	ND	26	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG14-3
T140297-17 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Ethyl tert-butyl ether	ND	26	ug/kg	1	4021812	02/18/14	02/19/14	EPA 8260B/5035	
Methyl tert-butyl ether	ND	26	"	"	"	"	"	"	
Surrogate: Toluene-d8		82.6 %	85.5-116		"	"	"	"	S-04
Surrogate: 4-Bromofluorobenzene		68.4 %	81.2-123		"	"	"	"	S-04
Surrogate: Dibromofluoromethane		158 %	95.7-135		"	"	"	"	S-04

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Katherine RunningCrane, Project Manager



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Ecobility Corp.
PO Box 2651
Pales Verdes Peninsula CA, 90274

Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG14-8
T140297-18 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	6.2	ug/kg	1	4021812	02/18/14	02/19/14	EPA 8260B/5035	
Bromochloromethane	ND	6.2	"	"	"	"	"	"	
Bromodichloromethane	ND	6.2	"	"	"	"	"	"	
Bromoform	ND	6.2	"	"	"	"	"	"	
Bromomethane	ND	6.2	"	"	"	"	"	"	
n-Butylbenzene	ND	6.2	"	"	"	"	"	"	
sec-Butylbenzene	ND	6.2	"	"	"	"	"	"	
tert-Butylbenzene	ND	6.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.2	"	"	"	"	"	"	
Chlorobenzene	ND	6.2	"	"	"	"	"	"	
Chloroethane	ND	6.2	"	"	"	"	"	"	
Chloroform	ND	6.2	"	"	"	"	"	"	
Chloromethane	ND	6.2	"	"	"	"	"	"	
2-Chlorotoluene	ND	6.2	"	"	"	"	"	"	
4-Chlorotoluene	ND	6.2	"	"	"	"	"	"	
Dibromochloromethane	ND	6.2	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	12	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	6.2	"	"	"	"	"	"	
Dibromomethane	ND	6.2	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	6.2	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	6.2	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	6.2	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	6.2	"	"	"	"	"	"	
1,1-Dichloroethane	ND	6.2	"	"	"	"	"	"	
1,2-Dichloroethane	ND	6.2	"	"	"	"	"	"	
1,1-Dichloroethene	ND	6.2	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	6.2	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	6.2	"	"	"	"	"	"	
1,2-Dichloropropane	ND	6.2	"	"	"	"	"	"	
1,3-Dichloropropane	ND	6.2	"	"	"	"	"	"	
2,2-Dichloropropane	ND	6.2	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG14-8
T140297-18 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	6.2	ug/kg	1	4021812	02/18/14	02/19/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	6.2	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	6.2	"	"	"	"	"	"	
Hexachlorobutadiene	ND	6.2	"	"	"	"	"	"	
Isopropylbenzene	ND	6.2	"	"	"	"	"	"	
p-Isopropyltoluene	ND	6.2	"	"	"	"	"	"	
Methylene chloride	ND	6.2	"	"	"	"	"	"	
Naphthalene	ND	6.2	"	"	"	"	"	"	
n-Propylbenzene	ND	6.2	"	"	"	"	"	"	
Styrene	ND	6.2	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	6.2	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	6.2	"	"	"	"	"	"	
Tetrachloroethene	ND	6.2	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	6.2	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	6.2	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	6.2	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	6.2	"	"	"	"	"	"	
Trichloroethene	ND	6.2	"	"	"	"	"	"	
Trichlorofluoromethane	ND	6.2	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	6.2	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	6.2	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	6.2	"	"	"	"	"	"	
Vinyl chloride	ND	6.2	"	"	"	"	"	"	
Benzene	ND	6.2	"	"	"	"	"	"	
Toluene	ND	6.2	"	"	"	"	"	"	
Ethylbenzene	ND	6.2	"	"	"	"	"	"	
m,p-Xylene	ND	12	"	"	"	"	"	"	
o-Xylene	ND	6.2	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	25	"	"	"	"	"	"	
Tert-butyl alcohol	ND	62	"	"	"	"	"	"	
Di-isopropyl ether	ND	25	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG14-8
T140297-18 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Ethyl tert-butyl ether	ND	25	ug/kg	1	4021812	02/18/14	02/19/14	EPA 8260B/5035	
Methyl tert-butyl ether	ND	25	"	"	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		88.6 %	85.5-116		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		73.6 %	81.2-123		"	"	"	"	S-04
<i>Surrogate: Dibromofluoromethane</i>		163 %	95.7-135		"	"	"	"	S-04

SunStar Laboratories, Inc.

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG14-15
T140297-19 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	5.0	ug/kg	1	4021812	02/18/14	02/19/14	EPA 8260B/5035	
Bromochloromethane	ND	5.0	"	"	"	"	"	"	
Bromodichloromethane	ND	5.0	"	"	"	"	"	"	
Bromoform	ND	5.0	"	"	"	"	"	"	
Bromomethane	ND	5.0	"	"	"	"	"	"	
n-Butylbenzene	ND	5.0	"	"	"	"	"	"	
sec-Butylbenzene	ND	5.0	"	"	"	"	"	"	
tert-Butylbenzene	ND	5.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	5.0	"	"	"	"	"	"	
Chlorobenzene	ND	5.0	"	"	"	"	"	"	
Chloroethane	ND	5.0	"	"	"	"	"	"	
Chloroform	ND	5.0	"	"	"	"	"	"	
Chloromethane	ND	5.0	"	"	"	"	"	"	
2-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
4-Chlorotoluene	ND	5.0	"	"	"	"	"	"	
Dibromochloromethane	ND	5.0	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	10	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	5.0	"	"	"	"	"	"	
Dibromomethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	
1,3-Dichloropropane	ND	5.0	"	"	"	"	"	"	
2,2-Dichloropropane	ND	5.0	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG14-15
T140297-19 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	5.0	ug/kg	1	4021812	02/18/14	02/19/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
Isopropylbenzene	ND	5.0	"	"	"	"	"	"	
p-Isopropyltoluene	ND	5.0	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	5.0	"	"	"	"	"	"	
n-Propylbenzene	ND	5.0	"	"	"	"	"	"	
Styrene	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	5.0	"	"	"	"	"	"	
Tetrachloroethene	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.0	"	"	"	"	"	"	
Trichloroethene	ND	5.0	"	"	"	"	"	"	
Trichlorofluoromethane	ND	5.0	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	20	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Di-isopropyl ether	ND	20	"	"	"	"	"	"	

SunStar Laboratories, Inc.

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG14-15
T140297-19 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Ethyl tert-butyl ether	ND	20	ug/kg	1	4021812	02/18/14	02/19/14	EPA 8260B/5035	
Methyl tert-butyl ether	ND	20	"	"	"	"	"	"	
Surrogate: Toluene-d8		89.6 %	85.5-116		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		72.4 %	81.2-123		"	"	"	"	S-04
Surrogate: Dibromofluoromethane		178 %	95.7-135		"	"	"	"	S-04

SunStar Laboratories, Inc.

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG15-3
T140297-20 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Bromobenzene	ND	3.9	ug/kg	1	4021812	02/18/14	02/19/14	EPA 8260B/5035	
Bromochloromethane	ND	3.9	"	"	"	"	"	"	
Bromodichloromethane	ND	3.9	"	"	"	"	"	"	
Bromoform	ND	3.9	"	"	"	"	"	"	
Bromomethane	ND	3.9	"	"	"	"	"	"	
n-Butylbenzene	ND	3.9	"	"	"	"	"	"	
sec-Butylbenzene	ND	3.9	"	"	"	"	"	"	
tert-Butylbenzene	ND	3.9	"	"	"	"	"	"	
Carbon tetrachloride	ND	3.9	"	"	"	"	"	"	
Chlorobenzene	ND	3.9	"	"	"	"	"	"	
Chloroethane	ND	3.9	"	"	"	"	"	"	
Chloroform	ND	3.9	"	"	"	"	"	"	
Chloromethane	ND	3.9	"	"	"	"	"	"	
2-Chlorotoluene	ND	3.9	"	"	"	"	"	"	
4-Chlorotoluene	ND	3.9	"	"	"	"	"	"	
Dibromochloromethane	ND	3.9	"	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	ND	7.8	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	3.9	"	"	"	"	"	"	
Dibromomethane	ND	3.9	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	3.9	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	3.9	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	3.9	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	3.9	"	"	"	"	"	"	
1,1-Dichloroethane	ND	3.9	"	"	"	"	"	"	
1,2-Dichloroethane	ND	3.9	"	"	"	"	"	"	
1,1-Dichloroethene	ND	3.9	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	3.9	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	3.9	"	"	"	"	"	"	
1,2-Dichloropropane	ND	3.9	"	"	"	"	"	"	
1,3-Dichloropropane	ND	3.9	"	"	"	"	"	"	
2,2-Dichloropropane	ND	3.9	"	"	"	"	"	"	

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Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG15-3
T140297-20 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

1,1-Dichloropropene	ND	3.9	ug/kg	1	4021812	02/18/14	02/19/14	EPA 8260B/5035	
cis-1,3-Dichloropropene	ND	3.9	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	3.9	"	"	"	"	"	"	
Hexachlorobutadiene	ND	3.9	"	"	"	"	"	"	
Isopropylbenzene	ND	3.9	"	"	"	"	"	"	
p-Isopropyltoluene	ND	3.9	"	"	"	"	"	"	
Methylene chloride	ND	3.9	"	"	"	"	"	"	
Naphthalene	ND	3.9	"	"	"	"	"	"	
n-Propylbenzene	ND	3.9	"	"	"	"	"	"	
Styrene	ND	3.9	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	3.9	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	3.9	"	"	"	"	"	"	
Tetrachloroethene	ND	3.9	"	"	"	"	"	"	
1,2,3-Trichlorobenzene	ND	3.9	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	3.9	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	3.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	3.9	"	"	"	"	"	"	
Trichloroethene	ND	3.9	"	"	"	"	"	"	
Trichlorofluoromethane	ND	3.9	"	"	"	"	"	"	
1,2,3-Trichloropropane	ND	3.9	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	3.9	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	3.9	"	"	"	"	"	"	
Vinyl chloride	ND	3.9	"	"	"	"	"	"	
Benzene	ND	3.9	"	"	"	"	"	"	
Toluene	ND	3.9	"	"	"	"	"	"	
Ethylbenzene	ND	3.9	"	"	"	"	"	"	
m,p-Xylene	ND	7.8	"	"	"	"	"	"	
o-Xylene	ND	3.9	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	16	"	"	"	"	"	"	
Tert-butyl alcohol	ND	39	"	"	"	"	"	"	
Di-isopropyl ether	ND	16	"	"	"	"	"	"	

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

SG15-3
T140297-20 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes

SunStar Laboratories, Inc.

Volatile Organic Compounds by EPA Method 8260B

Ethyl tert-butyl ether	ND	16	ug/kg	1	4021812	02/18/14	02/19/14	EPA 8260B/5035	
Methyl tert-butyl ether	ND	16	"	"	"	"	"	"	
Surrogate: Toluene-d8		83.1 %	85.5-116		"	"	"	"	S-04
Surrogate: 4-Bromofluorobenzene		74.5 %	81.2-123		"	"	"	"	S-04
Surrogate: Dibromofluoromethane		207 %	95.7-135		"	"	"	"	S-04

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Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch 4021812 - EPA 5035 GCMS

Blank (4021812-BLK1)

Prepared & Analyzed: 02/18/14

Bromobenzene	ND	5.0	ug/kg
Bromochloromethane	ND	5.0	"
Bromodichloromethane	ND	5.0	"
Bromoform	ND	5.0	"
Bromomethane	ND	5.0	"
n-Butylbenzene	ND	5.0	"
sec-Butylbenzene	ND	5.0	"
tert-Butylbenzene	ND	5.0	"
Carbon tetrachloride	ND	5.0	"
Chlorobenzene	ND	5.0	"
Chloroethane	ND	5.0	"
Chloroform	ND	5.0	"
Chloromethane	ND	5.0	"
2-Chlorotoluene	ND	5.0	"
4-Chlorotoluene	ND	5.0	"
Dibromochloromethane	ND	5.0	"
1,2-Dibromo-3-chloropropane	ND	10	"
1,2-Dibromoethane (EDB)	ND	5.0	"
Dibromomethane	ND	5.0	"
1,2-Dichlorobenzene	ND	5.0	"
1,3-Dichlorobenzene	ND	5.0	"
1,4-Dichlorobenzene	ND	5.0	"
Dichlorodifluoromethane	ND	5.0	"
1,1-Dichloroethane	ND	5.0	"
1,2-Dichloroethane	ND	5.0	"
1,1-Dichloroethene	ND	5.0	"
cis-1,2-Dichloroethene	ND	5.0	"
trans-1,2-Dichloroethene	ND	5.0	"
1,2-Dichloropropane	ND	5.0	"
1,3-Dichloropropane	ND	5.0	"
2,2-Dichloropropane	ND	5.0	"
1,1-Dichloropropene	ND	5.0	"
cis-1,3-Dichloropropene	ND	5.0	"
trans-1,3-Dichloropropene	ND	5.0	"
Hexachlorobutadiene	ND	5.0	"
Isopropylbenzene	ND	5.0	"

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Katherine RunningCrane

Katherine RunningCrane, Project Manager



25712 Commercentre Drive
Lake Forest, California 92630
949.297.5020 Phone
949.297.5027 Fax

Ecobility Corp.
PO Box 2651
Pales Verdes Peninsula CA, 90274

Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch 4021812 - EPA 5035 GCMS

Blank (4021812-BLK1)

Prepared & Analyzed: 02/18/14

p-Isopropyltoluene	ND	5.0	ug/kg							
Methylene chloride	ND	5.0	"							
Naphthalene	ND	5.0	"							
n-Propylbenzene	ND	5.0	"							
Styrene	ND	5.0	"							
1,1,2,2-Tetrachloroethane	ND	5.0	"							
1,1,1,2-Tetrachloroethane	ND	5.0	"							
Tetrachloroethene	ND	5.0	"							
1,2,3-Trichlorobenzene	ND	5.0	"							
1,2,4-Trichlorobenzene	ND	5.0	"							
1,1,2-Trichloroethane	ND	5.0	"							
1,1,1-Trichloroethane	ND	5.0	"							
Trichloroethene	ND	5.0	"							
Trichlorofluoromethane	ND	5.0	"							
1,2,3-Trichloropropane	ND	5.0	"							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
Vinyl chloride	ND	5.0	"							
Benzene	ND	5.0	"							
Toluene	ND	5.0	"							
Ethylbenzene	ND	5.0	"							
m,p-Xylene	ND	10	"							
o-Xylene	ND	5.0	"							
Tert-amyl methyl ether	ND	20	"							
Tert-butyl alcohol	ND	50	"							
Di-isopropyl ether	ND	20	"							
Ethyl tert-butyl ether	ND	20	"							
Methyl tert-butyl ether	ND	20	"							
Surrogate: Toluene-d8	39.2		"	40.0		97.9	85.5-116			
Surrogate: 4-Bromofluorobenzene	39.2		"	40.0		98.0	81.2-123			
Surrogate: Dibromofluoromethane	43.4		"	40.0		108	95.7-135			

SunStar Laboratories, Inc.

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Katherine RunningCrane

Katherine RunningCrane, Project Manager



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Ecobility Corp.
PO Box 2651
Pales Verdes Peninsula CA, 90274

Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch 4021812 - EPA 5035 GCMS

LCS (4021812-BS1)

Prepared & Analyzed: 02/18/14

Chlorobenzene	81.6	5.0	ug/kg	100		81.6	75-125			
1,1-Dichloroethene	76.9	5.0	"	100		76.9	75-125			
Trichloroethene	76.0	5.0	"	100		76.0	75-125			
Benzene	78.5	5.0	"	100		78.5	75-125			
Toluene	75.1	5.0	"	100		75.1	75-125			
Surrogate: Toluene-d8	37.2		"	40.0		92.9	85.5-116			
Surrogate: 4-Bromofluorobenzene	40.5		"	40.0		101	81.2-123			
Surrogate: Dibromofluoromethane	43.8		"	40.0		110	95.7-135			

LCS Dup (4021812-BSD1)

Prepared & Analyzed: 02/18/14

Chlorobenzene	84.2	5.0	ug/kg	100		84.2	75-125	3.20	20	
1,1-Dichloroethene	81.0	5.0	"	100		81.0	75-125	5.13	20	
Trichloroethene	86.2	5.0	"	100		86.2	75-125	12.5	20	
Benzene	88.8	5.0	"	100		88.8	75-125	12.3	20	
Toluene	87.6	5.0	"	100		87.6	75-125	15.3	20	
Surrogate: Toluene-d8	39.0		"	40.0		97.5	85.5-116			
Surrogate: 4-Bromofluorobenzene	42.0		"	40.0		105	81.2-123			
Surrogate: Dibromofluoromethane	49.0		"	40.0		122	95.7-135			

SunStar Laboratories, Inc.

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Katherine RunningCrane

Katherine RunningCrane, Project Manager



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Ecobility Corp.
PO Box 2651
Pales Verdes Peninsula CA, 90274

Project: MBK Homes - Newport Beach
Project Number: 026-14-001-1
Project Manager: Valeri Marshall

Reported:
02/20/14 14:03

Notes and Definitions

S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

SunStar Laboratories, Inc.

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Katherine RunningCrane

Katherine RunningCrane, Project Manager

Chain of Custody Record

SunStar Laboratories, Inc.
25712 Commerce Centre Dr
Lake Forest, CA 92630
949-297-5020

Client: Ecobility Corp
Address: PO Box 12051
Phone: (310) 910.1499 Fax: 310 377.3745
Project Manager: V. Maeshall

Date: 2/17/2014 Page: 1 of 2
Project Name: MBL Homes - Newport Beach
Collector: V. Maeshall Client Project #: 026-14-001-1
Batch #: TU0297 EDF #: _____

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	Laboratory ID #	Comments/Preservative	Total # of containers
SG8-3 ET	2/17/14		5035 WGA	5035 WGA		X								01	HOLD SAMPLE	1
SG8-8			SOIL											02	HOLD SAMPLE	1
SG8-15														03	HOLD SAMPLE	1
SG9-3														04	HOLD SAMPLE	1
SG9-8														05	HOLD SAMPLE	1
SG9-15														06	HOLD SAMPLE	1
SG10-3														07	HOLD SAMPLE	1
SG10-8														08	HOLD SAMPLE	1
SG10-15														09	HOLD SAMPLE	1
SG11-3														10	HOLD SAMPLE	1
SG11-8														11	HOLD SAMPLE	1
SG11-15														12	HOLD SAMPLE	1
SG12-3														13	HOLD SAMPLE	1
SG12-8														14	HOLD SAMPLE	1
SG12-15														15	HOLD SAMPLE	1
Relinquished by: (signature) <u>V. Maeshall</u>			Date / Time <u>2/17/14 4pm</u>		Received by: (signature) <u>V. Maeshall</u>		Date / Time <u>2/17/14 1600</u>		Total # of containers <u>15</u>		Chain of Custody seals Y/N/NA Seals intact? Y/N/NA		Notes HOLD ALL ACETATE SLEEVES. ANALYZE VOA's only			
Relinquished by: (signature)			Date / Time		Received by: (signature)		Date / Time		Received good condition/cold							
Relinquished by: (signature)			Date / Time		Received by: (signature)		Date / Time		Turn around time: <u>48 HR TAT</u>							

Sample disposal instructions: Disposal @ \$2.00 each _____

Return to client _____

Pickup _____

Client: ECOBIILITY Corp
Address: PO Box 2451
Phone: (310) 910.1499 Fax: (310) 377-3744
Project Manager: V. MARESHALL

Date: 2/17/14 Page: 2 of 2
Project Name: MAR 140MS - WELPAC BBAICN
Collector: _____ Client Project #: 026-14-001-1
Batch #: T140297 EDF #: _____

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	Laboratory ID #	Comments/Preservative	Total # of containers
SG-13-3	2/17/14		SOIL	VOL ACETATE SLEEVE	X									16	HOLD ACETATE SLEEVE ANALYZE SOBS VOL	1
SG-14-3														17		1
SG-14-8														18		1
SG-14-15														19		1
SG-15-3														20		1
SG-15-8														21	HOLD SAMPLE	1
SG-15-15														22	HOLD SAMPLE	1
Relinquished by: (signature) <i>Jessie Marshall</i>					Received by: (signature) <i>Alec 2/17/14</i>					Total # of containers					Notes	
Date / Time 2/17/14 4pm					Date / Time 2/17/14 16:00											
Relinquished by: (signature)					Received by: (signature)					Chain of Custody seals Y/N/A Seals intact? Y/N/A						
Date / Time					Date / Time					Received good condition/cold						
Turn around time: 48 hrs TAT																



SAMPLE RECEIVING REVIEW SHEET

 BATCH # 7140297

 Client Name: ECOBILITY CORP

 Project: MBK HOMES - NEWPORT

 Received by: PATRICK

 Date/Time Received: 2.17.14 / 16:06

 Delivered by : ☐ Client ☒ SunStar Courier ☐ GSO ☐ FedEx ☐ Other _____

 Total number of coolers received 0 Temp criteria = 6°C > 0°C (no frozen containers)

 Temperature: cooler #1 4.8 °C +/- the CF (- 0.2°C) = 4.6 °C corrected temperature

cooler #2 _____ °C +/- the CF (- 0.2°C) = _____ °C corrected temperature

cooler #3 _____ °C +/- the CF (- 0.2°C) = _____ °C corrected temperature

 Samples outside temp. but received on ice, w/in 6 hours of final sampling. ☒ Yes ☐ No* ☐ N/A

 Custody Seals Intact on Cooler/Sample ☐ Yes ☐ No* ☒ N/A

 Sample Containers Intact ☒ Yes ☐ No*

 Sample labels match COC ID's ☒ Yes ☐ No*

 Total number of containers received match COC ☒ Yes ☐ No*

 Proper containers received for analyses requested on COC ☐ Yes ☒ No*

 Proper preservative indicated on COC/containers for analyses requested ☐ Yes ☒ No* ☐ N/A

 Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times. ☐ Yes ☒ No*

* Complete Non-Conformance Receiving Sheet if checked

 Cooler/Sample Review - Initials and date SL 2.18.14

Comments:

SAMPLE NON-CONFORMANCE SHEET

BATCH # T140297

■ COOLERS

- ☐ Not Received (received COC only)
☐ Leaking/Damaged
☐ Other:

■ CUSTODY SEALS

- ☐ None
- ☐ Not Intact

■ **TEMPERATURE (SPECS 6 > 0°C)**

- ☐ Cooler/Sample Temp(s)
☐ Temperature Blank(s)

- **CHAIN OF CUSTODY (COC)**

- ☐ Not relinquished by client; No date/time relinquished
☐ Incomplete information provide
☐ COC not received – notify PM

CONTAINERS

- ☐ Leaking ☐ Broken
☒ Extra ☐ Missing

■ LABELS

- ☐ Not the same sample ID / info as on the COC
☐ Incomplete Information
☐ Markings/Info illegible

SAMPLES

- ☒ Samples **NOT RECEIVED** but listed on COC
- ☐ Samples received but **NOT LISTED** on COC
- ☐ Logged based on Label Information and not COC
- ☐ Logged according to Work Plan and not COC
- ☐ Logged in, **ON HOLD** until further notice
- ☐ Insufficient quantities for analysis
- ☐ Improper container used
- ☐ Mislabeled as to tests, preservatives, etc.
- ☐ Holding time expired – list sample ID and test
- ☒ Not preserved/Improper preservative used
- ☐ Without Labels, no information on containers
- ☐ Other

COMMENTS:

5035 KITS FOR SAMPLES (1, 2, 3, 19, 20, 21, 22) CONSIST OF ALL METHANOL WHEN IT SHOULD BE 1 METHANOL & 2 SOD. BISULFATE

5035 KITS FOR SAMPLES (4-12, 16-18) WERE ALL SODIUM BISULFATES. SAMPLES (13, 14, 15) ARE MISSING.

Sample fractionation only if broken container compromises other samples or if out of temp reading impacts more than one cooler

[illegible]

H: HCL, S: H2SO4, N: HNO3, V: VOA, SL, Sleeve, E: Encore, T: Terracore, PB: Poly Bottle, CGB: Clear Glass Bottle, AGJ: Amber Glass Jar, AGB: Amber Glass Bottle, n/f1:HNO3-Lab filtered, n/f:HNO3-Field filtered, znna: Zinc Acetate/Sodium Hydroxide, Na2s2o3: sodium thiosulfate



SunStar Laboratories, Inc.

PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

Company: Ecobility
Name: Mike

Item:		Quantity:	
2 oz jars 24/CS			
4 oz jars 24/CS			
8 oz jars 12/CS			
40 ml unp. Voas 72/BOX			
40 ml HCL Voas 72/BOX			
250 ml Poly 60/CS			
1 Liter Poly 30/CS			
500 ml Poly 16/CS			
500 ml Amber Bottle Wide 12/CS			
1 Liter Amber Bottle 12/CS			
1 Gallon Poly 4/BOX			
5035 kits:(2)Sodium Bisulfate Voas 72/BOX		208	CHARGE - 25 KITS
	(1) Methanol Voa 72/BOX	104	w/ 8 Methanol Voas
	(1)Syringe 50/PACK	154	CHARGE - 123 Syringes
Lock-N-Load Handle 1/PACK		2	CHARGE - 2
Tedlar Bags 10/PACK			
Manifold,Inst Sampler,Gauge, V. sampler			
Sub Slab Insert w/ washer			
Soil Gas Drop Tubes			
Gas extraction fittings			
Soil Gas Filters			
B.C. Summa Cans	400cc:		
	1L:		
	3L:		
	6L:		
Certified Summa Cans	400cc:		
	1L:		
	3L:		
	6L:		
Cooler (S,MED,LRG) Number & Quantity		2	
Swagelok Fittings: Ferrules,Unions, Nuts			
Other: Poly Tube, Tools, etc			
Prepared By: BRIAN		Date : 2-12-14	



A & R Laboratories

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FDA#	2030513
LA City#	10261
ELAP#s	2789
	2790
	2122

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CASE NARRATIVE

Authorized Signature Name / Title (print)

Ken Zheng, President

Signature / Date

Ken Zheng, President
02/21/2014 13:39:23

Laboratory Job No. (Certificate of Analysis No.)

1402-00065

Project Name / No.

1560-1570 Placentia Ave., Newport Beach, CA
026-14-001-1

Dates Sampled (from/to)

02/17/14 To 02/17/14

Dates Received (from/to)

02/18/14 To 02/18/14

Dates Reported (from/to)

02/20/14 To 2/21/2014

Chains of Custody Received

Yes

Comments:

Subcontracting

Organic Analyses

No analyses sub-contracted

Sample Condition(s)

All samples intact

Positive Results (Organic Compounds)

Sample	Analyte	Result	Qual	Units	RL	Sample	Analyte	Result	Qual	Units	RL
SG13-5 3PV	Tetrachloroethene	1,400		µg/m3	100	SG13-5 3PV	Trichloroethene	180		µg/m3	100
SG2-5	Tetrachloroethene	730		µg/m3	100	SG2-5	Toluene	910		µg/m3	100
SG2-5	Trichloroethene	1,100		µg/m3	100	SG2-15	Tetrachloroethene	150		µg/m3	100
SG2-15	Toluene	170		µg/m3	100	SG2-15	Trichloroethene	1,200		µg/m3	100
SG3-5	Tetrachloroethene	120		µg/m3	100	SG3-5	Trichloroethene	380		µg/m3	100
SG3-15	Tetrachloroethene	280		µg/m3	100	SG3-15	Toluene	110		µg/m3	100
SG3-15	Trichloroethene	1,700		µg/m3	100	SG4-5	Toluene	100		µg/m3	100
SG4-15	Trichloroethene	430		µg/m3	100	SG7-5	Trichloroethene	420		µg/m3	100
SG7-15	Tetrachloroethene	870		µg/m3	100	SG7-15	Toluene	140		µg/m3	100
SG7-15	Trichloroethene	8,100		µg/m3	100	SG7-15 DUP	Tetrachloroethene	310		µg/m3	100
SG7-15 DUP	Trichloroethene	3,800		µg/m3	100						

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CASE NARRATIVE

Authorized Signature Name / Title (print)

Ken Zheng, President

Signature / Date

Ken Zheng, President
02/20/2014 14:17:30

Laboratory Job No. (Certificate of Analysis No.)

1402-00065

Project Name / No.

1560-1570 Placentia Ave., Newport Beach, CA

026-14-001-1

Dates Sampled (from/to)

02/17/14 To 02/17/14

Dates Received (from/to)

02/18/14 To 02/18/14

Dates Reported (from/to)

02/20/14 To 2/20/2014

Chains of Custody Received

Yes

Comments:

Subcontracting

Organic Analyses

No analyses sub-contracted

Sample Condition(s)

All samples intact



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Laboratory Job# 1402-00065

Positive Results (Organic Compounds)											
Sample	Analyte	Result	Qual	Units	RL	Sample	Analyte	Result	Qual	Units	RL
SG13-5 1PV	Toluene	0.055	J	µg/L	0.10	SG13-5 3PV	Tetrachloroethene	1.4		µg/L	0.10
SG13-5 3PV	Trichloroethene	0.18		µg/L	0.10	SG2-5	Tetrachloroethene	0.73		µg/L	0.10
SG2-5	Toluene	0.91		µg/L	0.10	SG2-5	Trichloroethene	1.1		µg/L	0.10
SG2-5	m,p-Xylenes	0.12	J	µg/L	0.20	SG2-15	Tetrachloroethene	0.15		µg/L	0.10
SG2-15	Toluene	0.17		µg/L	0.10	SG2-15	Trichloroethene	1.2		µg/L	0.10
SG3-5	Tetrachloroethene	0.12		µg/L	0.10	SG3-5	Toluene	0.083	J	µg/L	0.10
SG3-5	Trichloroethene	0.38		µg/L	0.10	SG3-15	Tetrachloroethene	0.28		µg/L	0.10
SG3-15	Toluene	0.11		µg/L	0.10	SG3-15	Trichloroethene	1.7		µg/L	0.10
SG4-5	Toluene	0.10		µg/L	0.10	SG4-5	Trichloroethene	0.050	J	µg/L	0.10
SG4-15	Toluene	0.084	J	µg/L	0.10	SG4-15	Trichloroethene	0.43		µg/L	0.10
SG5-15	Toluene	0.055	J	µg/L	0.10	SG5-15	Trichloroethene	0.091	J	µg/L	0.10
SG7-5	Tetrachloroethene	0.071	J	µg/L	0.10	SG7-5	Trichloroethene	0.42		µg/L	0.10
SG7-15	Chloroform	0.054	J	µg/L	0.10	SG7-15	Tetrachloroethene	0.87		µg/L	0.10
SG7-15	Toluene	0.14		µg/L	0.10	SG7-15	Trichloroethene	8.1		µg/L	0.10
SG7-15 DUP	Tetrachloroethene	0.31		µg/L	0.10	SG7-15 DUP	Toluene	0.076	J	µg/L	0.10
SG7-15 DUP	Trichloroethene	3.8		µg/L	0.10						



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CERTIFICATE OF ANALYSIS

1402-00065

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/20/14
Date Received 02/18/14
Invoice No. 71370
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 001 SG13-5 1PV					Date & Time Sampled:			02/17/14	@	10:34
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 1										
[VOCs by GCMS]										
Acetone	<5.0		µg/L	EPA 8260B	1	5.0	10	02/17/14	10:46	HXE
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
Benzene	<0.036		µg/L	EPA 8260B	1	0.040	0.050	02/17/14	10:46	HXE
Bromobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
Bromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
Bromoform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
Bromomethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	10:46	HXE
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	10:46	HXE
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	10:46	HXE
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	10:46	HXE
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1	0.030	0.050	02/17/14	10:46	HXE
Chlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
Chloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
Chloroform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
Chloromethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	10:46	HXE
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
1,2-Dibromoethane (EDB)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
1,2-Dibromo-3-Chloropropane	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	10:46	HXE
Dibromomethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE

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CERTIFICATE OF ANALYSIS

1402-00065

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/20/14
Date Received 02/18/14
Invoice No. 71370
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 001 SG13-5 1PV					Date & Time Sampled:		02/17/14	@	10:34	
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 1										
.....continued										
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
Ethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
2-Hexanone	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	10:46	HXE
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
Methylene Chloride	<1.0		µg/L	EPA 8260B	1	1.0	2.0	02/17/14	10:46	HXE
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	10:46	HXE
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
Naphthalene	<0.032		µg/L	EPA 8260B	1	0.030	0.050	02/17/14	10:46	HXE
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
Styrene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
1,1,2,2-Tetrachloroethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	10:46	HXE
Tetrachloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
Toluene	0.055	J	µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE

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Date Reported 02/20/14
Date Received 02/18/14
Invoice No. 71370
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 001 SG13-5 1PV					Date & Time Sampled:			02/17/14	@	10:34
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 1										
.....continued										
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
Trichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
1,2,3-Trichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
Trichlorotrifluoroethane	<0.20		µg/L	EPA 8260B	1	0.20	0.20	02/17/14	10:46	HXE
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
Vinyl Chloride	<0.013		µg/L	EPA 8260B	1	0.010	0.050	02/17/14	10:46	HXE
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	10:46	HXE
o-Xylene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	10:46	HXE
[VOC Vapor Sampling Tracer]										
Isopropanol (IPA)	<10		µg/L	EPA 8260B	1	10	10	02/17/14	10:46	HXE
[VOC Surrogates]										
Dibromofluoromethane	104		%REC	EPA 8260B			70-130	02/17/14	10:46	HXE
Toluene-D8	107		%REC	EPA 8260B			70-130	02/17/14	10:46	HXE
Bromofluorobenzene	101		%REC	EPA 8260B			70-130	02/17/14	10:46	HXE
Sample: 002 SG13-5 3PV					Date & Time Sampled:			02/17/14	@	10:56
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
[VOCs by GCMS]										
Acetone	<5.0		µg/L	EPA 8260B	1	5.0	10	02/17/14	11:09	HXE
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
Benzene	<0.036		µg/L	EPA 8260B	1	0.040	0.050	02/17/14	11:09	HXE
Bromobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
Bromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
Bromoform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE



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CERTIFICATE OF ANALYSIS

1402-00065

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/20/14
Date Received 02/18/14
Invoice No. 71370
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 002 SG13-5 3PV					Date & Time Sampled:			02/17/14	@	10:56
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
Bromomethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	11:09	HXE
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	11:09	HXE
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	11:09	HXE
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	11:09	HXE
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1	0.030	0.050	02/17/14	11:09	HXE
Chlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
Chloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
Chloroform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
Chloromethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	11:09	HXE
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
1,2-Dibromoethane (EDB)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
1,2-Dibromo-3-Chloropropane	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	11:09	HXE
Dibromomethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE

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Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 002 SG13-5 3PV					Date & Time Sampled:		02/17/14 @ 10:56			
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
Ethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
2-Hexanone	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	11:09	HXE
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
Methylene Chloride	<1.0		µg/L	EPA 8260B	1	1.0	2.0	02/17/14	11:09	HXE
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	11:09	HXE
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
Naphthalene	<0.032		µg/L	EPA 8260B	1	0.030	0.050	02/17/14	11:09	HXE
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
Styrene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
1,1,2,2-Tetrachloroethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	11:09	HXE
Tetrachloroethene	1.4		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
Toluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
Trichloroethene	0.18		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
1,2,3-Trichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
Trichlorotrifluoroethane	<0.20		µg/L	EPA 8260B	1	0.20	0.20	02/17/14	11:09	HXE

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CERTIFICATE OF ANALYSIS

1402-00065

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/20/14
Date Received 02/18/14
Invoice No. 71370
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 002 SG13-5 3PV					Date & Time Sampled:			02/17/14	@	10:56
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
Vinyl Chloride	<0.013		µg/L	EPA 8260B	1	0.010	0.050	02/17/14	11:09	HXE
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	11:09	HXE
o-Xylene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:09	HXE
[VOC Vapor Sampling Tracer]										
Isopropanol (IPA)	<10		µg/L	EPA 8260B	1	10	10	02/17/14	11:09	HXE
[VOC Surrogates]										
Dibromofluoromethane	100		%REC	EPA 8260B			70-130	02/17/14	11:09	HXE
Toluene-D8	105		%REC	EPA 8260B			70-130	02/17/14	11:09	HXE
Bromofluorobenzene	101		%REC	EPA 8260B			70-130	02/17/14	11:09	HXE
Sample: 003 SG13-5 10PV										
Sample Matrix: Soil Vapor					Date & Time Sampled:			02/17/14	@	11:17
Purge Volume Sampled: 10										
[VOCs by GCMS]										
Acetone	<5.0		µg/L	EPA 8260B	1	5.0	10	02/17/14	11:31	HXE
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
Benzene	<0.036		µg/L	EPA 8260B	1	0.040	0.050	02/17/14	11:31	HXE
Bromobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
Bromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
Bromoform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
Bromomethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	11:31	HXE
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	11:31	HXE
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	11:31	HXE
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	11:31	HXE

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Date Received 02/18/14
Invoice No. 71370
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 003 SG13-5 10PV					Date & Time Sampled:		02/17/14	@	11:17	
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 10										
.....continued										
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1	0.030	0.050	02/17/14	11:31	HXE
Chlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
Chloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
Chloroform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
Chloromethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	11:31	HXE
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
1,2-Dibromoethane (EDB)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
1,2-Dibromo-3-Chloropropane	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	11:31	HXE
Dibromomethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
Ethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE



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P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/20/14
Date Received 02/18/14
Invoice No. 71370
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 003 SG13-5 10PV					Date & Time Sampled:		02/17/14	@	11:17	
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 10										
.....continued										
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
2-Hexanone	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	11:31	HXE
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
Methylene Chloride	<1.0		µg/L	EPA 8260B	1	1.0	2.0	02/17/14	11:31	HXE
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	11:31	HXE
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
Naphthalene	<0.032		µg/L	EPA 8260B	1	0.030	0.050	02/17/14	11:31	HXE
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
Styrene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
1,1,2,2-Tetrachloroethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	11:31	HXE
Tetrachloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
Toluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
Trichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
1,2,3-Trichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
Trichlorotrifluoroethane	<0.20		µg/L	EPA 8260B	1	0.20	0.20	02/17/14	11:31	HXE
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
Vinyl Chloride	<0.013		µg/L	EPA 8260B	1	0.010	0.050	02/17/14	11:31	HXE
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	11:31	HXE
o-Xylene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	11:31	HXE
[VOC Vapor Sampling Tracer]										
Isopropanol (IPA)	<10		µg/L	EPA 8260B	1	10	10	02/17/14	11:31	HXE

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PALOS VERDES PENINSULA, CA 90274

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Date Received 02/18/14
Invoice No. 71370
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 003 SG13-5 10PV					Date & Time Sampled:			02/17/14	@	11:17
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 10										
.....continued										
[VOC Surrogates]										
Dibromofluoromethane	100		%REC	EPA 8260B			70-130	02/17/14	11:31	HXE
Toluene-D8	104		%REC	EPA 8260B			70-130	02/17/14	11:31	HXE
Bromofluorobenzene	99		%REC	EPA 8260B			70-130	02/17/14	11:31	HXE
Sample: 004 SG1-5					Date & Time Sampled:			02/17/14	@	11:57
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
[VOCs by GCMS]										
Acetone	<5.0		µg/L	EPA 8260B	1	5.0	10	02/17/14	12:10	HXE
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
Benzene	<0.036		µg/L	EPA 8260B	1	0.040	0.050	02/17/14	12:10	HXE
Bromobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
Bromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
Bromoform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
Bromomethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	12:10	HXE
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	12:10	HXE
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	12:10	HXE
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	12:10	HXE
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1	0.030	0.050	02/17/14	12:10	HXE
Chlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
Chloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
Chloroform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
Chloromethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	12:10	HXE
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE

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Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 004 SG1-5					Date & Time Sampled:			02/17/14	@	11:57
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
1,2-Dibromoethane (EDB)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
1,2-Dibromo-3-Chloropropane	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	12:10	HXE
Dibromomethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
Ethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
2-Hexanone	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	12:10	HXE
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
Methylene Chloride	<1.0		µg/L	EPA 8260B	1	1.0	2.0	02/17/14	12:10	HXE
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	12:10	HXE
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE

The data and information on this, and other accompanying documents, represent only the sample(s) analyzed and is rendered upon condition that it is not to be reproduced, wholly or in part, for advertising or other purposes without approval from the laboratory.

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CERTIFICATE OF ANALYSIS

1402-00065

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/20/14
Date Received 02/18/14
Invoice No. 71370
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 004 SG1-5					Date & Time Sampled:		02/17/14	@	11:57	
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
Naphthalene	<0.032		µg/L	EPA 8260B	1	0.030	0.050	02/17/14	12:10	HXE
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
Styrene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
1,1,2,2-Tetrachloroethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	12:10	HXE
Tetrachloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
Toluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
Trichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
1,2,3-Trichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
Trichlorotrifluoroethane	<0.20		µg/L	EPA 8260B	1	0.20	0.20	02/17/14	12:10	HXE
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
Vinyl Chloride	<0.013		µg/L	EPA 8260B	1	0.010	0.050	02/17/14	12:10	HXE
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	12:10	HXE
o-Xylene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:10	HXE
[VOC Vapor Sampling Tracer]										
Isopropanol (IPA)	<10		µg/L	EPA 8260B	1	10	10	02/17/14	12:10	HXE
[VOC Surrogates]										
Dibromofluoromethane	103		%REC	EPA 8260B			70-130	02/17/14	12:10	HXE
Toluene-D8	104		%REC	EPA 8260B			70-130	02/17/14	12:10	HXE
Bromofluorobenzene	98		%REC	EPA 8260B			70-130	02/17/14	12:10	HXE
Sample: 005 SG1-15					Date & Time Sampled:		02/17/14	@	12:21	
Sample Matrix: Soil Vapor										



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CERTIFICATE OF ANALYSIS

1402-00065

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/20/14
Date Received 02/18/14
Invoice No. 71370
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 005 SG1-15					Date & Time Sampled:			02/17/14	@	12:21
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
[VOCs by GCMS]										
Acetone	<5.0		µg/L	EPA 8260B	1	5.0	10	02/17/14	12:32	HXE
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
Benzene	<0.036		µg/L	EPA 8260B	1	0.040	0.050	02/17/14	12:32	HXE
Bromobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
Bromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
Bromoform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
Bromomethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	12:32	HXE
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	12:32	HXE
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	12:32	HXE
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	12:32	HXE
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1	0.030	0.050	02/17/14	12:32	HXE
Chlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
Chloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
Chloroform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
Chloromethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	12:32	HXE
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
1,2-Dibromoethane (EDB)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
1,2-Dibromo-3-Chloropropane	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	12:32	HXE
Dibromomethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE



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CERTIFICATE OF ANALYSIS

1402-00065

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/20/14
Date Received 02/18/14
Invoice No. 71370
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 005 SG1-15					Date & Time Sampled:		02/17/14 @ 12:21			
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
Ethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
2-Hexanone	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	12:32	HXE
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
Methylene Chloride	<1.0		µg/L	EPA 8260B	1	1.0	2.0	02/17/14	12:32	HXE
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	12:32	HXE
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
Naphthalene	<0.032		µg/L	EPA 8260B	1	0.030	0.050	02/17/14	12:32	HXE
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
Styrene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
1,1,2,2-Tetrachloroethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	12:32	HXE
Tetrachloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
Toluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE



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Date Reported 02/20/14
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Invoice No. 71370
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 005 SG1-15					Date & Time Sampled:			02/17/14	@	12:21
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
Trichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
1,2,3-Trichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
Trichlorotrifluoroethane	<0.20		µg/L	EPA 8260B	1	0.20	0.20	02/17/14	12:32	HXE
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
Vinyl Chloride	<0.013		µg/L	EPA 8260B	1	0.010	0.050	02/17/14	12:32	HXE
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	12:32	HXE
o-Xylene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:32	HXE
[VOC Vapor Sampling Tracer]										
Isopropanol (IPA)	<10		µg/L	EPA 8260B	1	10	10	02/17/14	12:32	HXE
[VOC Surrogates]										
Dibromofluoromethane	105		%REC	EPA 8260B			70-130	02/17/14	12:32	HXE
Toluene-D8	104		%REC	EPA 8260B			70-130	02/17/14	12:32	HXE
Bromofluorobenzene	99		%REC	EPA 8260B			70-130	02/17/14	12:32	HXE
Sample: 006 SG2-5					Date & Time Sampled:			02/17/14	@	12:42
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
[VOCs by GCMS]										
Acetone	<5.0		µg/L	EPA 8260B	1	5.0	10	02/17/14	12:55	HXE
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
Benzene	<0.036		µg/L	EPA 8260B	1	0.040	0.050	02/17/14	12:55	HXE
Bromobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
Bromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
Bromoform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE

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CERTIFICATE OF ANALYSIS

1402-00065

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/20/14
Date Received 02/18/14
Invoice No. 71370
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 006 SG2-5					Date & Time Sampled:		02/17/14	@	12:42	
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
Bromomethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	12:55	HXE
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	12:55	HXE
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	12:55	HXE
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	12:55	HXE
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1	0.030	0.050	02/17/14	12:55	HXE
Chlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
Chloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
Chloroform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
Chloromethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	12:55	HXE
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
1,2-Dibromoethane (EDB)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
1,2-Dibromo-3-Chloropropane	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	12:55	HXE
Dibromomethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE

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Date Received 02/18/14
Invoice No. 71370
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 006 SG2-5					Date & Time Sampled:		02/17/14	@	12:42	
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
Ethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
2-Hexanone	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	12:55	HXE
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
Methylene Chloride	<1.0		µg/L	EPA 8260B	1	1.0	2.0	02/17/14	12:55	HXE
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	12:55	HXE
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
Naphthalene	<0.032		µg/L	EPA 8260B	1	0.030	0.050	02/17/14	12:55	HXE
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
Styrene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
1,1,2,2-Tetrachloroethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	12:55	HXE
Tetrachloroethene	0.73		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
Toluene	0.91		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
Trichloroethene	1.1		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
1,2,3-Trichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
Trichlorotrifluoroethane	<0.20		µg/L	EPA 8260B	1	0.20	0.20	02/17/14	12:55	HXE

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1402-00065

ECOBILITY CORPORATION
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PALOS VERDES PENINSULA, CA 90274

Date Reported 02/20/14
Date Received 02/18/14
Invoice No. 71370
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 006 SG2-5					Date & Time Sampled:		02/17/14		@	12:42
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
Vinyl Chloride	<0.013		µg/L	EPA 8260B	1	0.010	0.050	02/17/14	12:55	HXE
m,p-Xylenes	0.12	J	µg/L	EPA 8260B	1	0.10	0.20	02/17/14	12:55	HXE
o-Xylene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	12:55	HXE
[VOC Vapor Sampling Tracer]										
Isopropanol (IPA)	<10		µg/L	EPA 8260B	1	10	10	02/17/14	12:55	HXE
[VOC Surrogates]										
Dibromofluoromethane	102		%REC	EPA 8260B			70-130	02/17/14	12:55	HXE
Toluene-D8	109		%REC	EPA 8260B			70-130	02/17/14	12:55	HXE
Bromofluorobenzene	97		%REC	EPA 8260B			70-130	02/17/14	12:55	HXE
Sample: 007 SG2-15					Date & Time Sampled:		02/17/14		@	13:05
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
[VOCs by GCMS]										
Acetone	<5.0		µg/L	EPA 8260B	1	5.0	10	02/17/14	1:18	HXE
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
Benzene	<0.036		µg/L	EPA 8260B	1	0.040	0.050	02/17/14	1:18	HXE
Bromobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
Bromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
Bromoform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
Bromomethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	1:18	HXE
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	1:18	HXE
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	1:18	HXE
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	1:18	HXE

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Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 007 SG2-15					Date & Time Sampled:		02/17/14	@	13:05	
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1	0.030	0.050	02/17/14	1:18	HXE
Chlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
Chloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
Chloroform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
Chloromethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	1:18	HXE
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
1,2-Dibromoethane (EDB)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
1,2-Dibromo-3-Chloropropane	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	1:18	HXE
Dibromomethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
Ethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE



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Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 007 SG2-15					Date & Time Sampled:		02/17/14	@	13:05	
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
2-Hexanone	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	1:18	HXE
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
Methylene Chloride	<1.0		µg/L	EPA 8260B	1	1.0	2.0	02/17/14	1:18	HXE
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	1:18	HXE
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
Naphthalene	<0.032		µg/L	EPA 8260B	1	0.030	0.050	02/17/14	1:18	HXE
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
Styrene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
1,1,2,2-Tetrachloroethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	1:18	HXE
Tetrachloroethene	0.15		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
Toluene	0.17		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
Trichloroethene	1.2		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
1,2,3-Trichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
Trichlorotrifluoroethane	<0.20		µg/L	EPA 8260B	1	0.20	0.20	02/17/14	1:18	HXE
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
Vinyl Chloride	<0.013		µg/L	EPA 8260B	1	0.010	0.050	02/17/14	1:18	HXE
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	1:18	HXE
o-Xylene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:18	HXE
[VOC Vapor Sampling Tracer]										
Isopropanol (IPA)	<10		µg/L	EPA 8260B	1	10	10	02/17/14	1:18	HXE

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CERTIFICATE OF ANALYSIS

1402-00065

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/20/14
Date Received 02/18/14
Invoice No. 71370
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 007 SG2-15					Date & Time Sampled:			02/17/14	@	13:05
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
[VOC Surrogates]										
Dibromofluoromethane	104		%REC	EPA 8260B			70-130	02/17/14	1:18	HXE
Toluene-D8	107		%REC	EPA 8260B			70-130	02/17/14	1:18	HXE
Bromofluorobenzene	97		%REC	EPA 8260B			70-130	02/17/14	1:18	HXE
Sample: 008 SG3-5					Date & Time Sampled:			02/17/14	@	13:28
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
[VOCs by GCMS]										
Acetone	<5.0		µg/L	EPA 8260B	1	5.0	10	02/17/14	1:40	HXE
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
Benzene	<0.036		µg/L	EPA 8260B	1	0.040	0.050	02/17/14	1:40	HXE
Bromobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
Bromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
Bromoform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
Bromomethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	1:40	HXE
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	1:40	HXE
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	1:40	HXE
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	1:40	HXE
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1	0.030	0.050	02/17/14	1:40	HXE
Chlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
Chloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
Chloroform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
Chloromethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	1:40	HXE
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE

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CERTIFICATE OF ANALYSIS

1402-00065

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/20/14
Date Received 02/18/14
Invoice No. 71370
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 008 SG3-5					Date & Time Sampled:		02/17/14	@	13:28	
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
1,2-Dibromoethane (EDB)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
1,2-Dibromo-3-Chloropropane	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	1:40	HXE
Dibromomethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
Ethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
2-Hexanone	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	1:40	HXE
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
Methylene Chloride	<1.0		µg/L	EPA 8260B	1	1.0	2.0	02/17/14	1:40	HXE
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	1:40	HXE
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE

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CERTIFICATE OF ANALYSIS

1402-00065

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/20/14
Date Received 02/18/14
Invoice No. 71370
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 008 SG3-5					Date & Time Sampled:		02/17/14	@	13:28	
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
Naphthalene	<0.032		µg/L	EPA 8260B	1	0.030	0.050	02/17/14	1:40	HXE
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
Styrene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
1,1,2,2-Tetrachloroethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	1:40	HXE
Tetrachloroethene	0.12		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
Toluene	0.083	J	µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
Trichloroethene	0.38		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
1,2,3-Trichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
Trichlorotrifluoroethane	<0.20		µg/L	EPA 8260B	1	0.20	0.20	02/17/14	1:40	HXE
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
Vinyl Chloride	<0.013		µg/L	EPA 8260B	1	0.010	0.050	02/17/14	1:40	HXE
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	1:40	HXE
o-Xylene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	1:40	HXE
[VOC Vapor Sampling Tracer]										
Isopropanol (IPA)	<10		µg/L	EPA 8260B	1	10	10	02/17/14	1:40	HXE
[VOC Surrogates]										
Dibromofluoromethane	105		%REC	EPA 8260B			70-130	02/17/14	1:40	HXE
Toluene-D8	109		%REC	EPA 8260B			70-130	02/17/14	1:40	HXE
Bromofluorobenzene	97		%REC	EPA 8260B			70-130	02/17/14	1:40	HXE
Sample: 009 SG3-15					Date & Time Sampled:		02/17/14	@	13:48	
Sample Matrix: Soil Vapor										



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Date Reported 02/20/14
Date Received 02/18/14
Invoice No. 71370
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 009 SG3-15						Date & Time Sampled:		02/17/14	@	13:48
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
[VOCs by GCMS]										
Acetone	<5.0		µg/L	EPA 8260B	1	5.0	10	02/17/14	2:02	HXE
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
Benzene	<0.036		µg/L	EPA 8260B	1	0.040	0.050	02/17/14	2:02	HXE
Bromobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
Bromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
Bromoform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
Bromomethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	2:02	HXE
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	2:02	HXE
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	2:02	HXE
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	2:02	HXE
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1	0.030	0.050	02/17/14	2:02	HXE
Chlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
Chloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
Chloroform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
Chloromethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	2:02	HXE
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
1,2-Dibromoethane (EDB)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
1,2-Dibromo-3-Chloropropane	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	2:02	HXE
Dibromomethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE

The data and information on this, and other accompanying documents, represent only the sample(s) analyzed and is rendered upon condition that it is not to be reproduced, wholly or in part, for advertising or other purposes without approval from the laboratory.

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CERTIFICATE OF ANALYSIS

1402-00065

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/20/14
Date Received 02/18/14
Invoice No. 71370
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 009 SG3-15					Date & Time Sampled:		02/17/14	@	13:48	
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
Ethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
2-Hexanone	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	2:02	HXE
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
Methylene Chloride	<1.0		µg/L	EPA 8260B	1	1.0	2.0	02/17/14	2:02	HXE
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	2:02	HXE
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
Naphthalene	<0.032		µg/L	EPA 8260B	1	0.030	0.050	02/17/14	2:02	HXE
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
Styrene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
1,1,2,2-Tetrachloroethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	2:02	HXE
Tetrachloroethene	0.28		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
Toluene	0.11		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE



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Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 009 SG3-15					Date & Time Sampled:			02/17/14	@	13:48
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
Trichloroethene	1.7		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
1,2,3-Trichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
Trichlorotrifluoroethane	<0.20		µg/L	EPA 8260B	1	0.20	0.20	02/17/14	2:02	HXE
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
Vinyl Chloride	<0.013		µg/L	EPA 8260B	1	0.010	0.050	02/17/14	2:02	HXE
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	2:02	HXE
o-Xylene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:02	HXE
[VOC Vapor Sampling Tracer]										
Isopropanol (IPA)	<10		µg/L	EPA 8260B	1	10	10	02/17/14	2:02	HXE
[VOC Surrogates]										
Dibromofluoromethane	106		%REC	EPA 8260B			70-130	02/17/14	2:02	HXE
Toluene-D8	108		%REC	EPA 8260B			70-130	02/17/14	2:02	HXE
Bromofluorobenzene	99		%REC	EPA 8260B			70-130	02/17/14	2:02	HXE
Sample: 010 SG4-5										
Sample Matrix: Soil Vapor					Date & Time Sampled:			02/17/14	@	14:12
Purge Volume Sampled: 3										
[VOCs by GCMS]										
Acetone	<5.0		µg/L	EPA 8260B	1	5.0	10	02/17/14	2:24	HXE
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
Benzene	<0.036		µg/L	EPA 8260B	1	0.040	0.050	02/17/14	2:24	HXE
Bromobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
Bromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
Bromoform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE



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Cust # E083
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Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 010 SG4-5					Date & Time Sampled:			02/17/14	@	14:12
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
Bromomethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	2:24	HXE
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	2:24	HXE
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	2:24	HXE
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	2:24	HXE
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1	0.030	0.050	02/17/14	2:24	HXE
Chlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
Chloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
Chloroform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
Chloromethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	2:24	HXE
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
1,2-Dibromoethane (EDB)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
1,2-Dibromo-3-Chloropropane	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	2:24	HXE
Dibromomethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE



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Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 010 SG4-5					Date & Time Sampled:		02/17/14	@	14:12	
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
Ethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
2-Hexanone	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	2:24	HXE
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
Methylene Chloride	<1.0		µg/L	EPA 8260B	1	1.0	2.0	02/17/14	2:24	HXE
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	2:24	HXE
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
Naphthalene	<0.032		µg/L	EPA 8260B	1	0.030	0.050	02/17/14	2:24	HXE
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
Styrene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
1,1,2,2-Tetrachloroethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	2:24	HXE
Tetrachloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
Toluene	0.10		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
Trichloroethene	0.050	J	µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
1,2,3-Trichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
Trichlorotrifluoroethane	<0.20		µg/L	EPA 8260B	1	0.20	0.20	02/17/14	2:24	HXE



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Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 010 SG4-5					Date & Time Sampled:			02/17/14	@	14:12
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
Vinyl Chloride	<0.013		µg/L	EPA 8260B	1	0.010	0.050	02/17/14	2:24	HXE
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	2:24	HXE
o-Xylene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:24	HXE
[VOC Vapor Sampling Tracer]										
Isopropanol (IPA)	<10		µg/L	EPA 8260B	1	10	10	02/17/14	2:24	HXE
[VOC Surrogates]										
Dibromofluoromethane	104		%REC	EPA 8260B			70-130	02/17/14	2:24	HXE
Toluene-D8	109		%REC	EPA 8260B			70-130	02/17/14	2:24	HXE
Bromofluorobenzene	99		%REC	EPA 8260B			70-130	02/17/14	2:24	HXE
Sample: 011 SG4-15					Date & Time Sampled:			02/17/14	@	14:35
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
[VOCs by GCMS]										
Acetone	<5.0		µg/L	EPA 8260B	1	5.0	10	02/17/14	2:45	HXE
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
Benzene	<0.036		µg/L	EPA 8260B	1	0.040	0.050	02/17/14	2:45	HXE
Bromobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
Bromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
Bromoform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
Bromomethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	2:45	HXE
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	2:45	HXE
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	2:45	HXE
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	2:45	HXE

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CERTIFICATE OF ANALYSIS

1402-00065

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/20/14
Date Received 02/18/14
Invoice No. 71370
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 011 SG4-15					Date & Time Sampled:		02/17/14	@	14:35	
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1	0.030	0.050	02/17/14	2:45	HXE
Chlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
Chloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
Chloroform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
Chloromethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	2:45	HXE
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
1,2-Dibromoethane (EDB)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
1,2-Dibromo-3-Chloropropane	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	2:45	HXE
Dibromomethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
Ethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE



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PALOS VERDES PENINSULA, CA 90274

Date Reported 02/20/14
Date Received 02/18/14
Invoice No. 71370
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 011 SG4-15					Date & Time Sampled:		02/17/14	@	14:35	
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
2-Hexanone	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	2:45	HXE
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
Methylene Chloride	<1.0		µg/L	EPA 8260B	1	1.0	2.0	02/17/14	2:45	HXE
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	2:45	HXE
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
Naphthalene	<0.032		µg/L	EPA 8260B	1	0.030	0.050	02/17/14	2:45	HXE
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
Styrene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
1,1,2,2-Tetrachloroethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	2:45	HXE
Tetrachloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
Toluene	0.084	J	µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
Trichloroethene	0.43		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
1,2,3-Trichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
Trichlorotrifluoroethane	<0.20		µg/L	EPA 8260B	1	0.20	0.20	02/17/14	2:45	HXE
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
Vinyl Chloride	<0.013		µg/L	EPA 8260B	1	0.010	0.050	02/17/14	2:45	HXE
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	2:45	HXE
o-Xylene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	2:45	HXE
[VOC Vapor Sampling Tracer]										
Isopropanol (IPA)	<10		µg/L	EPA 8260B	1	10	10	02/17/14	2:45	HXE

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CERTIFICATE OF ANALYSIS

1402-00065

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/20/14
Date Received 02/18/14
Invoice No. 71370
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 011 SG4-15					Date & Time Sampled:			02/17/14	@	14:35
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
[VOC Surrogates]										
Dibromofluoromethane	105		%REC	EPA 8260B			70-130	02/17/14	2:45	HXE
Toluene-D8	106		%REC	EPA 8260B			70-130	02/17/14	2:45	HXE
Bromofluorobenzene	103		%REC	EPA 8260B			70-130	02/17/14	2:45	HXE
Sample: 012 SG5-5					Date & Time Sampled:			02/17/14	@	14:56
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
[VOCs by GCMS]										
Acetone	<5.0		µg/L	EPA 8260B	1	5.0	10	02/17/14	3:07	HXE
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
Benzene	<0.036		µg/L	EPA 8260B	1	0.040	0.050	02/17/14	3:07	HXE
Bromobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
Bromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
Bromoform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
Bromomethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	3:07	HXE
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	3:07	HXE
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	3:07	HXE
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	3:07	HXE
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1	0.030	0.050	02/17/14	3:07	HXE
Chlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
Chloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
Chloroform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
Chloromethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	3:07	HXE
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE

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Date Reported 02/20/14
Date Received 02/18/14
Invoice No. 71370
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 012 SG5-5					Date & Time Sampled:		02/17/14	@	14:56	
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
1,2-Dibromoethane (EDB)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
1,2-Dibromo-3-Chloropropane	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	3:07	HXE
Dibromomethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
Ethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
2-Hexanone	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	3:07	HXE
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
Methylene Chloride	<1.0		µg/L	EPA 8260B	1	1.0	2.0	02/17/14	3:07	HXE
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	3:07	HXE
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE

The data and information on this, and other accompanying documents, represent only the sample(s) analyzed and is rendered upon condition that it is not to be reproduced, wholly or in part, for advertising or other purposes without approval from the laboratory.

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CERTIFICATE OF ANALYSIS

1402-00065

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/20/14
Date Received 02/18/14
Invoice No. 71370
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 012 SG5-5					Date & Time Sampled:		02/17/14	@	14:56	
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
Naphthalene	<0.032		µg/L	EPA 8260B	1	0.030	0.050	02/17/14	3:07	HXE
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
Styrene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
1,1,2,2-Tetrachloroethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	3:07	HXE
Tetrachloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
Toluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
Trichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
1,2,3-Trichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
Trichlorotrifluoroethane	<0.20		µg/L	EPA 8260B	1	0.20	0.20	02/17/14	3:07	HXE
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
Vinyl Chloride	<0.013		µg/L	EPA 8260B	1	0.010	0.050	02/17/14	3:07	HXE
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	3:07	HXE
o-Xylene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:07	HXE
[VOC Vapor Sampling Tracer]										
Isopropanol (IPA)	<10		µg/L	EPA 8260B	1	10	10	02/17/14	3:07	HXE
[VOC Surrogates]										
Dibromofluoromethane	105		%REC	EPA 8260B			70-130	02/17/14	3:07	HXE
Toluene-D8	110		%REC	EPA 8260B			70-130	02/17/14	3:07	HXE
Bromofluorobenzene	98		%REC	EPA 8260B			70-130	02/17/14	3:07	HXE
Sample: 013 SG5-15					Date & Time Sampled:		02/17/14	@	15:16	
Sample Matrix: Soil Vapor										



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PALOS VERDES PENINSULA, CA 90274

Date Reported 02/20/14
Date Received 02/18/14
Invoice No. 71370
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 013 SG5-15						Date & Time Sampled:		02/17/14	@	15:16
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
[VOCs by GCMS]										
Acetone	<5.0		µg/L	EPA 8260B	1	5.0	10	02/17/14	3:28	HXE
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
Benzene	<0.036		µg/L	EPA 8260B	1	0.040	0.050	02/17/14	3:28	HXE
Bromobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
Bromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
Bromoform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
Bromomethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	3:28	HXE
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	3:28	HXE
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	3:28	HXE
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	3:28	HXE
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1	0.030	0.050	02/17/14	3:28	HXE
Chlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
Chloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
Chloroform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
Chloromethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	3:28	HXE
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
1,2-Dibromoethane (EDB)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
1,2-Dibromo-3-Chloropropane	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	3:28	HXE
Dibromomethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE

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PALOS VERDES PENINSULA, CA 90274

Date Reported 02/20/14
Date Received 02/18/14
Invoice No. 71370
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 013 SG5-15					Date & Time Sampled:			02/17/14	@	15:16
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
Ethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
2-Hexanone	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	3:28	HXE
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
Methylene Chloride	<1.0		µg/L	EPA 8260B	1	1.0	2.0	02/17/14	3:28	HXE
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	3:28	HXE
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
Naphthalene	<0.032		µg/L	EPA 8260B	1	0.030	0.050	02/17/14	3:28	HXE
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
Styrene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
1,1,2,2-Tetrachloroethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	3:28	HXE
Tetrachloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
Toluene	0.055	J	µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE



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Date Reported 02/20/14
Date Received 02/18/14
Invoice No. 71370
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 013 SG5-15					Date & Time Sampled:			02/17/14	@	15:16
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
Trichloroethene	0.091	J	µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
1,2,3-Trichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
Trichlorotrifluoroethane	<0.20		µg/L	EPA 8260B	1	0.20	0.20	02/17/14	3:28	HXE
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
Vinyl Chloride	<0.013		µg/L	EPA 8260B	1	0.010	0.050	02/17/14	3:28	HXE
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	3:28	HXE
o-Xylene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:28	HXE
[VOC Vapor Sampling Tracer]										
Isopropanol (IPA)	<10		µg/L	EPA 8260B	1	10	10	02/17/14	3:28	HXE
[VOC Surrogates]										
Dibromofluoromethane	102		%REC	EPA 8260B			70-130	02/17/14	3:28	HXE
Toluene-D8	108		%REC	EPA 8260B			70-130	02/17/14	3:28	HXE
Bromofluorobenzene	98		%REC	EPA 8260B			70-130	02/17/14	3:28	HXE
Sample: 014 SG7-5					Date & Time Sampled:			02/17/14	@	15:37
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
[VOCs by GCMS]										
Acetone	<5.0		µg/L	EPA 8260B	1	5.0	10	02/17/14	3:50	HXE
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
Benzene	<0.036		µg/L	EPA 8260B	1	0.040	0.050	02/17/14	3:50	HXE
Bromobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
Bromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
Bromoform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE



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Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 014 SG7-5					Date & Time Sampled:		02/17/14	@	15:37	
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
Bromomethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	3:50	HXE
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	3:50	HXE
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	3:50	HXE
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	3:50	HXE
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1	0.030	0.050	02/17/14	3:50	HXE
Chlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
Chloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
Chloroform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
Chloromethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	3:50	HXE
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
1,2-Dibromoethane (EDB)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
1,2-Dibromo-3-Chloropropane	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	3:50	HXE
Dibromomethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE

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CERTIFICATE OF ANALYSIS

1402-00065

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/20/14
Date Received 02/18/14
Invoice No. 71370
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 014 SG7-5					Date & Time Sampled:			02/17/14	@	15:37
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
Ethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
2-Hexanone	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	3:50	HXE
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
Methylene Chloride	<1.0		µg/L	EPA 8260B	1	1.0	2.0	02/17/14	3:50	HXE
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	3:50	HXE
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
Naphthalene	<0.032		µg/L	EPA 8260B	1	0.030	0.050	02/17/14	3:50	HXE
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
Styrene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
1,1,2,2-Tetrachloroethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	3:50	HXE
Tetrachloroethene	0.071	J	µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
Toluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
Trichloroethene	0.42		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
1,2,3-Trichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
Trichlorotrifluoroethane	<0.20		µg/L	EPA 8260B	1	0.20	0.20	02/17/14	3:50	HXE



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Invoice No. 71370
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 014 SG7-5					Date & Time Sampled:			02/17/14	@	15:37
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
Vinyl Chloride	<0.013		µg/L	EPA 8260B	1	0.010	0.050	02/17/14	3:50	HXE
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	3:50	HXE
o-Xylene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	3:50	HXE
[VOC Vapor Sampling Tracer]										
Isopropanol (IPA)	<10		µg/L	EPA 8260B	1	10	10	02/17/14	3:50	HXE
[VOC Surrogates]										
Dibromofluoromethane	103		%REC	EPA 8260B			70-130	02/17/14	3:50	HXE
Toluene-D8	110		%REC	EPA 8260B			70-130	02/17/14	3:50	HXE
Bromofluorobenzene	96		%REC	EPA 8260B			70-130	02/17/14	3:50	HXE
Sample: 015 SG7-15					Date & Time Sampled:			02/17/14	@	16:01
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
[VOCs by GCMS]										
Acetone	<5.0		µg/L	EPA 8260B	1	5.0	10	02/17/14	4:15	HXE
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
Benzene	<0.036		µg/L	EPA 8260B	1	0.040	0.050	02/17/14	4:15	HXE
Bromobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
Bromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
Bromoform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
Bromomethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	4:15	HXE
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	4:15	HXE
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	4:15	HXE
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	4:15	HXE

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CERTIFICATE OF ANALYSIS

1402-00065

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/20/14
Date Received 02/18/14
Invoice No. 71370
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 015 SG7-15					Date & Time Sampled:		02/17/14	@	16:01	
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1	0.030	0.050	02/17/14	4:15	HXE
Chlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
Chloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
Chloroform	0.054	J	µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
Chloromethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	4:15	HXE
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
1,2-Dibromoethane (EDB)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
1,2-Dibromo-3-Chloropropane	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	4:15	HXE
Dibromomethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
Ethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE



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Date Reported 02/20/14
Date Received 02/18/14
Invoice No. 71370
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 015 SG7-15					Date & Time Sampled:		02/17/14	@	16:01	
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
2-Hexanone	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	4:15	HXE
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
Methylene Chloride	<1.0		µg/L	EPA 8260B	1	1.0	2.0	02/17/14	4:15	HXE
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	4:15	HXE
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
Naphthalene	<0.032		µg/L	EPA 8260B	1	0.030	0.050	02/17/14	4:15	HXE
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
Styrene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
1,1,2,2-Tetrachloroethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	4:15	HXE
Tetrachloroethene	0.87		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
Toluene	0.14		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
Trichloroethene	8.1		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
1,2,3-Trichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
Trichlorotrifluoroethane	<0.20		µg/L	EPA 8260B	1	0.20	0.20	02/17/14	4:15	HXE
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
Vinyl Chloride	<0.013		µg/L	EPA 8260B	1	0.010	0.050	02/17/14	4:15	HXE
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	4:15	HXE
o-Xylene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:15	HXE
[VOC Vapor Sampling Tracer]										
Isopropanol (IPA)	<10		µg/L	EPA 8260B	1	10	10	02/17/14	4:15	HXE

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CERTIFICATE OF ANALYSIS

1402-00065

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/20/14
Date Received 02/18/14
Invoice No. 71370
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 015 SG7-15					Date & Time Sampled:			02/17/14	@	16:01
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
[VOC Surrogates]										
Dibromofluoromethane	103		%REC	EPA 8260B			70-130	02/17/14	4:15	HXE
Toluene-D8	109		%REC	EPA 8260B			70-130	02/17/14	4:15	HXE
Bromofluorobenzene	96		%REC	EPA 8260B			70-130	02/17/14	4:15	HXE
Sample: 016 SG7-15 DUP					Date & Time Sampled:			02/17/14	@	16:01
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
[VOCs by GCMS]										
Acetone	<5.0		µg/L	EPA 8260B	1	5.0	10	02/17/14	4:38	HXE
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
Benzene	<0.036		µg/L	EPA 8260B	1	0.040	0.050	02/17/14	4:38	HXE
Bromobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
Bromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
Bromoform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
Bromomethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	4:38	HXE
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	4:38	HXE
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	4:38	HXE
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	4:38	HXE
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1	0.030	0.050	02/17/14	4:38	HXE
Chlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
Chloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
Chloroform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
Chloromethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	4:38	HXE
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE

The data and information on this, and other accompanying documents, represent only the sample(s) analyzed and is rendered upon condition that it is not to be reproduced, wholly or in part, for advertising or other purposes without approval from the laboratory.

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1402-00065

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VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/20/14
Date Received 02/18/14
Invoice No. 71370
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 016 SG7-15 DUP					Date & Time Sampled:		02/17/14	@	16:01	
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
1,2-Dibromoethane (EDB)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
1,2-Dibromo-3-Chloropropane	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	4:38	HXE
Dibromomethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
Ethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
2-Hexanone	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	4:38	HXE
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
Methylene Chloride	<1.0		µg/L	EPA 8260B	1	1.0	2.0	02/17/14	4:38	HXE
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/17/14	4:38	HXE
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE

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Project: 1560-1570 Placentia Ave., Newport Beach, CA

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 016 SG7-15 DUP					Date & Time Sampled:		02/17/14	@	16:01	
Sample Matrix: Soil Vapor										
Purge Volume Sampled: 3										
.....continued										
Naphthalene	<0.032		µg/L	EPA 8260B	1	0.030	0.050	02/17/14	4:38	HXE
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
Styrene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
1,1,2,2-Tetrachloroethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	4:38	HXE
Tetrachloroethene	0.31		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
Toluene	0.076	J	µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
Trichloroethene	3.8		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
1,2,3-Trichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
Trichlorotrifluoroethane	<0.20		µg/L	EPA 8260B	1	0.20	0.20	02/17/14	4:38	HXE
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
Vinyl Chloride	<0.013		µg/L	EPA 8260B	1	0.010	0.050	02/17/14	4:38	HXE
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/17/14	4:38	HXE
o-Xylene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/17/14	4:38	HXE
[VOC Vapor Sampling Tracer]										
Isopropanol (IPA)	<10		µg/L	EPA 8260B	1	10	10	02/17/14	4:38	HXE
[VOC Surrogates]										
Dibromofluoromethane	105		%REC	EPA 8260B			70-130	02/17/14	4:38	HXE
Toluene-D8	107		%REC	EPA 8260B			70-130	02/17/14	4:38	HXE
Bromofluorobenzene	99		%REC	EPA 8260B			70-130	02/17/14	4:38	HXE



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Respectfully Submitted:

Ken Zheng

Ken Zheng - President

QUALIFIERS

B = Detected in the associated Method Blank at a concentration above the routine RL.

B1 = BOD dilution water is over specifications. The reported result may be biased high.

D = Surrogate recoveries are not calculated due to sample dilution.

E = Estimated value; Value exceeds calibration level of instrument.

H = Analyte was prepared and/or analyzed outside of the analytical method holding time

I = Matrix Interference.

J = Analyte concentration detected between RL and MDL.

Q = One or more quality control criteria did not meet specifications. See Comments for further explanation.

S = Customer provided specification limit exceeded.

ABBREVIATIONS

DF = Dilution Factor

RL = Reporting Limit, Adjusted by DF

MDL = Method Detection Limit, Adjusted by DF

Qual = Qualifier

Tech = Technician

As regulatory limits change frequently, A & R Laboratories advises the recipient of this report to confirm such limits with the appropriate federal, state, or local authorities before acting in reliance on the regulatory limits provided.

For any feedback concerning our services, please contact Marilu Escher, Project Manager at 951.779.0310. You may also contact Ken Zheng, President at arlab@arlaboratories.com.



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QUALITY CONTROL DATA REPORT

ECOBILITY CORPORATION

1402-00065

PALOS VERDES PENINSULA, CA 90274

Date Reported 02/20/2014

Date Received 02/18/2014

Date Sampled 02/17/2014

Invoice No. 71370

Customer # E083

Customer P.O. 026-14-001-1

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Method # EPA 8260B

QC Reference # 42191 Date Analyzed: 2/17/2014 Technician: HXE

Samples 001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016

Results

	LCS %REC	BLKSRR % REC
1,1-Dichloroethene	88	
Benzene	96	
Bromofluorobenzene		98
Chlorobenzene	97	
Dibromofluorometha		105
Toluene	98	
Toluene-D8		104
Trichloroethene	90	

Control Ranges

LCS %REC	BLKSRR %REC
70 - 130	
70 - 130	
	70 - 130
70 - 130	
	70 - 130
70 - 130	
	70 - 130
70 - 130	



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QUALITY CONTROL DATA REPORT

ECOBILITY CORPORATION

1402-00065

Date Reported

02/20/2014

Date Received

02/18/2014

Date Sampled

02/17/2014

Project: 1560-1570 Placentia Ave., Newport Beach, CA

Method blank results

Ref	Test Name	Result	Qualif	Units	MDL	Ref	Test Name	Result	Qualif	Units	MDL
42191	Acetone	<5.0		µg/L	5.0		2-Hexanone	<0.50		µg/L	0.50
	t-Amyl Methyl Ether (TAME)	<0.050		µg/L	0.050		Isopropylbenzene	<0.050		µg/L	0.050
	Benzene	<0.036		µg/L	0.036		4-Isopropyltoluene	<0.050		µg/L	0.050
	Bromobenzene	<0.050		µg/L	0.050		Methylene Chloride	<1.0		µg/L	1.0
	Bromochloromethane	<0.050		µg/L	0.050		4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	0.50
	Bromodichloromethane	<0.050		µg/L	0.050		Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	0.050
	Bromoform	<0.050		µg/L	0.050		Naphthalene	<0.032		µg/L	0.032
	Bromomethane	<0.10		µg/L	0.10		n-Propylbenzene	<0.050		µg/L	0.050
	t-Butanol (TBA)	<0.50		µg/L	0.50		Styrene	<0.050		µg/L	0.050
	2-Butanone (MEK)	<0.50		µg/L	0.50		1,1,1,2-Tetrachloroethane	<0.050		µg/L	0.050
	n-Butylbenzene	<0.050		µg/L	0.050		1,1,2,2-Tetrachloroethane	<0.10		µg/L	0.10
	sec-Butylbenzene	<0.050		µg/L	0.050		Tetrachloroethene	<0.050		µg/L	0.050
	tert-Butylbenzene	<0.050		µg/L	0.050		Toluene	<0.050		µg/L	0.050
	Carbon Disulfide	<0.50		µg/L	0.50		1,2,3-Trichlorobenzene	<0.050		µg/L	0.050
	Carbon Tetrachloride	<0.025		µg/L	0.025		1,2,4-Trichlorobenzene	<0.050		µg/L	0.050
	Chlorobenzene	<0.050		µg/L	0.050		1,1,1-Trichloroethane	<0.050		µg/L	0.050
	Chloroethane	<0.050		µg/L	0.050		1,1,2-Trichloroethane	<0.050		µg/L	0.050
	Chloroform	<0.050		µg/L	0.050		Trichloroethene	<0.050		µg/L	0.050
	Chloromethane	<0.10		µg/L	0.10		1,2,3-Trichloropropane	<0.050		µg/L	0.050
	2-Chlorotoluene	<0.050		µg/L	0.050		Trichlorofluoromethane	<0.050		µg/L	0.050
	4-Chlorotoluene	<0.050		µg/L	0.050		Trichlorotrifluoroethane	<0.20		µg/L	0.20
	Dibromochloromethane	<0.050		µg/L	0.050		1,2,4-Trimethylbenzene	<0.050		µg/L	0.050
	1,2-Dibromoethane (EDB)	<0.050		µg/L	0.050		1,3,5-Trimethylbenzene	<0.050		µg/L	0.050
	1,2-Dibromo-3-Chloropropane	<0.50		µg/L	0.50		Vinyl Chloride	<0.013		µg/L	0.013
	Dibromomethane	<0.050		µg/L	0.050		m,p-Xylenes	<0.10		µg/L	0.10
	1,2-Dichlorobenzene	<0.050		µg/L	0.050		o-Xylene	<0.050		µg/L	0.050
	1,3-Dichlorobenzene	<0.050		µg/L	0.050		Isopropanol (IPA)	<10		µg/L	10
	1,4-Dichlorobenzene	<0.050		µg/L	0.050						
	Dichlorodifluoromethane	<0.050		µg/L	0.050						
	1,1-Dichloroethane	<0.050		µg/L	0.050						
	1,2-Dichloroethane	<0.050		µg/L	0.050						
	1,1-Dichloroethene	<0.050		µg/L	0.050						
	cis-1,2-Dichloroethene	<0.050		µg/L	0.050						
	trans-1,2-Dichloroethene	<0.050		µg/L	0.050						
	1,2-Dichloropropane	<0.050		µg/L	0.050						
	1,3-Dichloropropane	<0.050		µg/L	0.050						
	2,2-Dichloropropane	<0.050		µg/L	0.050						
	1,1-Dichloropropene	<0.050		µg/L	0.050						
	cis-1,3-Dichloropropene	<0.050		µg/L	0.050						
	trans-1,3-Dichloropropene	<0.050		µg/L	0.050						
	Diisopropyl Ether (DiPE)	<0.050		µg/L	0.050						
	Ethylbenzene	<0.050		µg/L	0.050						
	Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	0.050						
	Hexachlorobutadiene	<0.050		µg/L	0.050						

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FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

QUALITY CONTROL DATA REPORT

ECOBILITY CORPORATION

1402-00065**Date Reported****02/20/2014****Date Received****02/18/2014****Date Sampled****02/17/2014****Project: 1560-1570 Placentia Ave., Newport Beach, CA****Respectfully Submitted:**

Ken Zheng - President

For any feedback concerning our services, please contact Marilu Escher, Project Manager at 951.779.0310. You may also contact Ken Zheng, President at arlab@arlaboratories.com.

office@arlaboratories.com

1402 - 65

Page 1 of 2

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The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under the Terms and Conditions set forth on the back hereof.

office@arlaboratories.com

1402-LS

Page 2 of 2[illegible]

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**A & R Laboratories***Formerly Microbac Southern California*

1650 S. GROVE AVE., SUITE C

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FDA#	2030513
LA City#	10261
ELAP#s	2789
	2790
	2122

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FOOD · COSMETICS · WATER · SOIL · SOIL VAPOR · WASTES

CASE NARRATIVE

Authorized Signature Name / Title (print)

Ken Zheng, President

Signature / Date

Ken Zheng, President
02/21/2014 12:50:42

Laboratory Job No. (Certificate of Analysis No.)

1402-00063

Project Name / No.

MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)
026-14-001-1

Dates Sampled (from/to)

02/18/14 To 02/18/14

Dates Received (from/to)

02/18/14 To 02/18/14

Dates Reported (from/to)

02/19/14 To 2/21/2014

Chains of Custody Received

Yes

Comments:

Subcontracting

Organic Analyses

No analyses sub-contracted

Sample Condition(s)

All samples intact



A & R Laboratories

Formerly Microbac Southern California

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Laboratory Job# 1402-00063

Positive Results (Organic Compounds)

Sample	Analyte	Result	Qual	Units	RL	Sample	Analyte	Result	Qual	Units	RL
SG6-15	Toluene	100		µg/m3	100	SG6-15	Trichloroethene	350		µg/m3	100
SG6A-5	Trichloroethene	100		µg/m3	100	SG9-5	Tetrachloroethene	600		µg/m3	100
SG9-5	Toluene	100		µg/m3	100	SG9-5	Trichloroethene	3,300		µg/m3	100
SG9-15	Tetrachloroethene	1,400		µg/m3	100	SG9-15	Trichloroethene	7,600		µg/m3	100
SG6-5	Tetrachloroethene	200		µg/m3	100	SG6-5	Toluene	100		µg/m3	100
SG6-5	Trichloroethene	1,000		µg/m3	100	SG8-5	Toluene	100		µg/m3	100
SG8-5	Trichloroethene	500		µg/m3	100	SG8-15	Tetrachloroethene	100		µg/m3	100
SG8-15	Trichloroethene	600		µg/m3	100	SG10-5	Toluene	400		µg/m3	100
SG10-5	Trichloroethene	300		µg/m3	100	SG10-15	Tetrachloroethene	100		µg/m3	100
SG10-15	Trichloroethene	300		µg/m3	100	SG11-5	Tetrachloroethene	200		µg/m3	100
SG11-5	Toluene	100		µg/m3	100	SG11-5	Trichloroethene	3,400		µg/m3	100
SG11-15	Tetrachloroethene	800		µg/m3	100	SG11-15	Toluene	100		µg/m3	100
SG11-15	Trichloroethene	6,300		µg/m3	100	SG12-5	Trichloroethene	200		µg/m3	100
SG12-15	Tetrachloroethene	300		µg/m3	100	SG12-15	Trichloroethene	2,700		µg/m3	100
SG14-5	Tetrachloroethene	100		µg/m3	100	SG14-5	Trichloroethene	500		µg/m3	100
SG14-15	Tetrachloroethene	1,600		µg/m3	100	SG14-15	Trichloroethene	7,300		µg/m3	100
SG15-5	Toluene	100		µg/m3	100	SG15-5	Trichloroethene	400		µg/m3	100
SG15-5 DUP	Toluene	100		µg/m3	100	SG15-5 DUP	Trichloroethene	300		µg/m3	100
SG6A-15	Trichloroethene	200		µg/m3	100						

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CASE NARRATIVE

Authorized Signature Name / Title (print)

Ken Zheng, President

Signature / Date

Ken Zheng, President
02/19/2014 13:17:18

Laboratory Job No. (Certificate of Analysis No.)

1402-00063

Project Name / No.

MBK HOMES - NEWPORT BEACH (1560-1570 Placentia
Ave.) 026-14-001-1

Dates Sampled (from/to)

02/18/14 To 02/18/14

Dates Received (from/to)

02/18/14 To 02/18/14

Dates Reported (from/to)

02/19/14 To 2/19/2014

Chains of Custody Received

Yes

Comments:

Subcontracting

Organic Analyses

No analyses sub-contracted

Sample Condition(s)

All samples intact



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Laboratory Job# 1402-00063

Positive Results (Organic Compounds)											
Sample	Analyte	Result	Qual	Units	RL	Sample	Analyte	Result	Qual	Units	RL
SG6-15	Toluene	0.1		µg/L	0.10	SG6-15	Trichloroethene	0.35		µg/L	0.10
SG6A-5	Trichloroethene	0.1		µg/L	0.10	SG9-5	Tetrachloroethene	0.6		µg/L	0.10
SG9-5	Toluene	0.1		µg/L	0.10	SG9-5	Trichloroethene	3.3		µg/L	0.10
SG9-15	Tetrachloroethene	1.4		µg/L	0.10	SG9-15	Trichloroethene	7.6		µg/L	0.10
SG6-5	Tetrachloroethene	0.2		µg/L	0.10	SG6-5	Toluene	0.1		µg/L	0.10
SG6-5	Trichloroethene	1.0		µg/L	0.10	SG8-5	Toluene	0.1		µg/L	0.10
SG8-5	Trichloroethene	0.5		µg/L	0.10	SG8-15	Tetrachloroethene	0.1		µg/L	0.10
SG8-15	Trichloroethene	0.6		µg/L	0.10	SG10-5	Toluene	0.4		µg/L	0.10
SG10-5	Trichloroethene	0.3		µg/L	0.10	SG10-15	Tetrachloroethene	0.1		µg/L	0.10
SG10-15	Trichloroethene	0.3		µg/L	0.10	SG11-5	Tetrachloroethene	0.2		µg/L	0.10
SG11-5	Toluene	0.1		µg/L	0.10	SG11-5	Trichloroethene	3.4		µg/L	0.10
SG11-15	Tetrachloroethene	0.8		µg/L	0.10	SG11-15	Toluene	0.1		µg/L	0.10
SG11-15	Trichloroethene	6.3		µg/L	0.10	SG12-5	Trichloroethene	0.2		µg/L	0.10
SG12-15	Tetrachloroethene	0.3		µg/L	0.10	SG12-15	Trichloroethene	2.7		µg/L	0.10
SG14-5	Tetrachloroethene	0.1		µg/L	0.10	SG14-5	Trichloroethene	0.5		µg/L	0.10
SG14-15	Tetrachloroethene	1.6		µg/L	0.10	SG14-15	Trichloroethene	7.3		µg/L	0.10
SG15-5	Toluene	0.1		µg/L	0.10	SG15-5	Trichloroethene	0.4		µg/L	0.10
SG15-5 DUP	Toluene	0.1		µg/L	0.10	SG15-5 DUP	Trichloroethene	0.3		µg/L	0.10
SG6A-15	Trichloroethene	0.2		µg/L	0.10						



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CERTIFICATE OF ANALYSIS

1402-00063

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/19/14
Date Received 02/18/14
Invoice No. 71359
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 001 SG6-15						Date & Time Sampled:			02/18/14	@ 10:10
Sample Matrix: Soil Vapor										
[VOCs by GCMS]										
Acetone	<5.0		µg/L	EPA 8260B	1	5.0	10	02/18/14	8:30	HXE
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Benzene	<0.036		µg/L	EPA 8260B	1	0.040	0.050	02/18/14	8:30	HXE
Bromobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromoform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromomethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
Chlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloroform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloromethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dibromoethane (EDB)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dibromo-3-Chloropropane	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Dibromomethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE



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CERTIFICATE OF ANALYSIS

1402-00063

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/19/14
Date Received 02/18/14
Invoice No. 71359
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 001 SG6-15					Date & Time Sampled:		02/18/14	@	10:10	
Sample Matrix: Soil Vapor										
.....continued										
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Ethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
2-Hexanone	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Methylene Chloride	<1.0		µg/L	EPA 8260B	1	1.0	2.0	02/18/14	8:30	HXE
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Naphthalene	<0.032		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Styrene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,2,2-Tetrachloroethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
Tetrachloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Toluene	0.1		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE

The data and information on this, and other accompanying documents, represent only the sample(s) analyzed and is rendered upon condition that it is not to be reproduced, wholly or in part, for advertising or other purposes without approval from the laboratory.

USDA-EPA-NIOSH Testing Food Sanitation Consulting Chemical and Microbiological Analyses and Research



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CERTIFICATE OF ANALYSIS

1402-00063

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/19/14
Date Received 02/18/14
Invoice No. 71359
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 001 SG6-15					Date & Time Sampled:		02/18/14	@	10:10	
Sample Matrix: Soil Vapor										
.....continued										
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichloroethene	0.35		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichlorotrifluoroethane	<0.20		µg/L	EPA 8260B	1	0.20	0.20	02/18/14	8:30	HXE
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Vinyl Chloride	<0.013		µg/L	EPA 8260B	1	0.010	0.050	02/18/14	8:30	HXE
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
o-Xylene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
[VOC Vapor Sampling Tracer]										
Isopropanol (IPA)	<10		µg/L	EPA 8260B	1	10	10	02/18/14	8:30	HXE
[VOC Surrogates]										
Dibromofluoromethane	112		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Toluene-D8	110		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Bromofluorobenzene	90		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Sample: 002 SG6A-5					Date & Time Sampled:		02/18/14	@	10:59	
Sample Matrix: Soil Vapor										
[VOCs by GCMS]										
Acetone	<5.0		µg/L	EPA 8260B	1	5.0	10	02/18/14	8:30	HXE
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Benzene	<0.036		µg/L	EPA 8260B	1	0.040	0.050	02/18/14	8:30	HXE
Bromobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromoform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromomethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE



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CERTIFICATE OF ANALYSIS

1402-00063

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/19/14
Date Received 02/18/14
Invoice No. 71359
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 002 SG6A-5					Date & Time Sampled:		02/18/14	@	10:59	
Sample Matrix: Soil Vapor										
.....continued										
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
Chlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloroform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloromethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dibromoethane (EDB)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dibromo-3-Chloropropane	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Dibromomethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE



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CERTIFICATE OF ANALYSIS

1402-00063

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/19/14
Date Received 02/18/14
Invoice No. 71359
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 002 SG6A-5					Date & Time Sampled:		02/18/14	@	10:59	
Sample Matrix: Soil Vapor										
.....continued										
Ethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
2-Hexanone	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Methylene Chloride	<1.0		µg/L	EPA 8260B	1	1.0	2.0	02/18/14	8:30	HXE
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Naphthalene	<0.032		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Styrene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,2,2-Tetrachloroethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
Tetrachloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Toluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichloroethene	0.1		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichlorotrifluoroethane	<0.20		µg/L	EPA 8260B	1	0.20	0.20	02/18/14	8:30	HXE
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Vinyl Chloride	<0.013		µg/L	EPA 8260B	1	0.010	0.050	02/18/14	8:30	HXE
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
o-Xylene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
[VOC Vapor Sampling Tracer]										



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CERTIFICATE OF ANALYSIS

1402-00063

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/19/14
Date Received 02/18/14
Invoice No. 71359
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 002 SG6A-5					Date & Time Sampled:			02/18/14	@	10:59
Sample Matrix: Soil Vapor										
.....continued										
Isopropanol (IPA)	<10		µg/L	EPA 8260B	1	10	10	02/18/14	8:30	HXE
[VOC Surrogates]										
Dibromofluoromethane	107		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Toluene-D8	102		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Bromofluorobenzene	87		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Sample: 003 SG9-5					Date & Time Sampled:			02/18/14	@	11:37
Sample Matrix: Soil Vapor										
[VOCs by GCMS]										
Acetone	<5.0		µg/L	EPA 8260B	1	5.0	10	02/18/14	8:30	HXE
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Benzene	<0.036		µg/L	EPA 8260B	1	0.040	0.050	02/18/14	8:30	HXE
Bromobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromoform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromomethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
Chlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloroform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloromethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE

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Date Reported 02/19/14
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Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 003 SG9-5					Date & Time Sampled:		02/18/14	@	11:37	
Sample Matrix: Soil Vapor										
.....continued										
1,2-Dibromoethane (EDB)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dibromo-3-Chloropropane	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Dibromomethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Ethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
2-Hexanone	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Methylene Chloride	<1.0		µg/L	EPA 8260B	1	1.0	2.0	02/18/14	8:30	HXE
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Naphthalene	<0.032		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE



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ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/19/14
Date Received 02/18/14
Invoice No. 71359
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 003 SG9-5					Date & Time Sampled:		02/18/14	@	11:37	
Sample Matrix: Soil Vapor										
.....continued										
Styrene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,2,2-Tetrachloroethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
Tetrachloroethene	0.6		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Toluene	0.1		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichloroethene	3.3		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichlorotrifluoroethane	<0.20		µg/L	EPA 8260B	1	0.20	0.20	02/18/14	8:30	HXE
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Vinyl Chloride	<0.013		µg/L	EPA 8260B	1	0.010	0.050	02/18/14	8:30	HXE
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
o-Xylene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
[VOC Vapor Sampling Tracer]										
Isopropanol (IPA)	<10		µg/L	EPA 8260B	1	10	10	02/18/14	8:30	HXE
[VOC Surrogates]										
Dibromofluoromethane	108		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Toluene-D8	106		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Bromofluorobenzene	86		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Sample: 004 SG9-15					Date & Time Sampled:		02/18/14	@	12:06	
Sample Matrix: Soil Vapor										
[VOCs by GCMS]										
Acetone	<5.0		µg/L	EPA 8260B	1	5.0	10	02/18/14	8:30	HXE
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Benzene	<0.036		µg/L	EPA 8260B	1	0.040	0.050	02/18/14	8:30	HXE

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CERTIFICATE OF ANALYSIS

1402-00063

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Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 004 SG9-15					Date & Time Sampled:		02/18/14	@	12:06	
Sample Matrix: Soil Vapor										
.....continued										
Bromobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromoform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromomethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
Chlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloroform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloromethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dibromoethane (EDB)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dibromo-3-Chloropropane	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Dibromomethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE



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Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 004 SG9-15					Date & Time Sampled:		02/18/14	@	12:06	
Sample Matrix: Soil Vapor										
.....continued										
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Ethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
2-Hexanone	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Methylene Chloride	<1.0		µg/L	EPA 8260B	1	1.0	2.0	02/18/14	8:30	HXE
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Naphthalene	<0.032		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Styrene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,2,2-Tetrachloroethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
Tetrachloroethene	1.4		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Toluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichloroethene	7.6		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE



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Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 004 SG9-15					Date & Time Sampled:			02/18/14	@	12:06
Sample Matrix: Soil Vapor										
.....continued										
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichlorotrifluoroethane	<0.20		µg/L	EPA 8260B	1	0.20	0.20	02/18/14	8:30	HXE
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Vinyl Chloride	<0.013		µg/L	EPA 8260B	1	0.010	0.050	02/18/14	8:30	HXE
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
o-Xylene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
[VOC Vapor Sampling Tracer]										
Isopropanol (IPA)	<10		µg/L	EPA 8260B	1	10	10	02/18/14	8:30	HXE
[VOC Surrogates]										
Dibromofluoromethane	112		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Toluene-D8	116		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Bromofluorobenzene	93		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Sample: 005 SG6-5					Date & Time Sampled:			02/18/14	@	12:26
Sample Matrix: Soil Vapor										
[VOCs by GCMS]										
Acetone	<5.0		µg/L	EPA 8260B	1	5.0	10	02/18/14	8:30	HXE
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Benzene	<0.036		µg/L	EPA 8260B	1	0.040	0.050	02/18/14	8:30	HXE
Bromobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromoform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromomethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE

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Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 005 SG6-5					Date & Time Sampled:		02/18/14	@	12:26	
Sample Matrix: Soil Vapor										
.....continued										
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
Chlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloroform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloromethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dibromoethane (EDB)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dibromo-3-Chloropropane	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Dibromomethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Ethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE



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CERTIFICATE OF ANALYSIS

1402-00063

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/19/14
Date Received 02/18/14
Invoice No. 71359
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 005 SG6-5					Date & Time Sampled:		02/18/14	@	12:26	
Sample Matrix: Soil Vapor										
.....continued										
2-Hexanone	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Methylene Chloride	<1.0		µg/L	EPA 8260B	1	1.0	2.0	02/18/14	8:30	HXE
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Naphthalene	<0.032		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Styrene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,2,2-Tetrachloroethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
Tetrachloroethene	0.2		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Toluene	0.1		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichloroethene	1.0		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichlorotrifluoroethane	<0.20		µg/L	EPA 8260B	1	0.20	0.20	02/18/14	8:30	HXE
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Vinyl Chloride	<0.013		µg/L	EPA 8260B	1	0.010	0.050	02/18/14	8:30	HXE
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
o-Xylene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
[VOC Vapor Sampling Tracer]										
Isopropanol (IPA)	<10		µg/L	EPA 8260B	1	10	10	02/18/14	8:30	HXE
[VOC Surrogates]										
Dibromofluoromethane	114		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE

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PALOS VERDES PENINSULA, CA 90274

Date Reported 02/19/14
Date Received 02/18/14
Invoice No. 71359
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 005 SG6-5 Sample Matrix: Soil Vapor continued								Date & Time Sampled: 02/18/14	@ 12:26	
Toluene-D8	110		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Bromofluorobenzene	92		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Sample: 006 SG8-5 Sample Matrix: Soil Vapor								Date & Time Sampled: 02/18/14	@ 12:49	
[VOCs by GCMS]										
Acetone	<5.0		µg/L	EPA 8260B	1	5.0	10	02/18/14	8:30	HXE
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Benzene	<0.036		µg/L	EPA 8260B	1	0.040	0.050	02/18/14	8:30	HXE
Bromobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromoform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromomethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
Chlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloroform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloromethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dibromoethane (EDB)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dibromo-3-Chloropropane	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Dibromomethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE

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CERTIFICATE OF ANALYSIS

1402-00063

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/19/14
Date Received 02/18/14
Invoice No. 71359
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 006 SG8-5					Date & Time Sampled:		02/18/14	@	12:49	
Sample Matrix: Soil Vapor										
.....continued										
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Ethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
2-Hexanone	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Methylene Chloride	<1.0		µg/L	EPA 8260B	1	1.0	2.0	02/18/14	8:30	HXE
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Naphthalene	<0.032		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Styrene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,2,2-Tetrachloroethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE



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Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 006 SG8-5					Date & Time Sampled:			02/18/14	@	12:49
Sample Matrix: Soil Vapor										
.....continued										
Tetrachloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Toluene	0.1		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichloroethene	0.5		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichlorotrifluoroethane	<0.20		µg/L	EPA 8260B	1	0.20	0.20	02/18/14	8:30	HXE
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Vinyl Chloride	<0.013		µg/L	EPA 8260B	1	0.010	0.050	02/18/14	8:30	HXE
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
o-Xylene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
[VOC Vapor Sampling Tracer]										
Isopropanol (IPA)	<10		µg/L	EPA 8260B	1	10	10	02/18/14	8:30	HXE
[VOC Surrogates]										
Dibromofluoromethane	110		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Toluene-D8	109		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Bromofluorobenzene	88		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Sample: 007 SG8-15					Date & Time Sampled:			02/18/14	@	12:50
Sample Matrix: Soil Vapor										
[VOCs by GCMS]										
Acetone	<5.0		µg/L	EPA 8260B	1	5.0	10	02/18/14	8:30	HXE
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Benzene	<0.036		µg/L	EPA 8260B	1	0.040	0.050	02/18/14	8:30	HXE
Bromobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE



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PALOS VERDES PENINSULA, CA 90274

Date Reported 02/19/14
Date Received 02/18/14
Invoice No. 71359
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 007 SG8-15					Date & Time Sampled:		02/18/14	@	12:50	
Sample Matrix: Soil Vapor										
.....continued										
Bromoform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromomethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
Chlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloroform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloromethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dibromoethane (EDB)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dibromo-3-Chloropropane	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Dibromomethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE



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CERTIFICATE OF ANALYSIS

1402-00063

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/19/14
Date Received 02/18/14
Invoice No. 71359
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 007 SG8-15					Date & Time Sampled:		02/18/14	@	12:50	
Sample Matrix: Soil Vapor										
.....continued										
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Ethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
2-Hexanone	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Methylene Chloride	<1.0		µg/L	EPA 8260B	1	1.0	2.0	02/18/14	8:30	HXE
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Naphthalene	<0.032		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Styrene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,2,2-Tetrachloroethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
Tetrachloroethene	0.1		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Toluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichloroethene	0.6		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichlorotrifluoroethane	<0.20		µg/L	EPA 8260B	1	0.20	0.20	02/18/14	8:30	HXE
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE



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CERTIFICATE OF ANALYSIS

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ECOBILITY CORPORATION
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Date Reported 02/19/14
Date Received 02/18/14
Invoice No. 71359
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 007 SG8-15					Date & Time Sampled:			02/18/14	@	12:50
Sample Matrix: Soil Vapor										
.....continued										
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Vinyl Chloride	<0.013		µg/L	EPA 8260B	1	0.010	0.050	02/18/14	8:30	HXE
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
o-Xylene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
[VOC Vapor Sampling Tracer]										
Isopropanol (IPA)	<10		µg/L	EPA 8260B	1	10	10	02/18/14	8:30	HXE
[VOC Surrogates]										
Dibromofluoromethane	106		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Toluene-D8	102		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Bromofluorobenzene	85		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Sample: 008 SG10-5					Date & Time Sampled:			02/18/14	@	13:00
Sample Matrix: Soil Vapor										
[VOCs by GCMS]										
Acetone	<5.0		µg/L	EPA 8260B	1	5.0	10	02/18/14	8:30	HXE
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Benzene	<0.036		µg/L	EPA 8260B	1	0.040	0.050	02/18/14	8:30	HXE
Bromobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromoform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromomethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
Chlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE

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Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 008 SG10-5					Date & Time Sampled:		02/18/14	@	13:00	
Sample Matrix: Soil Vapor										
.....continued										
Chloroform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloromethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dibromoethane (EDB)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dibromo-3-Chloropropane	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Dibromomethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Ethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
2-Hexanone	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE



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Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 008 SG10-5					Date & Time Sampled:		02/18/14	@	13:00	
Sample Matrix: Soil Vapor										
.....continued										
Methylene Chloride	<1.0		µg/L	EPA 8260B	1	1.0	2.0	02/18/14	8:30	HXE
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Naphthalene	<0.032		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Styrene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,2,2-Tetrachloroethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
Tetrachloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Toluene	0.4		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichloroethene	0.3		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichlorotrifluoroethane	<0.20		µg/L	EPA 8260B	1	0.20	0.20	02/18/14	8:30	HXE
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Vinyl Chloride	<0.013		µg/L	EPA 8260B	1	0.010	0.050	02/18/14	8:30	HXE
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
o-Xylene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
[VOC Vapor Sampling Tracer]										
Isopropanol (IPA)	<10		µg/L	EPA 8260B	1	10	10	02/18/14	8:30	HXE
[VOC Surrogates]										
Dibromofluoromethane	107		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Toluene-D8	106		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Bromofluorobenzene	87		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE



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CERTIFICATE OF ANALYSIS

1402-00063

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/19/14
Date Received 02/18/14
Invoice No. 71359
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 009 SG10-15					Date & Time Sampled:			02/18/14	@	13:01
Sample Matrix: Soil Vapor										
[VOCs by GCMS]										
Acetone	<5.0		µg/L	EPA 8260B	1	5.0	10	02/18/14	8:30	HXE
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Benzene	<0.036		µg/L	EPA 8260B	1	0.040	0.050	02/18/14	8:30	HXE
Bromobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromoform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromomethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
Chlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloroform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloromethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dibromoethane (EDB)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dibromo-3-Chloropropane	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Dibromomethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE



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CERTIFICATE OF ANALYSIS

1402-00063

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/19/14
Date Received 02/18/14
Invoice No. 71359
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 009 SG10-15					Date & Time Sampled:		02/18/14	@	13:01	
Sample Matrix: Soil Vapor										
.....continued										
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Ethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
2-Hexanone	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Methylene Chloride	<1.0		µg/L	EPA 8260B	1	1.0	2.0	02/18/14	8:30	HXE
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Naphthalene	<0.032		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Styrene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,2,2-Tetrachloroethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
Tetrachloroethene	0.1		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Toluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE

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CERTIFICATE OF ANALYSIS

1402-00063

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/19/14
Date Received 02/18/14
Invoice No. 71359
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 009 SG10-15					Date & Time Sampled:			02/18/14	@	13:01
Sample Matrix: Soil Vapor										
.....continued										
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichloroethene	0.3		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichlorotrifluoroethane	<0.20		µg/L	EPA 8260B	1	0.20	0.20	02/18/14	8:30	HXE
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Vinyl Chloride	<0.013		µg/L	EPA 8260B	1	0.010	0.050	02/18/14	8:30	HXE
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
o-Xylene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
[VOC Vapor Sampling Tracer]										
Isopropanol (IPA)	<10		µg/L	EPA 8260B	1	10	10	02/18/14	8:30	HXE
[VOC Surrogates]										
Dibromofluoromethane	107		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Toluene-D8	104		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Bromofluorobenzene	89		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Sample: 010 SG11-5					Date & Time Sampled:			02/18/14	@	13:14
Sample Matrix: Soil Vapor										
[VOCs by GCMS]										
Acetone	<5.0		µg/L	EPA 8260B	1	5.0	10	02/18/14	8:30	HXE
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Benzene	<0.036		µg/L	EPA 8260B	1	0.040	0.050	02/18/14	8:30	HXE
Bromobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromoform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromomethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE



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Invoice No. 71359
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Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 010 SG11-5					Date & Time Sampled:		02/18/14	@	13:14	
Sample Matrix: Soil Vapor										
.....continued										
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
Chlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloroform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloromethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dibromoethane (EDB)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dibromo-3-Chloropropane	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Dibromomethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE



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ELAP#s	2789
	2790
	2122

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CERTIFICATE OF ANALYSIS

1402-00063

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/19/14
Date Received 02/18/14
Invoice No. 71359
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 010 SG11-5					Date & Time Sampled:		02/18/14	@	13:14	
Sample Matrix: Soil Vapor										
.....continued										
Ethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
2-Hexanone	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Methylene Chloride	<1.0		µg/L	EPA 8260B	1	1.0	2.0	02/18/14	8:30	HXE
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Naphthalene	<0.032		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Styrene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,2,2-Tetrachloroethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
Tetrachloroethene	0.2		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Toluene	0.1		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichloroethene	3.4		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichlorotrifluoroethane	<0.20		µg/L	EPA 8260B	1	0.20	0.20	02/18/14	8:30	HXE
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Vinyl Chloride	<0.013		µg/L	EPA 8260B	1	0.010	0.050	02/18/14	8:30	HXE
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
o-Xylene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
[VOC Vapor Sampling Tracer]										



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Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 010 SG11-5					Date & Time Sampled:			02/18/14	@	13:14
Sample Matrix: Soil Vapor										
.....continued										
Isopropanol (IPA)	<10		µg/L	EPA 8260B	1	10	10	02/18/14	8:30	HXE
[VOC Surrogates]										
Dibromofluoromethane	104		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Toluene-D8	99		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Bromofluorobenzene	85		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Sample: 011 SG11-15					Date & Time Sampled:			02/18/14	@	13:15
Sample Matrix: Soil Vapor										
[VOCs by GCMS]										
Acetone	<5.0		µg/L	EPA 8260B	1	5.0	10	02/18/14	8:30	HXE
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Benzene	<0.036		µg/L	EPA 8260B	1	0.040	0.050	02/18/14	8:30	HXE
Bromobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromoform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromomethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
Chlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloroform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloromethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE

The data and information on this, and other accompanying documents, represent only the sample(s) analyzed and is rendered upon condition that it is not to be reproduced, wholly or in part, for advertising or other purposes without approval from the laboratory.

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Invoice No. 71359
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 011 SG11-15					Date & Time Sampled:		02/18/14	@	13:15	
Sample Matrix: Soil Vapor										
.....continued										
1,2-Dibromoethane (EDB)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dibromo-3-Chloropropane	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Dibromomethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Ethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
2-Hexanone	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Methylene Chloride	<1.0		µg/L	EPA 8260B	1	1.0	2.0	02/18/14	8:30	HXE
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Naphthalene	<0.032		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE



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Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 011 SG11-15					Date & Time Sampled:			02/18/14	@	13:15
Sample Matrix: Soil Vapor										
.....continued										
Styrene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,2,2-Tetrachloroethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
Tetrachloroethene	0.8		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Toluene	0.1		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichloroethene	6.3		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichlorotrifluoroethane	<0.20		µg/L	EPA 8260B	1	0.20	0.20	02/18/14	8:30	HXE
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Vinyl Chloride	<0.013		µg/L	EPA 8260B	1	0.010	0.050	02/18/14	8:30	HXE
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
o-Xylene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
[VOC Vapor Sampling Tracer]										
Isopropanol (IPA)	<10		µg/L	EPA 8260B	1	10	10	02/18/14	8:30	HXE
[VOC Surrogates]										
Dibromofluoromethane	108		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Toluene-D8	102		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Bromofluorobenzene	87		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Sample: 012 SG12-5					Date & Time Sampled:			02/18/14	@	13:26
Sample Matrix: Soil Vapor										
[VOCs by GCMS]										
Acetone	<5.0		µg/L	EPA 8260B	1	5.0	10	02/18/14	8:30	HXE
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Benzene	<0.036		µg/L	EPA 8260B	1	0.040	0.050	02/18/14	8:30	HXE



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Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 012 SG12-5					Date & Time Sampled:		02/18/14	@	13:26	
Sample Matrix: Soil Vapor										
.....continued										
Bromobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromoform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromomethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
Chlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloroform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloromethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dibromoethane (EDB)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dibromo-3-Chloropropane	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Dibromomethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE



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CERTIFICATE OF ANALYSIS

1402-00063

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/19/14
Date Received 02/18/14
Invoice No. 71359
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 012 SG12-5					Date & Time Sampled:		02/18/14	@	13:26	
Sample Matrix: Soil Vapor										
.....continued										
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Ethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
2-Hexanone	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Methylene Chloride	<1.0		µg/L	EPA 8260B	1	1.0	2.0	02/18/14	8:30	HXE
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Naphthalene	<0.032		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Styrene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,2,2-Tetrachloroethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
Tetrachloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Toluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichloroethene	0.2		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE



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1402-00063

ECOBILITY CORPORATION
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PALOS VERDES PENINSULA, CA 90274

Date Reported 02/19/14
Date Received 02/18/14
Invoice No. 71359
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 012 SG12-5					Date & Time Sampled:		02/18/14	@	13:26	
Sample Matrix: Soil Vapor										
.....continued										
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichlorotrifluoroethane	<0.20		µg/L	EPA 8260B	1	0.20	0.20	02/18/14	8:30	HXE
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Vinyl Chloride	<0.013		µg/L	EPA 8260B	1	0.010	0.050	02/18/14	8:30	HXE
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
o-Xylene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
[VOC Vapor Sampling Tracer]										
Isopropanol (IPA)	<10		µg/L	EPA 8260B	1	10	10	02/18/14	8:30	HXE
[VOC Surrogates]										
Dibromofluoromethane	106		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Toluene-D8	107		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Bromofluorobenzene	91		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Sample: 013 SG12-15					Date & Time Sampled:		02/18/14	@	13:26	
Sample Matrix: Soil Vapor										
[VOCs by GCMS]										
Acetone	<5.0		µg/L	EPA 8260B	1	5.0	10	02/18/14	8:30	HXE
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Benzene	<0.036		µg/L	EPA 8260B	1	0.040	0.050	02/18/14	8:30	HXE
Bromobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromoform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromomethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE

The data and information on this, and other accompanying documents, represent only the sample(s) analyzed and is rendered upon condition that it is not to be reproduced, wholly or in part, for advertising or other purposes without approval from the laboratory.

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ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/19/14
Date Received 02/18/14
Invoice No. 71359
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 013 SG12-15					Date & Time Sampled:			02/18/14	@	13:26
Sample Matrix: Soil Vapor										
.....continued										
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
Chlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloroform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloromethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dibromoethane (EDB)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dibromo-3-Chloropropane	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Dibromomethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Ethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE



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Date Reported 02/19/14
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Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 013 SG12-15					Date & Time Sampled:		02/18/14	@	13:26	
Sample Matrix: Soil Vapor										
.....continued										
2-Hexanone	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Methylene Chloride	<1.0		µg/L	EPA 8260B	1	1.0	2.0	02/18/14	8:30	HXE
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Naphthalene	<0.032		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Styrene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,2,2-Tetrachloroethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
Tetrachloroethene	0.3		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Toluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichloroethene	2.7		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichlorotrifluoroethane	<0.20		µg/L	EPA 8260B	1	0.20	0.20	02/18/14	8:30	HXE
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Vinyl Chloride	<0.013		µg/L	EPA 8260B	1	0.010	0.050	02/18/14	8:30	HXE
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
o-Xylene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
[VOC Vapor Sampling Tracer]										
Isopropanol (IPA)	<10		µg/L	EPA 8260B	1	10	10	02/18/14	8:30	HXE
[VOC Surrogates]										
Dibromofluoromethane	107		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE



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CERTIFICATE OF ANALYSIS

1402-00063

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/19/14
Date Received 02/18/14
Invoice No. 71359
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 013 SG12-15					Date & Time Sampled:			02/18/14	@	13:26
Sample Matrix: Soil Vapor										
.....continued										
Toluene-D8	101		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Bromofluorobenzene	86		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Sample: 014 SG14-5					Date & Time Sampled:			02/18/14	@	13:42
Sample Matrix: Soil Vapor										
[VOCs by GCMS]										
Acetone	<5.0		µg/L	EPA 8260B	1	5.0	10	02/18/14	8:30	HXE
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Benzene	<0.036		µg/L	EPA 8260B	1	0.040	0.050	02/18/14	8:30	HXE
Bromobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromoform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromomethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
Chlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloroform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloromethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dibromoethane (EDB)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dibromo-3-Chloropropane	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Dibromomethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE

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Invoice No. 71359
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 014 SG14-5					Date & Time Sampled:		02/18/14	@	13:42	
Sample Matrix: Soil Vapor										
.....continued										
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Ethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
2-Hexanone	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Methylene Chloride	<1.0		µg/L	EPA 8260B	1	1.0	2.0	02/18/14	8:30	HXE
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Naphthalene	<0.032		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Styrene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,2,2-Tetrachloroethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE



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Customer P.O. 026-14-001-1

Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 014 SG14-5					Date & Time Sampled:			02/18/14	@	13:42
Sample Matrix: Soil Vapor										
.....continued										
Tetrachloroethene	0.1		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Toluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichloroethene	0.5		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichlorotrifluoroethane	<0.20		µg/L	EPA 8260B	1	0.20	0.20	02/18/14	8:30	HXE
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Vinyl Chloride	<0.013		µg/L	EPA 8260B	1	0.010	0.050	02/18/14	8:30	HXE
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
o-Xylene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
[VOC Vapor Sampling Tracer]										
Isopropanol (IPA)	<10		µg/L	EPA 8260B	1	10	10	02/18/14	8:30	HXE
[VOC Surrogates]										
Dibromofluoromethane	107		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Toluene-D8	102		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Bromofluorobenzene	86		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Sample: 015 SG14-15					Date & Time Sampled:			02/18/14	@	13:43
Sample Matrix: Soil Vapor										
[VOCs by GCMS]										
Acetone	<5.0		µg/L	EPA 8260B	1	5.0	10	02/18/14	8:30	HXE
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Benzene	<0.036		µg/L	EPA 8260B	1	0.040	0.050	02/18/14	8:30	HXE
Bromobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE



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Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 015 SG14-15					Date & Time Sampled:		02/18/14	@	13:43	
Sample Matrix: Soil Vapor										
.....continued										
Bromoform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromomethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
Chlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloroform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloromethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dibromoethane (EDB)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dibromo-3-Chloropropane	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Dibromomethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE



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Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 015 SG14-15					Date & Time Sampled:		02/18/14	@	13:43	
Sample Matrix: Soil Vapor										
.....continued										
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Ethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
2-Hexanone	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Methylene Chloride	<1.0		µg/L	EPA 8260B	1	1.0	2.0	02/18/14	8:30	HXE
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Naphthalene	<0.032		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Styrene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,2,2-Tetrachloroethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
Tetrachloroethene	1.6		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Toluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichloroethene	7.3		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichlorotrifluoroethane	<0.20		µg/L	EPA 8260B	1	0.20	0.20	02/18/14	8:30	HXE
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE



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CERTIFICATE OF ANALYSIS

1402-00063

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/19/14
Date Received 02/18/14
Invoice No. 71359
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 015 SG14-15					Date & Time Sampled:			02/18/14	@	13:43
Sample Matrix: Soil Vapor										
.....continued										
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Vinyl Chloride	<0.013		µg/L	EPA 8260B	1	0.010	0.050	02/18/14	8:30	HXE
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
o-Xylene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
[VOC Vapor Sampling Tracer]										
Isopropanol (IPA)	<10		µg/L	EPA 8260B	1	10	10	02/18/14	8:30	HXE
[VOC Surrogates]										
Dibromofluoromethane	107		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Toluene-D8	103		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Bromofluorobenzene	88		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Sample: 016 SG15-5					Date & Time Sampled:			02/18/14	@	13:52
Sample Matrix: Soil Vapor										
[VOCs by GCMS]										
Acetone	<5.0		µg/L	EPA 8260B	1	5.0	10	02/18/14	8:30	HXE
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Benzene	<0.036		µg/L	EPA 8260B	1	0.040	0.050	02/18/14	8:30	HXE
Bromobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromoform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromomethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
Chlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE

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PALOS VERDES PENINSULA, CA 90274

Date Reported 02/19/14
Date Received 02/18/14
Invoice No. 71359
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 016 SG15-5					Date & Time Sampled:		02/18/14	@	13:52	
Sample Matrix: Soil Vapor										
.....continued										
Chloroform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloromethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dibromoethane (EDB)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dibromo-3-Chloropropane	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Dibromomethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Ethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
2-Hexanone	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE



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CERTIFICATE OF ANALYSIS

1402-00063

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/19/14
Date Received 02/18/14
Invoice No. 71359
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 016 SG15-5					Date & Time Sampled:		02/18/14	@	13:52	
Sample Matrix: Soil Vapor										
.....continued										
Methylene Chloride	<1.0		µg/L	EPA 8260B	1	1.0	2.0	02/18/14	8:30	HXE
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Naphthalene	<0.032		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Styrene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,2,2-Tetrachloroethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
Tetrachloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Toluene	0.1		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichloroethene	0.4		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichlorotrifluoroethane	<0.20		µg/L	EPA 8260B	1	0.20	0.20	02/18/14	8:30	HXE
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Vinyl Chloride	<0.013		µg/L	EPA 8260B	1	0.010	0.050	02/18/14	8:30	HXE
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
o-Xylene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
[VOC Vapor Sampling Tracer]										
Isopropanol (IPA)	<10		µg/L	EPA 8260B	1	10	10	02/18/14	8:30	HXE
[VOC Surrogates]										
Dibromofluoromethane	110		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Toluene-D8	106		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Bromofluorobenzene	87		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE



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Invoice No. 71359
Cust # E083
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Customer P.O. 026-14-001-1

Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 017 SG15-5 DUP					Date & Time Sampled:			02/18/14	@	13:52
Sample Matrix: Soil Vapor										
[VOCs by GCMS]										
Acetone	<5.0		µg/L	EPA 8260B	1	5.0	10	02/18/14	8:30	HXE
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Benzene	<0.036		µg/L	EPA 8260B	1	0.040	0.050	02/18/14	8:30	HXE
Bromobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromoform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromomethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
Chlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloroform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloromethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dibromoethane (EDB)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dibromo-3-Chloropropane	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Dibromomethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE



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CERTIFICATE OF ANALYSIS

1402-00063

ECOBILITY CORPORATION
VALERIE MARSHALL
P.O. BOX 2651
PALOS VERDES PENINSULA, CA 90274

Date Reported 02/19/14
Date Received 02/18/14
Invoice No. 71359
Cust # E083
Permit Number
Customer P.O. 026-14-001-1

Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 017 SG15-5 DUP					Date & Time Sampled:		02/18/14	@	13:52	
Sample Matrix: Soil Vapor										
.....continued										
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Ethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
2-Hexanone	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Methylene Chloride	<1.0		µg/L	EPA 8260B	1	1.0	2.0	02/18/14	8:30	HXE
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Naphthalene	<0.032		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Styrene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,2,2-Tetrachloroethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
Tetrachloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Toluene	0.1		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE



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Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 017 SG15-5 DUP					Date & Time Sampled:			02/18/14	@	13:52
Sample Matrix: Soil Vapor										
.....continued										
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichloroethene	0.3		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichlorotrifluoroethane	<0.20		µg/L	EPA 8260B	1	0.20	0.20	02/18/14	8:30	HXE
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Vinyl Chloride	<0.013		µg/L	EPA 8260B	1	0.010	0.050	02/18/14	8:30	HXE
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
o-Xylene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
[VOC Vapor Sampling Tracer]										
Isopropanol (IPA)	<10		µg/L	EPA 8260B	1	10	10	02/18/14	8:30	HXE
[VOC Surrogates]										
Dibromofluoromethane	108		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Toluene-D8	105		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Bromofluorobenzene	90		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Sample: 018 SG6A-15					Date & Time Sampled:			02/18/14	@	12:34
Sample Matrix: Soil Vapor										
[VOCs by GCMS]										
Acetone	<5.0		µg/L	EPA 8260B	1	5.0	10	02/18/14	8:30	HXE
t-Amyl Methyl Ether (TAME)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Benzene	<0.036		µg/L	EPA 8260B	1	0.040	0.050	02/18/14	8:30	HXE
Bromobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromodichloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromoform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Bromomethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
t-Butanol (TBA)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
2-Butanone (MEK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
n-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE



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Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 018 SG6A-15					Date & Time Sampled:		02/18/14 @ 12:34			
Sample Matrix: Soil Vapor										
.....continued										
sec-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
tert-Butylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Carbon Disulfide	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Carbon Tetrachloride	<0.025		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
Chlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloroform	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Chloromethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
2-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Chlorotoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dibromochloromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dibromoethane (EDB)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dibromo-3-Chloropropane	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Dibromomethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,4-Dichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Dichlorodifluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
trans-1,2-Dichloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
2,2-Dichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
cis-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
trans-1,3-Dichloropropene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Diisopropyl Ether (DiPE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE



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Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 018 SG6A-15					Date & Time Sampled:		02/18/14	@	12:34	
Sample Matrix: Soil Vapor										
.....continued										
Ethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Hexachlorobutadiene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
2-Hexanone	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Isopropylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
4-Isopropyltoluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Methylene Chloride	<1.0		µg/L	EPA 8260B	1	1.0	2.0	02/18/14	8:30	HXE
4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	EPA 8260B	1	0.50	1.0	02/18/14	8:30	HXE
Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Naphthalene	<0.032		µg/L	EPA 8260B	1	0.030	0.050	02/18/14	8:30	HXE
n-Propylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Styrene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1,2-Tetrachloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,2,2-Tetrachloroethane	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
Tetrachloroethene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Toluene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,4-Trichlorobenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,1-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,1,2-Trichloroethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichloroethene	0.2		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,2,3-Trichloropropane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichlorofluoromethane	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Trichlorotrifluoroethane	<0.20		µg/L	EPA 8260B	1	0.20	0.20	02/18/14	8:30	HXE
1,2,4-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
1,3,5-Trimethylbenzene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
Vinyl Chloride	<0.013		µg/L	EPA 8260B	1	0.010	0.050	02/18/14	8:30	HXE
m,p-Xylenes	<0.10		µg/L	EPA 8260B	1	0.10	0.20	02/18/14	8:30	HXE
o-Xylene	<0.050		µg/L	EPA 8260B	1	0.050	0.10	02/18/14	8:30	HXE
[VOC Vapor Sampling Tracer]										



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Analysis	Result	Qual	Units	Method	DF	MDL	RL	Date	Time	Tech
Sample: 018 SG6A-15	Date & Time Sampled: 02/18/14 @ 12:34									
Sample Matrix: Soil Vapor										
.....continued										
Isopropanol (IPA)	<10		µg/L	EPA 8260B	1	10	10	02/18/14	8:30	HXE
[VOC Surrogates]										
Dibromofluoromethane	109		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Toluene-D8	107		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE
Bromofluorobenzene	89		%REC	EPA 8260B			70-130	02/18/14	8:30	HXE

Respectfully Submitted:

Ken Zheng

Ken Zheng - President

QUALIFIERS

B = Detected in the associated Method Blank at a concentration above the routine RL.
B1 = BOD dilution water is over specifications. The reported result may be biased high.
D = Surrogate recoveries are not calculated due to sample dilution.
E = Estimated value; Value exceeds calibration level of instrument.
H = Analyte was prepared and/or analyzed outside of the analytical method holding time
I = Matrix Interference.
J = Analyte concentration detected between RL and MDL.
Q = One or more quality control criteria did not meet specifications. See Comments for further explanation.
S = Customer provided specification limit exceeded.

ABBREVIATIONS

DF = Dilution Factor
RL = Reporting Limit, Adjusted by DF
MDL = Method Detection Limit, Adjusted by DF
Qual = Qualifier
Tech = Technician

As regulatory limits change frequently, A & R Laboratories advises the recipient of this report to confirm such limits with the appropriate federal, state, or local authorities before acting in reliance on the regulatory limits provided.

For any feedback concerning our services, please contact Marilu Escher, Project Manager at 951.779.0310. You may also contact Ken Zheng, President at arlab@arlaboratories.com.



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QUALITY CONTROL DATA REPORT

ECOBILITY CORPORATION

1402-00063

PALOS VERDES PENINSULA, CA 90274

Date Reported 02/19/2014
Date Received 02/18/2014
Date Sampled 02/18/2014
Invoice No. 71359
Customer # E083
Customer P.O. 026-14-001-1

**Project: MBK HOMES - NEWPORT BEACH (1560-1570
 Placentia Ave.)**

Method # EPA 8260B

QC Reference # 42179 Date Analyzed: 2/18/2014 Technician: HXE

Samples 001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 018

Results

	LCS %REC	LCS %DUP	LCS %RPD	DUP %RPD
1,1-Dichloroethene	97	103	7	
Benzene	92	98	7	
Chlorobenzene	90	101	12	
Hexane				10
Toluene	93	95	3	
Trichloroethene	89	96	8	

Control Ranges

LCS %REC	LCS %RPD
70 - 130	0 - 25
70 - 130	0 - 25
70 - 130	0 - 25
70 - 130	0 - 25
70 - 130	0 - 25



A & R Laboratories

Formerly Microbac Southern California
1650 S. GROVE AVE., SUITE C
ONTAIRE, CA 91761

951-779-0310

www.arlaboratories.com

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office@arlaboratories.com

FDA#	2030513
LA City#	10261
ELAP#s	2789
	2790
	2122

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QUALITY CONTROL DATA REPORT

ECOBILITY CORPORATION

1402-00063

Date Reported

02/19/2014

Date Received

02/18/2014

Date Sampled

02/18/2014

Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Method blank results

Ref	Test Name	Result	Qualif	Units	MDL	Ref	Test Name	Result	Qualif	Units	MDL
42179	Acetone	<5.0		µg/L	5.0		Ethyl-t-Butyl Ether (EtBE)	<0.050		µg/L	0.050
	t-Amyl Methyl Ether (TAME)	<0.050		µg/L	0.050		Hexachlorobutadiene	<0.050		µg/L	0.050
	Benzene	<0.036		µg/L	0.036		2-Hexanone	<0.50		µg/L	0.50
	Bromobenzene	<0.050		µg/L	0.050		Isopropylbenzene	<0.050		µg/L	0.050
	Bromochloromethane	<0.050		µg/L	0.050		4-Isopropyltoluene	<0.050		µg/L	0.050
	Bromodichloromethane	<0.050		µg/L	0.050		Methylene Chloride	<1.0		µg/L	1.0
	Bromoform	<0.050		µg/L	0.050		4-Methyl-2-Pentanone (MIBK)	<0.50		µg/L	0.50
	Bromomethane	<0.10		µg/L	0.10		Methyl-t-butyl Ether (MtBE)	<0.050		µg/L	0.050
	t-Butanol (TBA)	<0.50		µg/L	0.50		Naphthalene	<0.032		µg/L	0.032
	2-Butanone (MEK)	<0.50		µg/L	0.50		n-Propylbenzene	<0.050		µg/L	0.050
	n-Butylbenzene	<0.050		µg/L	0.050		Styrene	<0.050		µg/L	0.050
	sec-Butylbenzene	<0.050		µg/L	0.050		1,1,1,2-Tetrachloroethane	<0.050		µg/L	0.050
	tert-Butylbenzene	<0.050		µg/L	0.050		1,1,2,2-Tetrachloroethane	<0.10		µg/L	0.10
	Carbon Disulfide	<0.50		µg/L	0.50		Tetrachloroethene	<0.050		µg/L	0.050
	Carbon Tetrachloride	<0.025		µg/L	0.025		Toluene	<0.050		µg/L	0.050
	Chlorobenzene	<0.050		µg/L	0.050		1,2,3-Trichlorobenzene	<0.050		µg/L	0.050
	Chloroethane	<0.050		µg/L	0.050		1,2,4-Trichlorobenzene	<0.050		µg/L	0.050
	Chloroform	<0.050		µg/L	0.050		1,1,1-Trichloroethane	<0.050		µg/L	0.050
	Chloromethane	<0.10		µg/L	0.10		1,1,2-Trichloroethane	<0.050		µg/L	0.050
	2-Chlorotoluene	<0.050		µg/L	0.050		Trichloroethene	<0.050		µg/L	0.050
	4-Chlorotoluene	<0.050		µg/L	0.050		1,2,3-Trichloropropane	<0.050		µg/L	0.050
	Dibromochloromethane	<0.050		µg/L	0.050		Trichlorofluoromethane	<0.050		µg/L	0.050
	1,2-Dibromoethane (EDB)	<0.050		µg/L	0.050		Trichlorotrifluoroethane	<0.20		µg/L	0.20
	1,2-Dibromo-3-Chloropropane	<0.50		µg/L	0.50		1,2,4-Trimethylbenzene	<0.050		µg/L	0.050
	Dibromomethane	<0.050		µg/L	0.050		1,3,5-Trimethylbenzene	<0.050		µg/L	0.050
	1,2-Dichlorobenzene	<0.050		µg/L	0.050		Vinyl Chloride	<0.013		µg/L	0.013
	1,3-Dichlorobenzene	<0.050		µg/L	0.050		m,p-Xylenes	<0.10		µg/L	0.10
	1,4-Dichlorobenzene	<0.050		µg/L	0.050		o-Xylene	<0.050		µg/L	0.050
	Dichlorodifluoromethane	<0.050		µg/L	0.050		Isopropanol (IPA)	<10		µg/L	10
	1,1-Dichloroethane	<0.050		µg/L	0.050						
	1,2-Dichloroethane	<0.050		µg/L	0.050						
	1,1-Dichloroethene	<0.050		µg/L	0.050						
	cis-1,2-Dichloroethene	<0.050		µg/L	0.050						
	trans-1,2-Dichloroethene	<0.050		µg/L	0.050						
	1,2-Dichloropropane	<0.050		µg/L	0.050						
	1,3-Dichloropropane	<0.050		µg/L	0.050						
	2,2-Dichloropropane	<0.050		µg/L	0.050						
	1,1-Dichloropropene	<0.050		µg/L	0.050						
	cis-1,3-Dichloropropene	<0.050		µg/L	0.050						
	trans-1,3-Dichloropropene	<0.050		µg/L	0.050						
	Diisopropyl Ether (DiPE)	<0.050		µg/L	0.050						
	Ethylbenzene	<0.050		µg/L	0.050						

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QUALITY CONTROL DATA REPORT

ECOBILITY CORPORATION

1402-00063**Date Reported****02/19/2014****Date Received****02/18/2014****Date Sampled****02/18/2014**

Project: MBK HOMES - NEWPORT BEACH (1560-1570 Placentia Ave.)

Respectfully Submitted:

Ken Zheng - President

For any feedback concerning our services, please contact Marilu Escher, Project Manager at 951.779.0310. You may also contact Ken Zheng, President at arlab@arlaboratories.com.

office@arlaboratories.com

1402 - 63

Page 1 of 2

Project No/Name:		Project Site:		Analyses Requested (circle appropriate)												Turn Around			
Project Manager:		Phone:		Fax:		Preserved	Micro: Plate Cnt., Coliform, E-Coli	Chem: BOD, TSS, VSS, TDS, pH, EC	Chem: Cyanide, Ammonia, TKN, Oil & Grease	IC: Br, SO4, PO4, NO3, NO2, Cl	Metals: Title 22(CAM) or RCRA	LUFT Gas or 8015 GRO (C4-C12)	LUFT Diesel or 8015 DRO & for Oil	VOCs by GCMS: 8260B or 624	BTEX, OXYs by GCMS: 8260B or 624	SVOCs: 8270C or 625	Pest. & for PCBs: 608 or 8081/8082	☐ 24hr RUSH*	
Customer Name: (Report and Billing)		Street Address: (Report and Billing)		☐ 48hr RUSH*															
Email:		City, State Zip		☐ Normal															
				☐ Other _____															
*PRIOR approval, additional fee, work received after 4 pm will be processed next work day																			
Special Instructions																			
Lab #	Sample ID	Grab/Comp	Date sampled	Time sampled	Sample matrix	Container # & Type													
(Lab use only)	(As it should appear on report)																		
1	SG6-15	grab	2/18/14	10:10	soil vapor	250cc glass bulb								X					
2	SG6A-5			10:59										X					
3	SG9-5			11:37										X					
4	SG9-15			12:06										X					
5	SG6-5			12:26										X					
6	SG8-5			12:49										X					
7	SG8-15			12:50										X					
8	SG10-5			13:00										X					
9	SG10-15			13:01										X					
10	SG11-5			13:14										X					
1) Relinquished by: (Sampler's Signature)		Date:	Time:	3) Relinquished by:		Date:	Time:	5) Relinquished by:		Date:	Time:	Disposal							
		2/18/14	14:23									☐ Return							
2) Received by:		Date:	Time:	4) Received by:		Date:	Time:	6) Received for Laboratory by:		Date:	Time:	☐ Lab Disposal							
Valerie Marshall		2/18/14	14:23									Unless other arrangements are made samples will be disposed of 60 days after receipt.							
This section is to be completed by laboratory personnel:																			
Samples Chilled		Custody Seals		Samples Intact		Temp C		Delivery		Report Delivery Formats									
☐ Yes ☐ No		☐ Yes ☐ No		☐ Yes ☐ No				☐ Courier ☐ Walk In		☐ Paper ☐ EMAIL ☐ XLS									
☐ From Field								☐ UPS/Fed Ex		☐ EDD, Type _____									
										☐ EDF, EPA Site ID _____									
Laboratory Notes:																			
Valerie.marshall@ecopilitycorp.com																			

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The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under the Terms and Conditions set forth on the back hereof.



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office@arlaboratories.com

E083

Chain of Custody Record

A & R Work Order #:

1402-063

Page 2 of 2

ECOBILITY CORP

Project No/Name: 026-14-001-1 Project Site: 1560-1570 PLACENTIA AVE

Project Manager: V. MARSHALL Phone: (310) 910.1499 Fax:

Customer Name: (Report and Billing) ECOBILITY CORP Street Address: (Report and Billing) PO Box 2651

Email: valerie.marshall@ecobilitycorp.com City, State Zip: P. V. Peninsula, CA 90744

Analyses Requested (circle appropriate)

Lab #	Sample ID	Grab/Comp	Date sampled	Time sampled	Sample matrix	Container # & Type	Micro: Plate Cnt., Coliform, E-Coli	Chem: BOD, TSS, VSS, TDS, pH, EC	Chem: Cyanide, Ammonia, TKN, Oil & Grease	IC: Br, SO4, PO4, NO3, NO2, Cl	Metals: Title 22(CAM) or RCRA	LUFT Gas or 8015 GRO (C4-C12)	LUFT Diesel or 8015 DRO &/or Oil	VOCs by GCMS: 8260B or 624	BTEX, OXYs by GCMS: 8260B or 624	SVOCs: 8270C or 625	Pest. &/or PCBs: 608 or 8081/8082
11	SG11-15	grab	2/18/14	13:15	soil vapor	250cc glass bulb								X			
12	SG12-5			13:26										X			
13	SG12-15			13:26										X			
14	SG14-5			13:42										X			
15	SG14-15			13:43										X			
16	SG15-5			13:52										X			
17	SG15-5 DUP			13:52										X			
18	SG6A-15			12:34										X			

1) Relinquished by: (Sampler's Signature) [Signature] Date: 2/18/14 Time: 14:24

2) Received by: [Signature] Date: 2/18/14 Time: 22:30

3) Relinquished by: Date: Time:

4) Received by: Date: Time:

5) Relinquished by: Date: Time:

6) Received for Laboratory by: Date: Time:

Turn Around

☐ 24hr RUSH*

☐ 48hr RUSH*

☐ Normal

☐ Other _____

Special Instructions

*PRIOR approval, additional fee, work received after 4 pm will be processed next work day.

Disposal

☐ Return

☐ Lab Disposal

Unless other arrangements are made samples will be disposed of 60 days after receipt.

Report Delivery Formats

☐ Paper ☐ EMAIL ☐ XLS

☐ EDD, Type _____

☐ EDF, EPA Site ID _____

Samples Chilled ☐ Yes ☐ No

Custody Seals ☐ Yes ☐ No

Samples Intact ☐ Yes ☐ No

Temp C _____

Delivery

☐ Courier ☐ Walk In

☐ UPS/Fed Ex

Laboratory Notes:

CHEMISTRY • MICROBIOLOGY • FOOD SAFETY • CONSUMER PRODUCTS • MOBILE LABORATORIES • COSMETICS

The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under the Terms and Conditions set forth on the back hereof.

APPENDIX D

RISK SCREENING WORKSHEETS

DATA ENTRY SHEET

SG-SCREEN
A Version 2.0; 04/

Reset to
Defaults

DTSC

Vapor Intrusion Guidance
Interim Final 12/04
(last modified 12/6/2011)

Soil Gas Concentration Data				
ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu\text{g}/\text{m}^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
127184	7.30E+02			Tetrachloroethylene

MORE
↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_s (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			1.00E-08

MORE
↓

ENTER Vadose zone SCS soil type Lookup Soil Parameters	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE
↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

CHEMICAL PROPERTIES SHEET

Diffusivity in air, D_a (cm ² /s)	Diffusivity in water, D_w (cm ² /s)	Henry's law constant at reference temperature, H (atm-m ³ /mol)	Henry's law constant reference temperature, T_R (°C)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B (°K)	Critical temperature, T_C (°K)	Unit risk factor, URF (µg/m ³) ⁻¹	Reference conc., RfC (mg/m ³)	Molecular weight, MW (g/mol)
7.20E-02	8.20E-06	1.84E-02	25	8,288	394.40	620.20	5.9E-06	3.5E-02	165.83

END

INTERMEDIATE CALCULATIONS SHEET

Source- building separation, L_T (cm)	Vadose zone soil air-filled porosity, θ_a^V (cm ³ /cm ³)	Vadose zone effective total fluid saturation, S_{te} (cm ³ /cm ³)	Vadose zone soil intrinsic permeability, k_i (cm ²)	Vadose zone soil relative air permeability, k_{rg} (cm ²)	Vadose zone soil effective vapor permeability, k_v (cm ²)	Floor- wall seam perimeter, X_{crack} (cm)	Soil gas conc. (ug/m ³)	Bldg. ventilation rate, $Q_{building}$ (cm ³ /s)
137.4	0.280	#N/A	#N/A	#N/A	1.00E-08	4,000	7.30E+02	3.39E+04

Area of enclosed space below grade, A_B (cm ²)	Crack- to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, H_{TS} (atm-m ³ /mol)	Henry's law constant at ave. soil temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Vadose zone effective diffusion coefficient, D_v^{eff} (cm ² /s)	Diffusion path length, L_d (cm)
1.00E+06	5.00E-03	15	9,410	1.74E-02	7.14E-01	1.80E-04	5.62E-03	137.4

Convection path length, L_p (cm)	Source vapor conc., C_{source} (ug/m ³)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm ³ /s)	Crack effective diffusion coefficient, D^{crack} (cm ² /s)	Area of crack, A_{crack} (cm ²)	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ (ug/m ³)
15	7.30E+02	1.25	8.33E+01	5.62E-03	5.00E+03	7.73E+12	8.09E-04	5.91E-01

Unit risk factor, URF (ug/m ³) ⁻¹	Reference conc., RFC (mg/m ³)
5.9E-06	3.5E-02
END	

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
1.4E-06	1.6E-02

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
A Version 2.0; 04/

Reset to
Defaults

DTSC

Vapor Intrusion Guidance
Interim Final 12/04
(last modified 12/6/2011)

Soil Gas Concentration Data				
ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu\text{g}/\text{m}^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
79016	7.30E+02			Trichloroethylene

MORE
↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_s (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			1.00E-08

MORE
↓

ENTER Vadose zone SCS soil type Lookup Soil Parameters	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE
↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

CHEMICAL PROPERTIES SHEET

Diffusivity in air, D_a (cm ² /s)	Diffusivity in water, D_w (cm ² /s)	Henry's law constant at reference temperature, H (atm-m ³ /mol)	Henry's law constant reference temperature, T_R (°C)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B (°K)	Critical temperature, T_C (°K)	Unit risk factor, URF (µg/m ³) ⁻¹	Reference conc., RfC (mg/m ³)	Molecular weight, MW (g/mol)
7.90E-02	9.10E-06	1.03E-02	25	7,505	360.36	544.20	4.1E-06	2.0E-03	131.39

END

INTERMEDIATE CALCULATIONS SHEET

Source- building separation, L_T (cm)	Vadose zone soil air-filled porosity, θ_a^V (cm ³ /cm ³)	Vadose zone effective total fluid saturation, S_{te} (cm ³ /cm ³)	Vadose zone soil intrinsic permeability, k_i (cm ²)	Vadose zone soil relative air permeability, k_{rg} (cm ²)	Vadose zone soil effective vapor permeability, k_v (cm ²)	Floor- wall seam perimeter, X_{crack} (cm)	Soil gas conc. ($\mu\text{g}/\text{m}^3$)	Bldg. ventilation rate, $Q_{building}$ (cm ³ /s)
137.4	0.280	#N/A	#N/A	#N/A	1.00E-08	4,000	7.30E+02	3.39E+04

Area of enclosed space below grade, A_B (cm ²)	Crack- to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, H_{TS} (atm-m ³ /mol)	Henry's law constant at ave. soil temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Vadose zone effective diffusion coefficient, D_v^{eff} (cm ² /s)	Diffusion path length, L_d (cm)
1.00E+06	5.00E-03	15	8,382	9.80E-03	4.02E-01	1.80E-04	6.16E-03	137.4

Convection path length, L_p (cm)	Source vapor conc., C_{source} ($\mu\text{g}/\text{m}^3$)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm ³ /s)	Crack effective diffusion coefficient, D^{crack} (cm ² /s)	Area of crack, A_{crack} (cm ²)	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ ($\mu\text{g}/\text{m}^3$)
15	7.30E+02	1.25	8.33E+01	6.16E-03	5.00E+03	5.57E+11	8.60E-04	6.28E-01

Unit risk factor, URF ($\mu\text{g}/\text{m}^3$) ⁻¹	Reference conc., RFC (mg/m ³)
4.1E-06	2.0E-03
END	

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
1.1E-06	3.0E-01

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
A Version 2.0; 04/

Reset to
Defaults

DTSC

Vapor Intrusion Guidance
Interim Final 12/04
(last modified 12/6/2011)

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu\text{g}/\text{m}^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108883	9.10E+02			Toluene

MORE
↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_s (°C)	OR	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			1.00E-08

MORE
↓

ENTER Vadose zone SCS soil type Lookup Soil Parameters	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE
↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

CHEMICAL PROPERTIES SHEET

Diffusivity in air, D_a (cm ² /s)	Diffusivity in water, D_w (cm ² /s)	Henry's law constant at reference temperature, H (atm-m ³ /mol)	Henry's law constant reference temperature, T_R (°C)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B (°K)	Critical temperature, T_C (°K)	Unit risk factor, URF (µg/m ³) ⁻¹	Reference conc., RfC (mg/m ³)	Molecular weight, MW (g/mol)
8.70E-02	8.60E-06	6.62E-03	25	7,930	383.78	591.79	0.0E+00	3.0E-01	92.14

END

INTERMEDIATE CALCULATIONS SHEET

Source- building separation, L_T (cm)	Vadose zone soil air-filled porosity, θ_a^V (cm ³ /cm ³)	Vadose zone effective total fluid saturation, S_{te} (cm ³ /cm ³)	Vadose zone soil intrinsic permeability, k_i (cm ²)	Vadose zone soil relative air permeability, k_{rg} (cm ²)	Vadose zone soil effective vapor permeability, k_v (cm ²)	Floor- wall seam perimeter, X_{crack} (cm)	Soil gas conc. ($\mu\text{g}/\text{m}^3$)	Bldg. ventilation rate, $Q_{building}$ (cm ³ /s)
137.4	0.280	#N/A	#N/A	#N/A	1.00E-08	4,000	9.10E+02	3.39E+04

Area of enclosed space below grade, A_B (cm ²)	Crack- to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, H_{TS} (atm-m ³ /mol)	Henry's law constant at ave. soil temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Vadose zone effective diffusion coefficient, D_v^{eff} (cm ² /s)	Diffusion path length, L_d (cm)
1.00E+06	5.00E-03	15	9,001	6.29E-03	2.58E-01	1.80E-04	6.79E-03	137.4

Convection path length, L_p (cm)	Source vapor conc., C_{source} ($\mu\text{g}/\text{m}^3$)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm ³ /s)	Crack effective diffusion coefficient, D^{crack} (cm ² /s)	Area of crack, A_{crack} (cm ²)	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ ($\mu\text{g}/\text{m}^3$)
15	9.10E+02	1.25	8.33E+01	6.79E-03	5.00E+03	4.63E+10	9.15E-04	8.33E-01

Unit risk factor, URF ($\mu\text{g}/\text{m}^3$) ⁻¹	Reference conc., RFC (mg/m ³)
NA	3.0E-01
END	

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	2.7E-03

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
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Reset to
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DTSC

Vapor Intrusion Guidance
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(last modified 12/6/2011)

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu\text{g}/\text{m}^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
127184	2.00E+02			Tetrachloroethylene

MORE
↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_s ($^{\circ}\text{C}$)	OR	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			1.00E-08

MORE
↓

ENTER Vadose zone SCS soil type Lookup Soil Parameters	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE
↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

CHEMICAL PROPERTIES SHEET

Diffusivity in air, D_a (cm ² /s)	Diffusivity in water, D_w (cm ² /s)	Henry's law constant at reference temperature, H (atm-m ³ /mol)	Henry's law constant reference temperature, T_R (°C)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B (°K)	Critical temperature, T_C (°K)	Unit risk factor, URF (µg/m ³) ⁻¹	Reference conc., RfC (mg/m ³)	Molecular weight, MW (g/mol)
7.20E-02	8.20E-06	1.84E-02	25	8,288	394.40	620.20	5.9E-06	3.5E-02	165.83

END

INTERMEDIATE CALCULATIONS SHEET

Source- building separation, L_T (cm)	Vadose zone soil air-filled porosity, θ_a^V (cm ³ /cm ³)	Vadose zone effective total fluid saturation, S_{te} (cm ³ /cm ³)	Vadose zone soil intrinsic permeability, k_i (cm ²)	Vadose zone soil relative air permeability, k_{rg} (cm ²)	Vadose zone soil effective vapor permeability, k_v (cm ²)	Floor- wall seam perimeter, X_{crack} (cm)	Soil gas conc. (ug/m ³)	Bldg. ventilation rate, $Q_{building}$ (cm ³ /s)
137.4	0.280	#N/A	#N/A	#N/A	1.00E-08	4,000	2.00E+02	3.39E+04

Area of enclosed space below grade, A_B (cm ²)	Crack- to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, H_{TS} (atm-m ³ /mol)	Henry's law constant at ave. soil temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Vadose zone effective diffusion coefficient, D_v^{eff} (cm ² /s)	Diffusion path length, L_d (cm)
1.00E+06	5.00E-03	15	9,410	1.74E-02	7.14E-01	1.80E-04	5.62E-03	137.4

Convection path length, L_p (cm)	Source vapor conc., C_{source} (ug/m ³)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm ³ /s)	Crack effective diffusion coefficient, D^{crack} (cm ² /s)	Area of crack, A_{crack} (cm ²)	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ (ug/m ³)
15	2.00E+02	1.25	8.33E+01	5.62E-03	5.00E+03	7.73E+12	8.09E-04	1.62E-01

Unit risk factor, URF (ug/m ³) ⁻¹	Reference conc., RFC (mg/m ³)
5.9E-06	3.5E-02
END	

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
3.9E-07	4.4E-03

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
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DTSC

Vapor Intrusion Guidance
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Soil Gas Concentration Data			
ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu\text{g}/\text{m}^3$)	OR	ENTER Soil gas conc., C_g (ppmv)
79016	1.00E+03		
			Chemical Trichloroethylene

MORE
↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_s ($^{\circ}\text{C}$)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			1.00E-08

MORE
↓

ENTER Vadose zone SCS soil type Lookup Soil Parameters	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE
↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

CHEMICAL PROPERTIES SHEET

Diffusivity in air, D_a (cm ² /s)	Diffusivity in water, D_w (cm ² /s)	Henry's law constant at reference temperature, H (atm-m ³ /mol)	Henry's law constant reference temperature, T_R (°C)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B (°K)	Critical temperature, T_C (°K)	Unit risk factor, URF (µg/m ³) ⁻¹	Reference conc., RfC (mg/m ³)	Molecular weight, MW (g/mol)
7.90E-02	9.10E-06	1.03E-02	25	7,505	360.36	544.20	4.1E-06	2.0E-03	131.39

END

INTERMEDIATE CALCULATIONS SHEET

Source- building separation, L_T (cm)	Vadose zone soil air-filled porosity, θ_a^V (cm ³ /cm ³)	Vadose zone effective total fluid saturation, S_{te} (cm ³ /cm ³)	Vadose zone soil intrinsic permeability, k_i (cm ²)	Vadose zone soil relative air permeability, k_{rg} (cm ²)	Vadose zone soil effective vapor permeability, k_v (cm ²)	Floor- wall seam perimeter, X_{crack} (cm)	Soil gas conc. (ug/m ³)	Bldg. ventilation rate, $Q_{building}$ (cm ³ /s)
137.4	0.280	#N/A	#N/A	#N/A	1.00E-08	4,000	1.00E+03	3.39E+04

Area of enclosed space below grade, A_B (cm ²)	Crack- to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, H_{TS} (atm-m ³ /mol)	Henry's law constant at ave. soil temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Vadose zone effective diffusion coefficient, D_v^{eff} (cm ² /s)	Diffusion path length, L_d (cm)
1.00E+06	5.00E-03	15	8,382	9.80E-03	4.02E-01	1.80E-04	6.16E-03	137.4

Convection path length, L_p (cm)	Source vapor conc., C_{source} (ug/m ³)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm ³ /s)	Crack effective diffusion coefficient, D^{crack} (cm ² /s)	Area of crack, A_{crack} (cm ²)	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ (ug/m ³)
15	1.00E+03	1.25	8.33E+01	6.16E-03	5.00E+03	5.57E+11	8.60E-04	8.60E-01

Unit risk factor, URF (ug/m ³) ⁻¹	Reference conc., RFC (mg/m ³)
4.1E-06	2.0E-03
END	

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
1.4E-06	4.1E-01

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
A Version 2.0; 04/

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Defaults

DTSC

Vapor Intrusion Guidance
Interim Final 12/04
(last modified 12/6/2011)

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu\text{g}/\text{m}^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108883	1.00E+02			Toluene

MORE
↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_s (°C)	OR	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			1.00E-08

MORE
↓

ENTER Vadose zone SCS soil type Lookup Soil Parameters	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE
↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

CHEMICAL PROPERTIES SHEET

Diffusivity in air, D_a (cm ² /s)	Diffusivity in water, D_w (cm ² /s)	Henry's law constant at reference temperature, H (atm-m ³ /mol)	Henry's law constant reference temperature, T_R (°C)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B (°K)	Critical temperature, T_C (°K)	Unit risk factor, URF (µg/m ³) ⁻¹	Reference conc., RfC (mg/m ³)	Molecular weight, MW (g/mol)
8.70E-02	8.60E-06	6.62E-03	25	7,930	383.78	591.79	0.0E+00	3.0E-01	92.14

END

INTERMEDIATE CALCULATIONS SHEET

Source- building separation, L_T (cm)	Vadose zone soil air-filled porosity, θ_a^V (cm ³ /cm ³)	Vadose zone effective total fluid saturation, S_{te} (cm ³ /cm ³)	Vadose zone soil intrinsic permeability, k_i (cm ²)	Vadose zone soil relative air permeability, k_{rg} (cm ²)	Vadose zone soil effective vapor permeability, k_v (cm ²)	Floor- wall seam perimeter, X_{crack} (cm)	Soil gas conc. ($\mu\text{g}/\text{m}^3$)	Bldg. ventilation rate, $Q_{building}$ (cm ³ /s)
137.4	0.280	#N/A	#N/A	#N/A	1.00E-08	4,000	1.00E+02	3.39E+04

Area of enclosed space below grade, A_B (cm ²)	Crack- to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, H_{TS} (atm-m ³ /mol)	Henry's law constant at ave. soil temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Vadose zone effective diffusion coefficient, D_v^{eff} (cm ² /s)	Diffusion path length, L_d (cm)
1.00E+06	5.00E-03	15	9,001	6.29E-03	2.58E-01	1.80E-04	6.79E-03	137.4

Convection path length, L_p (cm)	Source vapor conc., C_{source} ($\mu\text{g}/\text{m}^3$)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm ³ /s)	Crack effective diffusion coefficient, D^{crack} (cm ² /s)	Area of crack, A_{crack} (cm ²)	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ ($\mu\text{g}/\text{m}^3$)
15	1.00E+02	1.25	8.33E+01	6.79E-03	5.00E+03	4.63E+10	9.15E-04	9.15E-02

Unit risk factor, URF ($\mu\text{g}/\text{m}^3$) ⁻¹	Reference conc., RFC (mg/m ³)
NA	3.0E-01
END	

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	2.9E-04

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
A Version 2.0; 04/

Reset to
Defaults

DTSC

Vapor Intrusion Guidance
Interim Final 12/04
(last modified 12/6/2011)

Soil Gas Concentration Data				
ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu\text{g}/\text{m}^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108883	1.00E+02			Toluene

MORE
↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_s (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			1.00E-08

MORE
↓

ENTER Vadose zone SCS soil type Lookup Soil Parameters	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE
↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

CHEMICAL PROPERTIES SHEET

Diffusivity in air, D_a (cm ² /s)	Diffusivity in water, D_w (cm ² /s)	Henry's law constant at reference temperature, H (atm-m ³ /mol)	Henry's law constant reference temperature, T_R (°C)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B (°K)	Critical temperature, T_C (°K)	Unit risk factor, URF (µg/m ³) ⁻¹	Reference conc., RfC (mg/m ³)	Molecular weight, MW (g/mol)
8.70E-02	8.60E-06	6.62E-03	25	7,930	383.78	591.79	0.0E+00	3.0E-01	92.14

END

INTERMEDIATE CALCULATIONS SHEET

Source- building separation, L_T (cm)	Vadose zone soil air-filled porosity, θ_a^V (cm ³ /cm ³)	Vadose zone effective total fluid saturation, S_{te} (cm ³ /cm ³)	Vadose zone soil intrinsic permeability, k_i (cm ²)	Vadose zone soil relative air permeability, k_{rg} (cm ²)	Vadose zone soil effective vapor permeability, k_v (cm ²)	Floor- wall seam perimeter, X_{crack} (cm)	Soil gas conc. ($\mu\text{g}/\text{m}^3$)	Bldg. ventilation rate, $Q_{building}$ (cm ³ /s)
137.4	0.280	#N/A	#N/A	#N/A	1.00E-08	4,000	1.00E+02	3.39E+04

Area of enclosed space below grade, A_B (cm ²)	Crack- to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, H_{TS} (atm-m ³ /mol)	Henry's law constant at ave. soil temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Vadose zone effective diffusion coefficient, D_v^{eff} (cm ² /s)	Diffusion path length, L_d (cm)
1.00E+06	5.00E-03	15	9,001	6.29E-03	2.58E-01	1.80E-04	6.79E-03	137.4

Convection path length, L_p (cm)	Source vapor conc., C_{source} ($\mu\text{g}/\text{m}^3$)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm ³ /s)	Crack effective diffusion coefficient, D^{crack} (cm ² /s)	Area of crack, A_{crack} (cm ²)	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ ($\mu\text{g}/\text{m}^3$)
15	1.00E+02	1.25	8.33E+01	6.79E-03	5.00E+03	4.63E+10	9.15E-04	9.15E-02

Unit risk factor, URF ($\mu\text{g}/\text{m}^3$) ⁻¹	Reference conc., RFC (mg/m ³)
NA	3.0E-01
END	

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	2.9E-04

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
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Defaults

DTSC

Vapor Intrusion Guidance
Interim Final 12/04
(last modified 12/6/2011)

Soil Gas Concentration Data			
ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu\text{g}/\text{m}^3$)	OR	ENTER Soil gas conc., C_g (ppmv)
127184	6.00E+02		
			Chemical Tetrachloroethylene

MORE
↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_s ($^{\circ}\text{C}$)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			1.00E-08

MORE
↓

ENTER Vadose zone SCS soil type Lookup Soil Parameters	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE
↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

CHEMICAL PROPERTIES SHEET

Diffusivity in air, D_a (cm ² /s)	Diffusivity in water, D_w (cm ² /s)	Henry's law constant at reference temperature, H (atm-m ³ /mol)	Henry's law constant reference temperature, T_R (°C)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B (°K)	Critical temperature, T_C (°K)	Unit risk factor, URF (µg/m ³) ⁻¹	Reference conc., RfC (mg/m ³)	Molecular weight, MW (g/mol)
7.20E-02	8.20E-06	1.84E-02	25	8,288	394.40	620.20	5.9E-06	3.5E-02	165.83

END

INTERMEDIATE CALCULATIONS SHEET

Source- building separation, L_T (cm)	Vadose zone soil air-filled porosity, θ_a^V (cm ³ /cm ³)	Vadose zone effective total fluid saturation, S_{te} (cm ³ /cm ³)	Vadose zone soil intrinsic permeability, k_i (cm ²)	Vadose zone soil relative air permeability, k_{rg} (cm ²)	Vadose zone soil effective vapor permeability, k_v (cm ²)	Floor- wall seam perimeter, X_{crack} (cm)	Soil gas conc. ($\mu\text{g}/\text{m}^3$)	Bldg. ventilation rate, $Q_{building}$ (cm ³ /s)
137.4	0.280	#N/A	#N/A	#N/A	1.00E-08	4,000	6.00E+02	3.39E+04

Area of enclosed space below grade, A_B (cm ²)	Crack- to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, H_{TS} (atm-m ³ /mol)	Henry's law constant at ave. soil temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Vadose zone effective diffusion coefficient, D_v^{eff} (cm ² /s)	Diffusion path length, L_d (cm)
1.00E+06	5.00E-03	15	9,410	1.74E-02	7.14E-01	1.80E-04	5.62E-03	137.4

Convection path length, L_p (cm)	Source vapor conc., C_{source} ($\mu\text{g}/\text{m}^3$)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm ³ /s)	Crack effective diffusion coefficient, D^{crack} (cm ² /s)	Area of crack, A_{crack} (cm ²)	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ ($\mu\text{g}/\text{m}^3$)
15	6.00E+02	1.25	8.33E+01	5.62E-03	5.00E+03	7.73E+12	8.09E-04	4.86E-01

Unit risk factor, URF ($\mu\text{g}/\text{m}^3$) ⁻¹	Reference conc., RFC (mg/m ³)
5.9E-06	3.5E-02
END	

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
1.2E-06	1.3E-02

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

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Reset to
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DTSC

Vapor Intrusion Guidance
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Soil Gas Concentration Data				
ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu\text{g}/\text{m}^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
79016	3.30E+03			Trichloroethylene

MORE
↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_s (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			1.00E-08

MORE
↓

ENTER Vadose zone SCS soil type Lookup Soil Parameters	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE
↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

CHEMICAL PROPERTIES SHEET

Diffusivity in air, D_a (cm ² /s)	Diffusivity in water, D_w (cm ² /s)	Henry's law constant at reference temperature, H (atm-m ³ /mol)	Henry's law constant reference temperature, T_R (°C)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B (°K)	Critical temperature, T_C (°K)	Unit risk factor, URF (µg/m ³) ⁻¹	Reference conc., RfC (mg/m ³)	Molecular weight, MW (g/mol)
7.90E-02	9.10E-06	1.03E-02	25	7,505	360.36	544.20	4.1E-06	2.0E-03	131.39

END

INTERMEDIATE CALCULATIONS SHEET

Source- building separation, L_T (cm)	Vadose zone soil air-filled porosity, θ_a^V (cm ³ /cm ³)	Vadose zone effective total fluid saturation, S_{te} (cm ³ /cm ³)	Vadose zone soil intrinsic permeability, k_i (cm ²)	Vadose zone soil relative air permeability, k_{rg} (cm ²)	Vadose zone soil effective vapor permeability, k_v (cm ²)	Floor- wall seam perimeter, X_{crack} (cm)	Soil gas conc. (ug/m ³)	Bldg. ventilation rate, $Q_{building}$ (cm ³ /s)
137.4	0.280	#N/A	#N/A	#N/A	1.00E-08	4,000	3.30E+03	3.39E+04

Area of enclosed space below grade, A_B (cm ²)	Crack- to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, H_{TS} (atm-m ³ /mol)	Henry's law constant at ave. soil temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Vadose zone effective diffusion coefficient, D_v^{eff} (cm ² /s)	Diffusion path length, L_d (cm)
1.00E+06	5.00E-03	15	8,382	9.80E-03	4.02E-01	1.80E-04	6.16E-03	137.4

Convection path length, L_p (cm)	Source vapor conc., C_{source} (ug/m ³)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm ³ /s)	Crack effective diffusion coefficient, D^{crack} (cm ² /s)	Area of crack, A_{crack} (cm ²)	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ (ug/m ³)
15	3.30E+03	1.25	8.33E+01	6.16E-03	5.00E+03	5.57E+11	8.60E-04	2.84E+00

Unit risk factor, URF (ug/m ³) ⁻¹	Reference conc., RFC (mg/m ³)
4.1E-06	2.0E-03
END	

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
4.8E-06	1.4E+00

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

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DTSC

Vapor Intrusion Guidance
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Soil Gas Concentration Data				
ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu\text{g}/\text{m}^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108883	1.00E+02			Toluene

MORE
↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_s (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			1.00E-08

MORE
↓

ENTER Vadose zone SCS soil type Lookup Soil Parameters	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE
↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

CHEMICAL PROPERTIES SHEET

Diffusivity in air, D_a (cm ² /s)	Diffusivity in water, D_w (cm ² /s)	Henry's law constant at reference temperature, H (atm-m ³ /mol)	Henry's law constant reference temperature, T_R (°C)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B (°K)	Critical temperature, T_C (°K)	Unit risk factor, URF (µg/m ³) ⁻¹	Reference conc., RfC (mg/m ³)	Molecular weight, MW (g/mol)
8.70E-02	8.60E-06	6.62E-03	25	7,930	383.78	591.79	0.0E+00	3.0E-01	92.14

END

INTERMEDIATE CALCULATIONS SHEET

Source- building separation, L_T (cm)	Vadose zone soil air-filled porosity, θ_a^V (cm ³ /cm ³)	Vadose zone effective total fluid saturation, S_{te} (cm ³ /cm ³)	Vadose zone soil intrinsic permeability, k_i (cm ²)	Vadose zone soil relative air permeability, k_{rg} (cm ²)	Vadose zone soil effective vapor permeability, k_v (cm ²)	Floor- wall seam perimeter, X_{crack} (cm)	Soil gas conc. ($\mu\text{g}/\text{m}^3$)	Bldg. ventilation rate, $Q_{building}$ (cm ³ /s)
137.4	0.280	#N/A	#N/A	#N/A	1.00E-08	4,000	1.00E+02	3.39E+04

Area of enclosed space below grade, A_B (cm ²)	Crack- to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, H_{TS} (atm-m ³ /mol)	Henry's law constant at ave. soil temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Vadose zone effective diffusion coefficient, D_v^{eff} (cm ² /s)	Diffusion path length, L_d (cm)
1.00E+06	5.00E-03	15	9,001	6.29E-03	2.58E-01	1.80E-04	6.79E-03	137.4

Convection path length, L_p (cm)	Source vapor conc., C_{source} ($\mu\text{g}/\text{m}^3$)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm ³ /s)	Crack effective diffusion coefficient, D^{crack} (cm ² /s)	Area of crack, A_{crack} (cm ²)	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ ($\mu\text{g}/\text{m}^3$)
15	1.00E+02	1.25	8.33E+01	6.79E-03	5.00E+03	4.63E+10	9.15E-04	9.15E-02

Unit risk factor, URF ($\mu\text{g}/\text{m}^3$) ⁻¹	Reference conc., RFC (mg/m ³)
NA	3.0E-01
END	

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	2.9E-04

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
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DTSC

Vapor Intrusion Guidance
Interim Final 12/04
(last modified 12/6/2011)

Soil Gas Concentration Data			
ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu\text{g}/\text{m}^3$)	OR	ENTER Soil gas conc., C_g (ppmv)
127184	2.00E+02		
			Chemical Tetrachloroethylene

MORE
↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_s (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			1.00E-08

MORE
↓

ENTER Vadose zone SCS soil type Lookup Soil Parameters	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE
↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

CHEMICAL PROPERTIES SHEET

Diffusivity in air, D_a (cm ² /s)	Diffusivity in water, D_w (cm ² /s)	Henry's law constant at reference temperature, H (atm-m ³ /mol)	Henry's law constant reference temperature, T_R (°C)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B (°K)	Critical temperature, T_C (°K)	Unit risk factor, URF (µg/m ³) ⁻¹	Reference conc., RfC (mg/m ³)	Molecular weight, MW (g/mol)
7.20E-02	8.20E-06	1.84E-02	25	8,288	394.40	620.20	5.9E-06	3.5E-02	165.83

END

INTERMEDIATE CALCULATIONS SHEET

Source- building separation, L_T (cm)	Vadose zone soil air-filled porosity, θ_a^V (cm ³ /cm ³)	Vadose zone effective total fluid saturation, S_{te} (cm ³ /cm ³)	Vadose zone soil intrinsic permeability, k_i (cm ²)	Vadose zone soil relative air permeability, k_{rg} (cm ²)	Vadose zone soil effective vapor permeability, k_v (cm ²)	Floor- wall seam perimeter, X_{crack} (cm)	Soil gas conc. (ug/m ³)	Bldg. ventilation rate, $Q_{building}$ (cm ³ /s)
137.4	0.280	#N/A	#N/A	#N/A	1.00E-08	4,000	2.00E+02	3.39E+04

Area of enclosed space below grade, A_B (cm ²)	Crack- to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, H_{TS} (atm-m ³ /mol)	Henry's law constant at ave. soil temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Vadose zone effective diffusion coefficient, D_v^{eff} (cm ² /s)	Diffusion path length, L_d (cm)
1.00E+06	5.00E-03	15	9,410	1.74E-02	7.14E-01	1.80E-04	5.62E-03	137.4

Convection path length, L_p (cm)	Source vapor conc., C_{source} (ug/m ³)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm ³ /s)	Crack effective diffusion coefficient, D^{crack} (cm ² /s)	Area of crack, A_{crack} (cm ²)	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ (ug/m ³)
15	2.00E+02	1.25	8.33E+01	5.62E-03	5.00E+03	7.73E+12	8.09E-04	1.62E-01

Unit risk factor, URF (ug/m ³) ⁻¹	Reference conc., RFC (mg/m ³)
5.9E-06	3.5E-02
END	

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
3.9E-07	4.4E-03

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
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Defaults

DTSC

Vapor Intrusion Guidance
Interim Final 12/04
(last modified 12/6/2011)

Soil Gas Concentration Data				
ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu\text{g}/\text{m}^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
79016	3.40E+03			Trichloroethylene

MORE
↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_s ($^{\circ}\text{C}$)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			1.00E-08

MORE
↓

ENTER Vadose zone SCS soil type Lookup Soil Parameters	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE
↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

CHEMICAL PROPERTIES SHEET

Diffusivity in air, D_a (cm ² /s)	Diffusivity in water, D_w (cm ² /s)	Henry's law constant at reference temperature, H (atm-m ³ /mol)	Henry's law constant reference temperature, T_R (°C)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B (°K)	Critical temperature, T_C (°K)	Unit risk factor, URF (µg/m ³) ⁻¹	Reference conc., RfC (mg/m ³)	Molecular weight, MW (g/mol)
7.90E-02	9.10E-06	1.03E-02	25	7,505	360.36	544.20	4.1E-06	2.0E-03	131.39

END

INTERMEDIATE CALCULATIONS SHEET

Source- building separation, L_T (cm)	Vadose zone soil air-filled porosity, θ_a^V (cm ³ /cm ³)	Vadose zone effective total fluid saturation, S_{te} (cm ³ /cm ³)	Vadose zone soil intrinsic permeability, k_i (cm ²)	Vadose zone soil relative air permeability, k_{rg} (cm ²)	Vadose zone soil effective vapor permeability, k_v (cm ²)	Floor- wall seam perimeter, X_{crack} (cm)	Soil gas conc. (ug/m ³)	Bldg. ventilation rate, $Q_{building}$ (cm ³ /s)
137.4	0.280	#N/A	#N/A	#N/A	1.00E-08	4,000	3.40E+03	3.39E+04

Area of enclosed space below grade, A_B (cm ²)	Crack- to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, H_{TS} (atm-m ³ /mol)	Henry's law constant at ave. soil temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Vadose zone effective diffusion coefficient, D_v^{eff} (cm ² /s)	Diffusion path length, L_d (cm)
1.00E+06	5.00E-03	15	8,382	9.80E-03	4.02E-01	1.80E-04	6.16E-03	137.4

Convection path length, L_p (cm)	Source vapor conc., C_{source} (ug/m ³)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm ³ /s)	Crack effective diffusion coefficient, D^{crack} (cm ² /s)	Area of crack, A_{crack} (cm ²)	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ (ug/m ³)
15	3.40E+03	1.25	8.33E+01	6.16E-03	5.00E+03	5.57E+11	8.60E-04	2.93E+00

Unit risk factor, URF (ug/m ³) ⁻¹	Reference conc., RFC (mg/m ³)
4.1E-06	2.0E-03
END	

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
4.9E-06	1.4E+00

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

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DTSC

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Soil Gas Concentration Data				
ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu\text{g}/\text{m}^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108883	1.00E+02			Toluene

MORE
↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_s (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			1.00E-08

MORE
↓

ENTER Vadose zone SCS soil type Lookup Soil Parameters	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE
↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

CHEMICAL PROPERTIES SHEET

Diffusivity in air, D_a (cm ² /s)	Diffusivity in water, D_w (cm ² /s)	Henry's law constant at reference temperature, H (atm-m ³ /mol)	Henry's law constant reference temperature, T_R (°C)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B (°K)	Critical temperature, T_C (°K)	Unit risk factor, URF (µg/m ³) ⁻¹	Reference conc., RfC (mg/m ³)	Molecular weight, MW (g/mol)
8.70E-02	8.60E-06	6.62E-03	25	7,930	383.78	591.79	0.0E+00	3.0E-01	92.14

END

INTERMEDIATE CALCULATIONS SHEET

Source- building separation, L_T (cm)	Vadose zone soil air-filled porosity, θ_a^V (cm ³ /cm ³)	Vadose zone effective total fluid saturation, S_{te} (cm ³ /cm ³)	Vadose zone soil intrinsic permeability, k_i (cm ²)	Vadose zone soil relative air permeability, k_{rg} (cm ²)	Vadose zone soil effective vapor permeability, k_v (cm ²)	Floor- wall seam perimeter, X_{crack} (cm)	Soil gas conc. ($\mu\text{g}/\text{m}^3$)	Bldg. ventilation rate, $Q_{building}$ (cm ³ /s)
137.4	0.280	#N/A	#N/A	#N/A	1.00E-08	4,000	1.00E+02	3.39E+04

Area of enclosed space below grade, A_B (cm ²)	Crack- to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, H_{TS} (atm-m ³ /mol)	Henry's law constant at ave. soil temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Vadose zone effective diffusion coefficient, D_v^{eff} (cm ² /s)	Diffusion path length, L_d (cm)
1.00E+06	5.00E-03	15	9,001	6.29E-03	2.58E-01	1.80E-04	6.79E-03	137.4

Convection path length, L_p (cm)	Source vapor conc., C_{source} ($\mu\text{g}/\text{m}^3$)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm ³ /s)	Crack effective diffusion coefficient, D^{crack} (cm ² /s)	Area of crack, A_{crack} (cm ²)	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ ($\mu\text{g}/\text{m}^3$)
15	1.00E+02	1.25	8.33E+01	6.79E-03	5.00E+03	4.63E+10	9.15E-04	9.15E-02

Unit risk factor, URF ($\mu\text{g}/\text{m}^3$) ⁻¹	Reference conc., RFC (mg/m ³)
NA	3.0E-01
END	

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	2.9E-04

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

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DTSC

Vapor Intrusion Guidance
Interim Final 12/04
(last modified 12/6/2011)

Soil Gas Concentration Data				Chemical
ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu\text{g}/\text{m}^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	
127184	1.40E+03			Tetrachloroethylene

MORE
↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_s ($^{\circ}\text{C}$)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			1.00E-08

MORE
↓

ENTER Vadose zone SCS soil type Lookup Soil Parameters	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE
↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

CHEMICAL PROPERTIES SHEET

Diffusivity in air, D_a (cm ² /s)	Diffusivity in water, D_w (cm ² /s)	Henry's law constant at reference temperature, H (atm-m ³ /mol)	Henry's law constant reference temperature, T_R (°C)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B (°K)	Critical temperature, T_C (°K)	Unit risk factor, URF (µg/m ³) ⁻¹	Reference conc., RfC (mg/m ³)	Molecular weight, MW (g/mol)
7.20E-02	8.20E-06	1.84E-02	25	8,288	394.40	620.20	5.9E-06	3.5E-02	165.83

END

INTERMEDIATE CALCULATIONS SHEET

Source- building separation, L_T (cm)	Vadose zone soil air-filled porosity, θ_a^V (cm ³ /cm ³)	Vadose zone effective total fluid saturation, S_{te} (cm ³ /cm ³)	Vadose zone soil intrinsic permeability, k_i (cm ²)	Vadose zone soil relative air permeability, k_{rg} (cm ²)	Vadose zone soil effective vapor permeability, k_v (cm ²)	Floor- wall seam perimeter, X_{crack} (cm)	Soil gas conc. ($\mu\text{g}/\text{m}^3$)	Bldg. ventilation rate, $Q_{building}$ (cm ³ /s)
137.4	0.280	#N/A	#N/A	#N/A	1.00E-08	4,000	1.40E+03	3.39E+04

Area of enclosed space below grade, A_B (cm ²)	Crack- to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, H_{TS} (atm-m ³ /mol)	Henry's law constant at ave. soil temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Vadose zone effective diffusion coefficient, D_v^{eff} (cm ² /s)	Diffusion path length, L_d (cm)
1.00E+06	5.00E-03	15	9,410	1.74E-02	7.14E-01	1.80E-04	5.62E-03	137.4

Convection path length, L_p (cm)	Source vapor conc., C_{source} ($\mu\text{g}/\text{m}^3$)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm ³ /s)	Crack effective diffusion coefficient, D^{crack} (cm ² /s)	Area of crack, A_{crack} (cm ²)	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ ($\mu\text{g}/\text{m}^3$)
15	1.40E+03	1.25	8.33E+01	5.62E-03	5.00E+03	7.73E+12	8.09E-04	1.13E+00

Unit risk factor, URF ($\mu\text{g}/\text{m}^3$) ⁻¹	Reference conc., RFC (mg/m ³)
5.9E-06	3.5E-02
END	

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
2.7E-06	3.1E-02

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
A Version 2.0; 04/

Reset to
Defaults

DTSC

Vapor Intrusion Guidance
Interim Final 12/04
(last modified 12/6/2011)

Soil Gas Concentration Data				
ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu\text{g}/\text{m}^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
79016	1.80E+02			Trichloroethylene

MORE
↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_s (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	152.4	24			1.00E-08

MORE
↓

ENTER Vadose zone SCS soil type Lookup Soil Parameters	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
	1.5	0.43	0.15	5

MORE
↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

CHEMICAL PROPERTIES SHEET

Diffusivity in air, D_a (cm ² /s)	Diffusivity in water, D_w (cm ² /s)	Henry's law constant at reference temperature, H (atm-m ³ /mol)	Henry's law constant reference temperature, T_R (°C)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Normal boiling point, T_B (°K)	Critical temperature, T_C (°K)	Unit risk factor, URF (µg/m ³) ⁻¹	Reference conc., RfC (mg/m ³)	Molecular weight, MW (g/mol)
7.90E-02	9.10E-06	1.03E-02	25	7,505	360.36	544.20	4.1E-06	2.0E-03	131.39

END

INTERMEDIATE CALCULATIONS SHEET

Source- building separation, L_T (cm)	Vadose zone soil air-filled porosity, θ_a^V (cm ³ /cm ³)	Vadose zone effective total fluid saturation, S_{te} (cm ³ /cm ³)	Vadose zone soil intrinsic permeability, k_i (cm ²)	Vadose zone soil relative air permeability, k_{rg} (cm ²)	Vadose zone soil effective vapor permeability, k_v (cm ²)	Floor- wall seam perimeter, X_{crack} (cm)	Soil gas conc. ($\mu\text{g}/\text{m}^3$)	Bldg. ventilation rate, $Q_{building}$ (cm ³ /s)
137.4	0.280	#N/A	#N/A	#N/A	1.00E-08	4,000	1.80E+02	3.39E+04

Area of enclosed space below grade, A_B (cm ²)	Crack- to-total area ratio, η (unitless)	Crack depth below grade, Z_{crack} (cm)	Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol)	Henry's law constant at ave. soil temperature, H_{TS} (atm-m ³ /mol)	Henry's law constant at ave. soil temperature, H'_{TS} (unitless)	Vapor viscosity at ave. soil temperature, μ_{TS} (g/cm-s)	Vadose zone effective diffusion coefficient, D_v^{eff} (cm ² /s)	Diffusion path length, L_d (cm)
1.00E+06	5.00E-03	15	8,382	9.80E-03	4.02E-01	1.80E-04	6.16E-03	137.4

Convection path length, L_p (cm)	Source vapor conc., C_{source} ($\mu\text{g}/\text{m}^3$)	Crack radius, r_{crack} (cm)	Average vapor flow rate into bldg., Q_{soil} (cm ³ /s)	Crack effective diffusion coefficient, D^{crack} (cm ² /s)	Area of crack, A_{crack} (cm ²)	Exponent of equivalent foundation Peclet number, $\exp(Pe^f)$ (unitless)	Infinite source indoor attenuation coefficient, α (unitless)	Infinite source bldg. conc., $C_{building}$ ($\mu\text{g}/\text{m}^3$)
15	1.80E+02	1.25	8.33E+01	6.16E-03	5.00E+03	5.57E+11	8.60E-04	1.55E-01

Unit risk factor, URF ($\mu\text{g}/\text{m}^3$) ⁻¹	Reference conc., RFC (mg/m ³)
4.1E-06	2.0E-03
END	

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
2.6E-07	7.4E-02

MESSAGE SUMMARY BELOW:

END