November 7, 2014

Alameda County Department of Environmental Health 1131 Harbor Bay Parkway, 2nd Floor Alameda, CA 94502

Attention: Mark Detterman

Subject:Report of Data Gaps Investigation3800 San Pablo Avenue, Emeryville, CaliforniaACDEH Fuel Leak Case: RO00002520; Global ID: T06019788682

Ladies and Gentlemen:

Attached please find a copy of the *Report of Data Gaps Investigation* prepared by Gribi Associates. I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

Very truly yours,

William H Banhip

William H. Banker, Jr. San Pablo Avenue Venture c/o Banker, Marks & Kirk 1720 Broadway, Suite 202 Oakland, CA 94612

# **REPORT OF DATA GAPS INVESTIGATION**

3800 San Pablo Avenue Emeryville, California

ACDEH Fuel Leak Case: RO00002520 Global ID: T06019788682

Prepared for:

San Pablo Avenue Venture c/o Banker, Marks & Kirk 1721 Broadway, Suite 202 Oakland, CA 94612

Prepared by:

Gribi Associates 1090 Adams Street, Suite K Benicia, California, 94510

November 7, 2014

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Ladies and Gentlemen:

Gribi Associates is pleased to submit this *Report of Data Gaps Investigation* on behalf of the site owners for the property located at 3800 San Pablo Avenue in Emeryville, California (Site). This report describes and documents: (1) The drilling and sampling of two soil borings (B-29 and B-30) on the west side of San Pablo Avenue, west of the Site groundwater hydrocarbon plume; (2) The installation and sampling of five temporary soil gas wells (SG-1 through SG-5) inside the Site building; and (3) The collection and analysis of four shallow soil samples (SS-1 through SS-4) on the east side of the Site. The goal of these investigative activities has been to address previously-identified investigative data gaps in order to move the Site towards regulatory closure.

We appreciate the opportunity to present this report for your review. Please call if you have any questions or require additional information.

Very truly yours,

Matthew A. Rosman Project Engineer

MAR/JEG:ct

James E. Gribi Professional Geologist California No. 5843



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#### **REPORT OF DATA GAPS INVESTIGATION**

3800 SAN PABLO AVENUE EMERYVILLE, CALIFORNIA

## **EXECUTIVE SUMMARY**

Gribi Associates is pleased to submit this *Report of Data Gaps Investigation* on behalf of the site owners for the property located at 3800 San Pablo Avenue in Emeryville, California (Site). This report describes and documents: (1) The drilling and sampling of two soil borings (B-29 and B-30) on the west side of San Pablo Avenue, west of the Site groundwater hydrocarbon plume; (2) The installation and sampling of five temporary soil gas wells (SG-1 through SG-5) inside the Site building; and (3) The collection and analysis of four shallow soil samples (SS-1 through SS-4) on the east side of the Site. The goal of these investigative activities has been to address previously-identified investigative data gaps in order to move the Site towards regulatory closure.

Soil borings B-29 and B-30 were drilled and sampled on August 28, 2014. Temporary soil vapor wells were installed and sampled on August 28, 2014. Vapor well SG-2 was re-sampled on September 15, 2014, and vapor wells SG-2 and SG-5 were re-sampled on September 25, 2014. Shallow soil samples SS-1 through SS-4 were collected on September 15, 2014.

## **Results of Investigations**

Soil and groundwater samples from borings B-29 and B-30 showed no detectable concentrations of hydrocarbon constituents, except for 0.72 micrograms per liter (ug/L) of Toluene in the groundwater sample from B-29. Soil samples at 2.5 feet and 5.0 feet in depth from temporary well borings SG-2 and SG-5 showed no detectable concentrations of hydrocarbon constituents. Shallow soil samples SS-1 through SS-4 showed no detectable concentrations of hydrocarbons and VOCs, and background levels of Metals. Note that the SS-2 sample showed 69 milligrams per kilogram (mg/kg) of Total Lead and 2.6 milligrams per liter (mg/L) of Soluble (STLC) Lead.

Soil vapor samples from SG-1, SG-3, and SG-4 showed no detectable concentrations of hydrocarbon constituents. Vapor samples collected at SG-2 on September 15, 2014 and September 25, 2014 showed relatively low concentrations of TPH-G, with no detectable BTEX constituents and low concentrations of Cyclohexane, Hexane, Heptane, and 1,3,4-Trimethylbenzene. The vapor sample collected from SG-5 on August 28, 2014 showed 1,700 micrograms per cubic meter (ug/m^3) OF Benzene, 5,600 ug/m^3 of Toluene, 1,200 ug/m^3 of Ethylbenzene, and 4,570 ug/m^3 of Xylenes. The two duplicate vapor samples from SG-5 collected on September 25, 2014 showed no detectable concentrations of hydrocarbon constituents. All the vapor samples showed no detectable Helium (leak detection compound) and generally high levels (greater than 10 percent) of Oxygen.



## Conclusions

Soil and groundwater samples from borings B-29 and B-30 showed no significant detections of hydrocarbon constituents. Thus, the groundwater hydrocarbon plume has been defined to the west, and this data gap has been adequately addressed.

The soil gas samples from SG-1, SG-3, and SG-4 were nondetect and, hence, do not indicate a significant indoor air concern at these locations.

The soil gas samples at SG-2 showed low levels of some gasoline-range constituents, but no BTEX constituents. Also, the soil samples at 2.5 feet and 5.0 feet in depth at SG-2 showed no detectable hydrocarbons. Thus, there does not appear to be a significant indoor air concern at SG-2.

The August 28, 2014 vapor sample from SG-5 showed 1,500 ug/m^3 of Benzene, which is above the commercial indoor air soil vapor Environmental Screening Level (ESL) of 420 ug/m^3. However, the subsequent duplicate soil gas samples from SG-5 collected on September 25, 2014 showed no detectable concentrations of Benzene or other hydrocarbons, indicating that the August 28, 2014 result may have been anomalous. Also, because the SG-5 vapor samples contained greater than 4 percent oxygen and the SG-5 soil samples showed no detectable Benzene, the SG-5 location meets the Low Threat Closure vapor intrusion criteria even with a Benzene soil gas level of 1,500 ug/m^3.

Shallow soil samples SS-1 through SS-4 showed hydrocarbon and metals concentrations which meet residential land use standards. Thus, soils on the east side of the Site do not pose a significant risk for the planned commercial/residential Site redevelopment.

## **Planned Activities**

Pursuant to our October 23, 2014 meeting with ACEH staff at ACEH offices, the ozone injection system at the Site was turned off on October 24, 2014 to allow for groundwater hydrocarbon concentration rebound, if any.

In order to assess remediation effectiveness, fourth quarter groundwater monitoring of Site groundwater monitoring wells and temporary soil gas wells will be conducted in early December 2014, and a report documenting monitoring activities and results will be submitted within three weeks following field monitoring activities. This report will also include an evaluation of Site conditions relative to the Low-Threat Closure Policy and, If warranted, request regulatory closure of this Site.



## 1.0 INTRODUCTION

Gribi Associates is pleased to submit this *Report of Data Gaps Investigation* on behalf of the site owners for the property located at 3800 San Pablo Avenue in Emeryville, California (Site) (see Figure 1 and Figure 2). This report describes and documents: (1) The drilling and sampling of two soil borings (B-29 and B-30) on the west side of San Pablo Avenue, west of the Site groundwater hydrocarbon plume; (2) The installation and sampling of five temporary soil gas wells (SG-1 through SG-5) inside the Site building; and (3) The collection and analysis of four shallow soil samples (SS-1 through SS-4) on the east side of the Site. The goal of these investigative activities has been to address previously-identified investigative data gaps in order to move the Site towards regulatory closure.

All Site activities were conducted in accordance with the procedures set forth in prior approved workplans and with applicable regulatory guidelines and statutes.

## 1.1 Scope of Work

Gribi Associates was contracted by the property owners to conduct the following scope of work:

Task 1: Conduct pre-field activities. Task 2: Conduct offsite soil and groundwater sampling activities Task 3: Conduct installation and sampling of temporary soil gas wells Task 4: Conduct shallow soil sampling on east side of site Task 5: Conduct laboratory analyses of soil, water, and vapor samples. Task 6: Prepare report of findings.

These tasks were conducted in accordance with the approved workplan and with generally accepted sampling guidelines and protocols.

## 1.2 Limitations

The services provided under this contract as described in this report include professional opinions and judgments based on data collected. These services have been provided according to generally accepted environmental protocols.

The opinions and conclusions contained in this report are typically based on information obtained from:

- 1. Observations and measurements made by our field staff.
- 2. Contacts and discussions with regulatory agencies and others.
- 3. Review of available hydrogeologic data.



## 2.0 SITE BACKGROUND

According to the USGS Oakland, West, California 7.5-Minute Quadrangle Map, the Site lies on a gently southwest-sloping plain approximately one mile east from San Francisco Bay. The elevation at the Site is approximately 40 feet above mean sea level. Based on site topography and location, we would expect groundwater flow in the site area to generally be to the west towards San Francisco Bay.

Subsurface soils at the site and in the site area generally consist of clays, with occasional thin, discontinuous silts, sands, and gravels. Groundwater at the site is generally encountered at depths below 10 feet below surface grade.

# 2.1 Brief Site History

Preliminary Phase I ESA activities were conducted which included a review of historical Sanborn Maps, a city directories abstract, historical aerial photos, and City of Emeryville records for the Site and site vicinity. Results of the historical records review indicate the following relative to Site history and environmental conditions.

- The current Site building was constructed between 1911 and 1939, and was occupied by a GMC truck sales and repair facility from at least 1950 to 1980.
- A former gasoline dispenser kiosk, labeled as "Gas & Oil" was present in the small Adeline Street parking lot directly adjacent to the site building (where the current front door to the building is located). The "Gas & Oil" label is the standard designation on Sanborn Maps for a gas station or gasoline fueling facility. Note that it is possible that the fuel dispenser island extended inside the Site building, immediately adjacent to the outside kiosk.
- The south wing of the GMC truck facility was apparently not used for truck repair activities, but rather was used for offices, parts department, and body shop.
- While the GMC truck facility was present, the southeast yard, adjacent to Apgar Street, was either not part of the facility (residences) or was used for truck parking. The northeast yard area, adjacent to 39<sup>th</sup> Street, extended further east to include the current adjacent auto repair facility and was apparently used for storage and auto painting.

## 2.2 Summary of Previous Environmental Investigation Activities

The following sections describe previous underground storage tank (UST) removal and environmental investigation activities conducted at the Site.



## 2.2.1 UST Removal Activities

According to previous reports and records, there were previously two separate UST fueling systems on the Site. One system included two 1,000-gallon gasoline USTs and, while the exact location of these USTs is not known, these USTs were most likely located in the parking lot on the northeast side of the Site. The second system included one 1,000-gallon heating oil UST and one 550-gallon heating oil UST, both located in, and adjacent to, the Adeline Street sidewalk on the northwest property boundary. The gasoline UST system was apparently removed in 1981, and there is no record of environmental sampling during the removal. The two heating oil USTs were removed in May 2002. One soil sample was collected beneath each of the removed USTs at a depth of approximately seven feet in depth. These soil samples showed up to 440 milligrams per kilogram (mg/kg) of Total Petroleum Hydrocarbons as Gasoline (TPH-G). The UST excavation cavities were subsequently overexcavated, and subsequent soil samples collected at approximately ten feet in depth showed relatively low levels of hydrocarbons.

In April 2012, a 1,000-gallon UST was discovered in the Apgar Street sidewalk on the south side of the Site. This UST was removed on August 9, 2012. The tank showed no evidence of leakage, and soils beneath the removed UST exhibited slight to occasionally moderate hydrocarbon odors. Laboratory analytical results from soil samples showed no significant hydrocarbon detections. The only hydrocarbon detection in any of the samples was 0.520 milligrams per kilogram (mg/kg) (detection level = 0.500 mg/kg) of Total Petroleum Hydrocarbons as Gasoline (TPH-G) in the north sidewall soil sample. All of the metals results were relatively low and appear to represent background metals concentrations.

## 2.2.2 Site Investigation Activities

In May 2007, Enviro Soil Tech Consultants (ESTC) drilled and sampled seven soil borings, B-1 through B-7, in the small parking lot on the northwest (Adeline Street) side of the Site (see Figures 2, 3, and 4) (*Preliminary Investigation and Evaluation Report for 3800 San Pablo Avenue, Emeryville, California,* Enviro Soil Tech Consultants, August 28, 2007). Soil samples collected at five-foot intervals down to 20 feet in depth showed no significant hydrocarbon detections. Grab groundwater samples from borings B-2, B-4, and B-7, located on the extreme north and south sides of the parking lot, showed no significant hydrocarbon detections. Grab groundwater samples from borings B-1, B-3, B-5, and B-6, located on the middle of the parking lot from the extreme east (building) edge to the southwest (Adeline Street) edge of the lot, showed TPH-G concentrations ranging from 4,500 micrograms per liter (ug/L) to 780,000 ug/L, and Benzene concentrations ranging from 7.5 ug/L to 6,400 ug/L. The configuration of these groundwater hydrocarbon detections seemed to point to a southwest aligned groundwater hydrocarbon plume that originated northeast of the small Adeline Street parking lot itself. This conclusion of a northeasterly source was bolstered by the lack of soil hydrocarbon detections or field evidence of shallow soil impacts in the seven soil borings.

In December 2011, Gribi Associates drilled and sampled seven investigative borings, B-8 through B-14, on the site (*Report of Soil and Groundwater Investigation and Workplan to Conduct Additional Investigation Activities, 3800 San Pablo Avenue, Emeryville, California*, Gribi



Associates, January 26, 2012). Soils encountered in the borings generally consisted of clays, with relatively thin discontinuous silty and clayey gravels and sands present in some of the borings. Soil and grab groundwater samples from the seven borings were analyzed for both gasoline- and diesel-range hydrocarbons. Very low concentrations (below 50 milligrams per kilogram, mg/kg) of diesel-range hydrocarbons were encountered in soil samples below ten feet in depth in borings B-8 and B-11. Very low concentrations (below 5 mg/kg) of gasolinerange hydrocarbons were encountered in soil samples below ten feet in depth in borings B-8, B-12, B-13, and B-14. Low concentrations of gasoline-range hydrocarbons, with no BTEX constituents, were encountered in grab groundwater samples from B-8 and B-14. Moderate levels of gasoline-range hydrocarbons were encountered in grab groundwater samples from borings B-12 and B-13. Results of this investigation indicated that the previously-identified groundwater hydrocarbon plume beneath the Adeline Street parking lot is localized and did not originate from elsewhere on the Site. Further, it appeared that the source, or sources, of the groundwater hydrocarbon impacts in the Adeline Street parking lot are either the former USTs in the Adeline Street sidewalk (removed in 2002) or perhaps fuel dispensers associated with these former USTs. The report for this investigation included a work plan to: (1) The installation and monitoring of four groundwater monitoring wells in the Adeline Street parking lot; (2) The drilling and sampling of three soil borings on the west side of San Pablo Avenue, approximately 120 feet southwest from the Adeline Street parking lot.

In May 2012, nine investigative borings (B-15 through B-23) were drilled and four groundwater monitoring wells (MW-1 through MW-4) were installed at the Site (*Report of Remedial Investigation and Workplan to Conduct Interim Remedial Measures, 3800 San Pablo Avenue, Emeryville, California,* Gribi Associates, July 13, 2012). Both field and laboratory analytical results from this investigation indicate a relatively small, concentrated, predominately groundwater only, gasoline-range hydrocarbon plume present beneath the Adeline Street parking lot. The report for this investigation included a Conceptual Site Model and a work plan to conduct interim remedial measures (IRMs) for the Site. The IRM work plan proposed the drilling and sampling of additional borings and the implementation of an ozone injection pilot test on the Site. This work plan was conditionally approved on November 16, 2012.

In February 2013, three soil borings (B-24, B-27, and B-28) and three ozone injection wells (OW-1, OW-2, and OW-3) were installed and sampled. Soil samples from the three investigative borings and three well borings showed relatively low levels of gasoline-range hydrocarbons, with TPH-G concentrations ranging from nondetect to 25 mg/kg, and Benzene concentrations ranging from nondetect to 0.039 mg/kg. Groundwater samples from the three investigative borings showed low to moderate levels of gasoline-range hydrocarbons, with TPH-G concentrations ranging from nondetect to 7,900 ug/L and Benzene concentrations ranging from nondetect to 1,100 ug/L.

Gribi Associates installed an ozone remediation system at the site during the week of September 2, 2013. The ozone system was started on September 9, 2013 and operated continuously until the mid-October 2013. The system required repairs and was re-started on November 7, 2013 and operated continuously until the system was turned off on February 7, 2014. The ozone system was re-started on August 5, 2014 and turned off on October 24, 2014 to assess concentration rebound.



On April 25, 2014, Gribi Associates submitted the *Data Gaps Investigation Workplan* proposing additional soil, groundwater, and soil vapor sampling at the Site. Based on comments from ACEH, Gribi Associates submitted the *Workplan Addendum* on July 7, 2014 responding and providing clarification relative to ACEH comments. The workplan and workplan addendum were approved by ACEH on July 18, 2014.

# 3.0 SITE CONCEPTUAL MODEL

Gribi Associates prepared a Site Conceptual Model (SCM) for the Site which generally included an evaluation of contaminant sources, contaminant impacts, potential environmental and human health receptors, and investigative data gaps. Some of the key elements of the SCM include the following:

- The contaminants of concern are primarily TPH-G and BTEX.
- The contaminant source, or sources, appears to be the former dispenser kiosk located in the Adeline Street parking lot near the west edge of the Site building.
- Contaminant impacts in soil appear to be fairly low, with maximum TPH-G and Benzene concentrations of 69 mg/kg and 0.36 mg/kg, respectively.
- Contaminant impacts in groundwater are limited primarily to the west side of the Site, encompassing an area including the west Adeline Street parking lot and extending a short distance northeast into the site building TPH-G and benzene concentrations in this area are elevated (TPH-G>10,000 ug/L and benzene>1,000 ug/L).
- Contaminant impacts in vapor have not been assessed.
- Potential human health receptors include (1) future construction workers, and (2) human exposure to outdoor and indoor volatile contaminant vapors.
- Investigative data gaps include (1) the extent of groundwater contaminant impacts west across San Pablo Avenue, and (2) the nature and extent of vapor contaminant impacts beneath the Site building.

## 4.0 DESCRIPTION OF FIELD ACTIVITIES

Soil borings B-29 and B-30 were drilled and sampled on August 28, 2014. Temporary soil vapor wells were installed and sampled on August 28, 2014. Vapor well SG-2 was re-sampled on September 15, 2014, and vapor wells SG-2 and SG-5 were re-sampled on September 25, 2014. Shallow soil samples SS-1 through SS-4 were collected on September 15, 2014.

## 4.1 Pre-Field Activities

Prior to beginning field activities, a drilling permit was obtained from the Alameda County Department of Public Works, and an encroachment permit was obtained from the City of Emeryville for borings on the public right-of-way. Copies of these permits are provided in Appendix A.



Prior to implementing field activities, proposed well locations were marked with white paint, and Underground Services Alert (USA) was notified at least 48 hours prior to drilling. Also, proposed well locations were also cleared by a private underground utility locator.

Prior to initiating drilling activities, a Site Safety Plan was prepared, and a tailgate safety meeting was conducted with all the workers involved in conducting the investigations.

# 4.2 Locations of Soil Gas Sample and Groundwater Monitoring Wells

The location of borings, soil gas wells, and shallow soil samples are shown on Figure 5. The two investigative borings, B-29 and B-30, were located on the west side of San Pablo Avenue, due west from the UST/dispenser source areas on in the Adeline Street parking lot.

Temporary soil gas wells, SG-1, SG-2, SG-3, and SG-5 were sited inside the Site building along the west to southwest sides of the building, as close as possible to known hydrocarbon impact areas in the Adeline Street parking lot. Soil gas well SG-4 was sited in the southwest corner of the Site building directly adjacent to the former UST located in the Apgar Street sidewalk on the southwest side of the Site.

The four shallow soil samples, SS-1, SS-2, SS-3, and SS-4, were collected in a grid pattern in an area on the east side of the Site to be excavated during planned Site redevelopment.

# 4.3 Drilling and Sampling of Investigative Borings

Boring activities were conducted by Gregg Drilling (C-57 License No. 485165) using direct-push coring equipment. The two investigative borings, B-29 and B-30, were drilled to approximately 24 feet in depth using direct-push hydraulically-driven soil coring equipment. Continuous soil cores were collected to total depth in a clear plastic acetate tube, nested inside a stainless steel core barrel. After each four-foot core barrel was brought to the surface and exposed, the core was sliced lengthwise to expose the soil core, examined, logged, and field screened for hydrocarbons by a qualified geologist using sight, smell, and an organic vapor monitor (OVM). Following completion, the investigative borings were grouted to match existing grade using a cement\sand slurry.

Each soil core was first sliced open lengthwise along the length of the acetate tube, allowing full examination and logging of the soil core prior to sampling. Soil samples were then collected from specific zones of interest in an acetate liner, which were cut to the desired length (typically four to six inches), capped with Teflon tape and plastic end caps, labeled and placed in cold storage pending transport to a laboratory under formal chain-of-custody. All coring and sampling equipment was thoroughly cleaned and decontaminated between each sample collection by triple rinsing first with water, then with dilute tri-sodium phosphate solution, and finally with distilled water.

One grab groundwater sample was collected from each boring at first encountered groundwater. Grab groundwater samples were collected from the open boring after placing 3/4-inch diameter well casing in the boring. Groundwater was then sampled using a clean



small diameter bailer, and poured directly into laboratory-supplied containers. Each sample container will then be tightly sealed, labeled, and placed in cold storage for transport to the laboratory under formal chain-of-custody.

# 4.4 Installation and Sampling of Temporary Soil Gas Wells

All soil gas sampling activities were conducted in accordance with *Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air* (DTSC, Final, October 2011) and *Advisory - Active Soil Gas Investigations* (DTSC, April 2012). Five temporary soil gas sampling wells, SG-1 through SG-5, were installed by Gregg Drilling. The vapor well borings were drilled to approximately 5.5 feet in depth using hand auger equipment and were constructed using a porous vapor tip attached to 1/4-inch diameter Teflon tubing. The wells were constructed as follows: (1) Filter sand was placed around the vapor tip and tubing to approximately six inches above the vapor tip (set at approximately 5.5 feet below ground surface); (2) A one foot bentonite seal, consisting of six inches of dry granular bentonite followed by six inches of prehydrated granular or pellet bentonite, was placed above the filter sand; and (3) The remaining annulus was filled with hydrated pellet bentonite. The top of each well was placed in a well box concreted in place at surface grade.

The five temporary vapor wells, SG-1 through SG-5, were sampled on August 28, 2014. However, the vapor sample from SG-2 was not viable when it reached the laboratory. Thus, SG-2 was re-sampled on September 15, 2014. Also, due to the hydrocarbon detections in SG-2 and SG-5, these vapor wells were again sampled, with a duplicate for the SG-5 well, on September 25, 2014.

Each of the temporary soil gas wells was sampled using the following procedures:

- Soil vapor samples was not be collected within 72 hours following a significant (>0.5 inches rain) precipitation event.
- A "T" valve was placed in line at the ground surface to allow for system purging and for pressure testing of the above ground portion of the sampling train. The sampling tubing was attached to a 200-milliliter per minute maximum flow controller, then a one liter laboratory-supplied Summa Canister<sup>™</sup> (evacuated to 29 inches mercury vacuum) with vacuum pressure valve.
- After allowing the vapor wells to equilibrate for at least two hours, the wells were purged and sampled. A laboratory supplied purge/pressure test Summa Canister™ (evacuated to 29 inches mercury) was then used to test vacuum pressure in the above ground portion of the sampling train. Sampling train vacuum pressure were maintained for at least 10 minutes.
- The vapor well was then purged of approximately three purge volumes using a dedicated Summa Canister.



- The entire probe and sampling train was then placed under a shroud and a leak test was conducted. Helium from a compressed gas cylinder was pumped into the shroud, and the helium concentration inside the shroud was maintained at approximately 10,000 ppmV (the detection level for the ASTM Method D-1946 is 100 ppmV). Helium monitoring was conducted using a Mark Radiodetection MGD-2002 helium detector with internal pump (or equivalent). For the sampling train leak test, the helium monitor was attached to the purge tube and the T-valve opened. No positive readings of helium were detected, thus indicating no leaks in the sampling train prior to sampling.
- The vapor sample was then collected by opening the Summa canister and allowing the vapor to fill the canister until the vacuum pressure in the canister reached 10 to 20 percent of initial (approximately 2 to 6 inched mercury). The flow controller insured that the Summa Canister filled slowly (at 200 ml per minute or less) to insure a representative soil vapor sample. Prior to, at start time, and during sampling, periodic vacuum measurements were recorded on a field data sheet, and initial and final vacuum pressures were noted on chain-of-custody records.

The vapor samples (filled Summa canisters) were secured and transported to Sunstar Laboratories, a certified analytical laboratory, under formal chain-of-custody.

Note that, after vapor sampling at vapor well locations SG-2 and SG-5 on September 25, 2014, soil samples were collected from hand auger borings adjacent to the vapor wells. Soil samples were collected at approximately 2.5 feet and 5.0 feet in depth from each boring. Each soil sample was collected by completely filling a laboratory supplied jar, tightly capping and labeling the jar, and placing the jar in an ice-chilled cooler for transport to a certified analytical laboratory under formal chain-of-custody. All coring and sampling equipment was thoroughly cleaned and decontaminated between each sample collection, and after completion, the borings were backfilled and resurfaced to match existing grade.

# 4.5 Collection of Shallow Soil Samples

Four shallow soil samples, SS-1 through SS-4, will be collected using hand auger equipment after coring through the asphalt-paved ground surface. Soil samples were collected at approximately 1.0 foot bgs in 4-ounce Teflon-lined jars. Each soil sample was collected by completely filling a laboratory supplied jar, tightly capping and labeling the jar, and placing the jar in an ice-chilled cooler for transport to a certified analytical laboratory under formal chain-of-custody. All coring and sampling equipment was thoroughly cleaned and decontaminated between each sample collection, and after completion, the borings were backfilled and resurfaced to match existing grade.

# 4.6 Laboratory Analysis of Vapor, Soil, and Water Samples

One soil sample and one grab groundwater sample from the two offsite borings, B-29 and B-30, were analyzed for the following parameters. Also, two soil samples from SG-2 and SG-5 were analyzed for the following parameters.



- USEPA 8260B Total Petroleum Hydrocarbons as Gasoline (TPH-G)
- USEPA 8260B Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX)
- USEPA 8260B Oxygenates (DIPE, ETBE, MTBE, TAME, TBA)
- USEPA 8260B Naphthalene

In addition, eight soil gas samples from the five wells, SG-1 through SG-5, were analyzed for the following parameters with appropriate detection levels which are below regulatory screening levels.

- USEPA TO-15 TPH-G and Volatile Organic Compounds (VOCs)
- ASTM Method D-1946 Fixed Gases (Helium, Oxygen, Carbon Dioxide, Nitrogen)
- RSK 175 Methane

Also, the four shallow soil samples, SS-1 through SS-4, were analyzed for the following parameters.

- USEPA 8015B Total Petroleum Hydrocarbons-Carbon Chain
- USEPA 8260B Volatile Organic Compounds (VOCs)
- USEPA 6010 CAM 17 Metals

Due to a slightly elevated Total Lead level, the SS-2 soil sample was also analyzed for the following parameters:

USEPA 6000 Soluble Lead (STLC Pb)

All analyses were conducted by Sunstar Labs, a California-certified environmental laboratory, with standard turnaround time on results.

## 5.0 **RESULTS OF INVESTIGATION**

## 5.1 General Subsurface Conditions

Boring logs for B-29 and B-30 are included in Appendix B. Soils encountered in borings B-29 and B-30 generally consisted of clayey silts and sandy silts, occasionally grading to clayey, silty sands. Soils in the five temporary soil gas wells, SG-1 through SG-5, consisted 0-2 feet of fill soils, underlain by dark grey to black Bay Mud clays to approximately 4.0 feet in depth, and then by light brown to brown sandy, gravelly silt to 5.5 feet total depth. Soils in the four shallow soil sample borings, SS-1 through SS-4, consisted of approximately 0.5-1 feet of silty gravels, followed by Bay Mud silty clays to 2.0 feet total depth.

Groundwater was encountered in borings B-29 and B-30 at a depth of approximately 22 feet in depth and rose in the borings to at least 15 feet in depth (due to vehicle safety concerns, borings were grouted prior to groundwater stabilization).



No hydrocarbon odors or OVM detections were noted in soils from any of the borings from this investigation. No hydrocarbon odors or sheens were noted in purged water from borings B-29 or B-30.

# 5.2 Results of Laboratory Analyses

Soil and groundwater laboratory analytical results from B-29 and B-30 are summarized in Table 1 and on Figure 5, and soil laboratory analytical results from SG-2 and SG-5 are summarized in Table 1. Soil vapor laboratory analytical results from SG-1 through SG-5 are summarized in Table 2 and on Figure 6, and soil laboratory analytical results from SS-1 through SS-4 are summarized in Table 3. Laboratory data reports and chain-of-custody records for all analyses are included in Appendix C.

Soil and groundwater samples from borings B-29 and B-30 showed no detectable concentrations of hydrocarbon constituents, except for 0.72 micrograms per liter (ug/L) of Toluene in the groundwater sample from B-29. Soil samples at 2.5 feet and 5.0 feet in depth from temporary well borings SG-2 and SG-5 showed no detectable concentrations of hydrocarbon constituents. Shallow soil samples SS-1 through SS-4 showed no detectable concentrations of hydrocarbons and VOCs, and background levels of Metals. Note that the SS-2 sample showed 69 milligrams per kilogram (mg/kg) of Total Lead and 2.6 milligrams per liter (mg/L) of Soluble (STLC) Lead.

Soil vapor samples from SG-1, SG-3, and SG-4 showed no detectable concentrations of hydrocarbon constituents. Vapor samples collected at SG-2 on September 15, 2014 and September 25, 2014 showed relatively low concentrations of TPH-G, with no detectable BTEX constituents and low concentrations of Cyclohexane, Hexane, Heptane, and 1,3,4-Trimethylbenzene. The vapor sample collected from SG-5 on August 28, 2014 showed 1,700 micrograms per cubic meter (ug/m^3) OF Benzene, 5,600 ug/m^3 of Toluene, 1,200 ug/m^3 of Ethylbenzene, and 4,570 ug/m^3 of Xylenes. The two duplicate vapor samples from SG-5 collected on September 25, 2014 showed no detectable concentrations of hydrocarbon constituents. All the vapor samples showed no detectable Helium (leak detection compound) and generally high levels (greater than 10 percent) of Oxygen.

## 6.0 CONCLUSIONS

Gribi Associates conducted a data gaps investigation which included: (1) The drilling and sampling of two soil borings, B-29 and B-30, on the west side of San Pablo Avenue, west of the Site groundwater hydrocarbon plume; (2) The installation and sampling of five temporary soil gas wells, SG-1 through SG-5, inside the Site building; and (3) The collection and analysis of four shallow soil samples, SS-1 through SS-4, on the east side of the Site.

## 6.1 Soil Borings B-29 and B-30

Soil and groundwater samples from borings B-29 and B-30 showed no significant detections of hydrocarbon constituents. Thus, the groundwater hydrocarbon plume has been defined to the west, and this data gap has been adequately addressed.



## 6.2 Soil Gas Wells SG-1 through SG-5

The soil gas samples from SG-1, SG-3, and SG-4 were nondetect and, hence, do not indicate a significant indoor air concern at these locations.

The soil gas samples at SG-2 showed low levels of some gasoline-range constituents, but no BTEX constituents. Also, the soil samples at 2.5 feet and 5.0 feet in depth at SG-2 showed no detectable hydrocarbons. Thus, there does not appear to be a significant indoor air concern at SG-2.

The August 28, 2014 vapor sample from SG-5 showed 1,500 ug/m^3 of Benzene, which is above the commercial indoor air soil vapor Environmental Screening Level (ESL) of 420 ug/m^3. However, the subsequent duplicate soil gas samples from SG-5 collected on September 25, 2014 showed no detectable concentrations of Benzene or other hydrocarbons, indicating that the August 28, 2014 result may have been anomalous. Also, because the SG-5 vapor samples contained greater than 4 percent oxygen and the SG-5 soil samples showed no detectable Benzene, the SG-5 location meets the Low Threat Closure vapor intrusion criteria even with a Benzene soil gas level of 1,500 ug/m^3<sup>1</sup>.

## 6.3 Shallow Soil Samples SS-1 through SS-4

Shallow soil samples SS-1 through SS-4 showed hydrocarbon and metals concentrations which meet residential land use standards. Thus, soils on the east side of the Site do not pose a significant risk for the planned commercial/residential Site redevelopment.

## 7.0 PLANNED ACTIVITIES

Pursuant to our October 23, 2014 meeting with ACEH staff at ACEH offices, the ozone injection system at the Site was turned off on October 24, 2014 to allow for groundwater hydrocarbon concentration rebound, if any.

In order to assess remediation effectiveness, fourth quarter groundwater monitoring of Site groundwater monitoring wells and temporary soil gas wells will be conducted in early December 2014, and a report documenting monitoring activities and results will be submitted within three weeks following field monitoring activities. This report will also include an evaluation of Site conditions relative to the Low-Threat Closure Policy and, If warranted, request regulatory closure of this Site.

<sup>&</sup>lt;sup>1</sup> According to Scenario 4 Direct Measurement of Soil Gas Concentrations in Appendix 4 of the *Low-Threat Underground Storage Tank Case Closure Policy*, a site with 5 feet of soil with TPH of less than 100 mg/kg and Oxygen greater than 4 percent is allowed a Benzene soil vapor concentration of up to 85,000 ug/m<sup>3</sup> for residential land use and 280,000 ug/m<sup>3</sup> for commercial land use).



TABLES



Table 1         SUMMARY OF SOIL AND GRAB GROUNDWATER LABORATORY ANALYTICAL RESULTS         Former Maz Glass UST Site										
					Soil	concentratio	on in milligrai	ms per kilogr	am (mg/kg)	
		Sample	Sample	Groundwater concentration in micrograms per liter (ug/L)						
Sample ID	Date	Matrix	Depth	TPH-G	Benzene	Toluene	benzene	Xylenes	Napthalene	Oxygenates
B-29-20.0	8/28/2014	Soil	20 ft	<0.50	<0.005	<0.005	<0.005	<0.010	<0.005	NA
B-29-W	8/28/2014	Water	20 ft	<50	<0.50	0.72	<0.50	<1.0	<1.0	All ND
B-30-20.0	8/28/2014	Soil	20 ft	<0.50	<0.005	<0.005	<0.005	<0.010	<0.005	NA
B-30-W	8/28/2014	Water	20 ft	<50	<0.50	<0.50	<0.50	<1.0	<1.0	All ND
SG-2-2.5	9/25/2014	Soil	2.5 ft	<0.5	<0.005	<0.005	<0.005	<0.010	<0.005	All ND
SG-2-5.0	9/25/2014	Soil	5.0 ft	<0.5	<0.005	<0.005	<0.005	<0.010	<0.005	All ND
SG-5-2.5	9/25/2014	Soil	2.5 ft	<0.5	<0.005	<0.005	<0.005	<0.010	<0.005	All ND
SG-5-5.0	9/25/2014	Soil	5.0 ft	<0.5	< 0.005	< 0.005	< 0.005	< 0.010	< 0.005	All ND
	Shallow S	oil ESL		83	0.044	2.9	3.3	2.3	1.2	Various
	Groundwa	ter ESL	100 1.0 40 30 20 6.1 Various					Various		

#### **Table Notes**

TPH-G = Total petroleum hydrocarbons as gasoline O(4) = O(4) = O(4)

OXY = Oxygenates, including Ter-butanol (TBA),

Di-isopropyl Ether (DIPE), Methyl Tertiary Butyl Ether

(MTBE), Ethyl-t-butyl Ether (ETBE), and Tert-amyl Methyl

Ether (TAME)

ND = Not detected above laboratory detection limits

<0.5 = Not detected above the expressed detection level ESL = Environmental Screening Levels, as contained in Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, San Francisco Bay Regional Water Quality Control Board, December 2013

							Table 2							
				SUMM	ARY OF SO	L VAPOR L	ABORATO	RY ANALY	FICAL RESULTS					
						Former M	az Glass U	ST Site						
		Sample	Sample	TPH-G	В	т	Е	Х	Other	Methane	CO2	Ν	02	Helium
Sample ID	Date	Matrix	Depth	(ug/m3)	(ug/m3)	(ug/m3)	(ug/m3)	(ug/m3)	(ug/m3)	(ppmv)	(%)	(%)	(%)	(%)
SG-1	8/28/2014	Vapor	5.5 ft	<7,170	<3.3	<3.8	<4.4	<8.8	Heptane = <b>5.1</b>	<8.1	<1.62	62.1	14.2	<1.62
SG-2	9/15/2014	Vapor	5.5 ft	7,600	<3.3	<3.8	<4.4	<8.8	Cyclohexane = 310	170	3.87	51.0	13.2	<1.57
									Heptane = <b>46</b>					
									Hexane = <b>1,000</b>					
56-2	9/25/2014	Vanor	5 5 ft	<7 170	<160	<100	~220	~220	1,3,3-100B = 30	77	5 30	58 3	2 01	0.00
30-2	5/25/2014	vapor	5.5 ft	<7,170	<100	150	~220	~220	Hexane = <b>1,000</b>	,,	5.50	50.5	2.01	0.00
SG-3	8/28/2014	Vapor	5.5 ft	<7,170	<3.3	<3.8	<4.4	<8.8		<7.6	<1.51	49.7	16.6	<1.51
SG-4	8/28/2014	Vapor	5.5 ft	<7,170	<3.3	<3.8	<4.4	<8.8	1,2,4-TMB = <b>13</b>	240	<1.54	52.3	5.87	<1.54
SG-5	8/28/2014	Vapor	5.5 ft	<7,170	1,700	5,600	1,200	4,570	All ND	150	<1.53	49.7	12.5	<1.53
SG-5	9/25/2014	Vapor	5.5 ft	<7,170	<3.3	<3.8	<4.4	<8.8	All ND	18	2.01	54.7	9.28	0.00
SG-5D	9/25/20114	Vapor	5.5 ft	<7,170	<3.3	<3.8	<4.5	<8.9	All ND	<7.9	2.01	53.5	10.8	0.00
Purge	8/28/2014	Vapor	5.5 ft	NA	NA	NA	NA	NA	NA	NA	<1.58	53.5	14	<1.58
	Soil Gas	ESL		2.5E+06	420	1.3E+06	4,900	4.4E+05	Various					

#### **Table Notes**

B= Benzene

T = Toluene

E = Ethylhbenzene

X = Xylenes

1,2,4-TMB = 1,2,4-Trimethylbenzene

ug/m3 = micrograms per cubic meter

ppmb = parts per million by volume

% = Percent

Other = Other VOCs, includes approxmately 47 individual VOC compounds

<7,170 = Not detected at or above the expressed value.

ND = Not detected above laboratory detection levels.

NA = Not analyzed for this analyte

		Table 3							
SUMMAR	SUMMARY OF SHALLOW SOIL LABORATORY ANALYTICAL RESULTS								
Former Maz Glass UST Site									
Location	SS-1	SS-2	SS-3	SS-4					
Depth	1.0 ft	1.0 ft	1.0 ft	1.0 ft	ESL				
Units	mg/kg	mg/kg	mg/kg	mg/kg					
TPH-G	<10	<10	<10	<10	100				
TPH-D	<10	<10	<10	<10	100				
TPH-MO	<10	<10	<10	<10	500				
VOCs	ALL ND	ALL ND	ALL ND	ALL ND	Various				
Antimony	<3.0	<3.0	<3.0	<3.0	20				
Arsenic	<5.0	<5.0	<5.0	<5.0	0.39				
Barium	170	200	150	130	750				
Beryllium	<1.0	<1.0	<1.0	<1.0	4.0				
Cadmium	<2.0	<2.0	<2.0	<2.0	12				
Chromium	30	29	10	9.7	750				
Cobalt	8.9	13	44	25	23				
Copper	21	26	8.9	8.8	230				
Lead	16	69(A)	10	11	80				
Mercury	<0.10	0.25	0.29	0.3	6.7				
Molybdenum	<5.0	<5.0	<5.0	<5.0	40				
Nickel	39	40	20	16	150				
Selenium	<5.0	<5.0	<5.0	<5.0	10				
Silver	<2.0	<2.0	<2.0	<2.0	20				
Thallium	<2.0	<2.0	<2.0	<2.0	0.78				
Vanadium	37	36	17	15	2.3				
Zinc	61	94	42	36	600				

#### **Table Notes**

mg/kg = Milligrams per kilogram

TPH-G = Total petroleum hydrocarbons as gasoline

TPH-D = Total petroleum hydrocarbons as diesel

TPH-MO = Total petroleum hydrocarbons as motor oil

VOCs = Volatile Organic Compounds, includes approximately 59 individual compounds

<10 = Not detected above the expressed value

ALL ND = No detectable concentrations of approximately 59 individual compounds

ESL = Environmental Screening Levels, as contained in Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater, San Francisco Bay Regional Water Quality

Control Board, December 2013

**FIGURES** 









						-				
20.0'		DEPTH	7.5'	11.0'	16.5'		DEPTH	6.0'	9.0'	14.0
NA 3.9 5 <0.005 5 <0.005 5 <b>0.070</b> 0 <0.010 NA		TPH-D: TPH-G: B: T: E: X: OXY:	NA <0.5 <0.005 <0.005 <0.010 NA	NA <0.5 <0.005 <0.005 <0.005 <0.010 NA	NA <0.5 <0.005 <0.005 <0.005 <0.010 NA		TPH-D: TPH-G: B: T: E: X: OXY:	NA <0.5 <0.005 <0.005 <0.010 NA	NA 4.0 <0.005 <0.005 <0.005 <0.010 NA	22 2.2 <0.00 <0.00 <0.00 <0.01 NA
~	_		$\succ$		_	_				

DEPTH	11.0'
TPH-G:	<b>0.700</b>
B:	<0.005
T:	<0.005
E:	<0.005
X:	<0.010

DEPTH	7.5'	13.5'	20.5'
TPH-D:	NA	NA	NA
B:	<0.5 <0.005	<0.5 <0.005	<0.5 <0.005
T: E:	<0.005 <0.005	<0.005 <0.005	<0.005 <0.005
X: OXY:	<0.010 NA	<0.010 NA	<0.010 NA

-	DEPTH	10.5'	15.0'	20.0'
	TPH-D:	<b>26</b>	<10	NA
	TPH-G:	<0.5	<0.5	<0.5
	B:	<0.005	<0.005	<0.005
	T:	<0.005	<0.005	<0.005
	E:	<0.005	<0.005	<0.005
	X:	<0.010	<0.010	<0.010
	OXY:	NA	NA	NA





**HISTORICAL SOIL** HYDROCARBON RESULTS

3800 SAN PABLO AVENUE EMERYVILLE, CALIFORNIA

FIGURE: 3 DATE: 11/07/2014

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**APPENDIX A** 

**REGULATORY PERMITS** 



## Alameda County Public Works Agency - Water Resources Well Permit



399 Elmhurst Street Hayward, CA 94544-1395 Telephone: (510)670-6633 Fax:(510)782-1939

#### Application Approved on: 08/01/2014 By jamesy

08/19/2014

Permit Numbers: W2014-0726 Permits Valid from 08/19/2014 to 08/20/2014 City of Project Site: Emeryville 1406933172967 3800 San Pablo Avenue, Emeryville, CA Completion Date:08/20/2014 Contact Sam Brathwaite at (925) 570-7609 or sbrathwaite@groundzonees.com Phone: 707-748-7743

Phone: --

Applicant: Gribi - James Gribi 1090 Adams St Ste K, Benicia, CA 94510 **Property Owner:** Elaine Kirk Marks Mgmt. Co 505 Sansome St, San Francisco, CA 94111 \*\* same as Property Owner \*\* Client:

	Total Due:	\$265.00
Receipt Number: WR2014-0315	Total Amount Paid:	\$265.00
Payer Name : Gribi	Paid By: CHECK	PAID IN FULL

#### **Works Requesting Permits:**

Borehole(s) for Investigation-Contamination Study - 6 Boreholes Driller: Gregg - Lic #: 485165 - Method: hstem

#### Specifications

Application Id:

Site Location:

Project Start Date:

Assigned Inspector:

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2014-	08/01/2014	11/17/2014	6	2.50 in.	20.00 ft
0726					

#### **Specific Work Permit Conditions**

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.

2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

4. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

5. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting,

#### Work Total: \$265.00

## Alameda County Public Works Agency - Water Resources Well Permit

once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

6. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.

## 7. NOTE:

Under California laws, the owner/operator are responsible for reporting the contamination to the governmental regulatory agencies under Section 25295(a). The owner/operator is liable for civil penalties under Section 25299(a)(4) and criminal penalties under Section 25299(d) for failure to report a leak. The owner/operator is liable for civil penalties under Section 25299(b)(4) for knowing failure to ensure compliance with the law by the operator. These penalty provisions do not apply to a potential buyer.

8. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

# CITY OF EMERYVILLE • DEPARTMENT OF PUBLIC WORKS

ADDUCANT	FOR CITY USE ONLY
AFFLICAINI Gribi Associates	Permit No. 20147339 Date 8-6-14
CONTACT PERSON James Gribi	$\Box \text{ Temporary Permit # } days \Box \text{ Long Term Permit}$
ADDRESS 1090 Adams Stree	Dermit Administrativo Eco
Benicia, CA 94510	(bla Darking" Oinge ) all
PHONE 707-748-7743 EMAIL jgribi@gribiassociates.c	om No Parking Signs
	Permit Inspection Deposit (2 hr. min.)\$
<b>OWNER/DEVELOPER</b> Elain Kirk (Marks Management C	.) Cost Recovery Estimate\$
ADDRESS 505 Sansome Street, Suite 1400	Arborist Recovery Estimate\$
San Francisco, CA 94111	Long Term Permit Fee (mos. x)\$
PHONEEMAIL	Tree Removal Fee\$
	Tree Protection Deposit (value x 3 + \$10,000) \$
CONTRACTOR DOING WORK Gregg Drilling	Required Security Deposit:
CONTACT PERSON Chris Pruner	∳\$1,000 cash\$_ <u>I00</u> ⊖
ADDRESS 950 Howe Road	□ \$10,000 BondBond #
Montines CA 04552	□100% Performance Bond, Bond #
	Bond Value \$
PHONE 925-313-5800 EMAIL cpruner@greggdrilling.co	Total Payment Required\$ 1385
LICENSE NO. <u>485165</u> CLASS <u>C-57</u>	Receipt # Date Amt. Received:\$
∞Yes       □No       CURRENT CITY BUSINESS LICENSE ON FILE         □Yes       □No       PROVIDE PROOF OF INSURANCE	□ Business License □ Certificate of Insurance
EST. START DATE 8/19/14 EST. COMPLETION DATE	<sup>8/19/14</sup> EST. COST IN CITY R/W \$2,000

LOCATION OF WORK\_South bond of San Pablo Avenue

tames

#### **CHECK ALL CONDITIONS THAT APPLY:**

□ Traffic Control □Survey □ Sidewalk Detour □Dumpster ⊠Temporary No Parking □ Construction □ Sidewalk □ Obstruction □ Private Facilities on Public Right of Way □ Driveway Approach □Curb & Gutter □Pedestrian Ramp □Water Service □Fence □ Excavation □Electric Service □Roof Drain □Utility Maintenance □Access Road □Monitoring Well □ Sewer Lateral □Crane □ Storm Drain □Block Party □Gas Service

FULLY DESCRIBE PROPOSED WORK WITHIN CITY RIGHT-OF-WAY (additional space on reverse if needed): Attach 3 complete sets of plans 8 ½ X 11, if applicable.

Two soil borings (B29 and B-30) will be drilled to 20 feet in depth using direct-push coring
equipment. Continuous sol cores will be collected to total boring depth, and portion of the soil
cores will be removed for preservation and laboratory analysis. One grab groundwater sample will
be collected from each of the borings. After completion, the two soil borings will be grouted to
match surface grade.

I hereby agree to protect and indemnify the City of Emeryville and hold it harmless in every way from all claim or suits for injury or damage to persons or property as set forth in the Standard Provisions. I agree not to begin construction until all materials to be used are on hand; to perform all work in accordance with the plans submitted (if any), the Standard Provisions to Encroachment Permit, and all applicable Special Conditions of Approval, and to pay all inspection and engineering costs in addition to those paid at the time of suance of this permit. I further agree to complete the work to the satisfaction of the City Engineer and if for any reason the City of Emeryville is required to complete this work, I will pay all costs for such work.

Applicant Signature

Date 731 14

FOR CITY USE ONLY								
The following documents are attached and incorporated into this permit and have been given to the applicant:								
<ul> <li>Standard Provisions to Encroachment Permit</li> <li>Special Conditions of Approval</li> <li>City Standard Details (List Details)</li> <li>Handout, Urban Runoff BMP's</li> </ul>								
Dother								
Remarks								
48 HOUR NOTICE PRIOR TO START OF WORK								
D PROVIDE CONSTRUCTION SCHEDULE 5 DAYS PRIOR TO START OF WORK								
AS-BUILT PLANS REQUIRED     PLEASE CALL FOR INSPECTION AT 510-596-4333								
□ PLEASE NOTIFY POLICE (510-596-3700) AND FIRE (510-596-3750) 24 HOURS IN ADVANCE.								
This permit is void unless the work is completed before								
This permit is to be strictly construed and no other work than is specifically mentioned is hereby authorized.								
After final inspection is approved, please contact the Public Works Department at 510-596-4330 to determine final cost, and for final payment or reimbursement of deposit. Failure to obtain approval of a Final Inspection of the work covered by this Encroachment Permit within one (1) year of the estimated completion date shall result in the loss of the security deposit which shall be retained by the City of Emeryville APPROVED								
FINAL INSPECTION APPROVEDTITLEDATE								

**APPENDIX B** 

SOIL BORING LOGS



BORING NUMBER : B-29

BORING LOCATION:

BORING TYPE: SOIL BORING

PROJECT NAME: FORMER MAZ GLASS SITE EMERYVILLE, CALIFORNIA

FIELD SCIENTIST: J. GRIBI R. BET-YONAN LOG OF SOIL BORING

GRIBI

ASSOCIATES

START DATE: 08/28/2014

COMPLETION DATE: 08/28/2014

DRILLING CONTRACTOR: GREGG DRILLING, INC. DRILLING METHOD: DIRECT PUSH BOREHOLE DIAMETER: 2.5 INCHES COMPLETION METHOD: BORING BORING TOTAL DEPTH: 24.0 FEET

GROUNDWATER DEPTH: INITIAL: 22.0 FT FINAL: 14.0 FT

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING BLOW COUNTS ♀ - INITIAL ♀ - FINAL	USCS	LOG OF MATERIAL	
- - - 5 -					۶	<ul> <li>0.0 - 2.0 ft. Asphalt and Concrete</li> <li>2.0 - 10.5 ft. Gravelly Silt (ML) Light brown, firm, dry to moist no hydrocarbon odors or staining</li> </ul>	
				PID = 0 PID = 0 ₩		10.5 - 19.0 ft. <b>Clay (CL)</b> Light grey, firm, few fine pebble clasts, no hydrocarbon odor. or staining	
 20  	B-29-20.0 09:15	20.0 FT.		PID = 0 \	ML	19.0 - 24.0 ft. <b>Gravelly Silt (ML) to Fine Sand</b> Light brown, moist to wet, no hydrocarbon odor or staining	
25 - - - 30 -						TOTAL DEPTH: 24 FEET BGS. GROUNDWATER SAMPLE B-29-W COLLECTED AT 11:20	
BORING NUMBER : B-30

BORING LOCATION:

BORING TYPE: SOIL BORING

PROJECT NAME: FORMER MAZ GLASS SITE EMERYVILLE, CALIFORNIA

FIELD SCIENTIST: J. GRIBI R. BET-YONAN LOG OF SOIL BORING

DRILLING CONTRACTOR: GREGG DRILLING, INC. DRILLING METHOD: DIRECT PUSH BOREHOLE DIAMETER: 2.5 INCHES COMPLETION METHOD: BORING BORING TOTAL DEPTH: 23.0 FEET GROUNDWATER DEPTH: INITIAL: 22.0 FT

FINAL: 17.0 FT

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING BLOW COUNTS 긏 - INITIAL ᆾ - FINAL	USCS	LOG OF MATERIAL	
				PID = 0	ML ML	<ul> <li>0.0 - 1.5 ft. Asphalt and Concrete Cleared using hand auger</li> <li>1.5 - 5.0 ft. Gravelly Silt (ML) Cleared using hand auger Dark brown to brown, dry, no odor or staining</li> <li>5.0 - 8.0 ft. Gravelly Silt (ML) Light brown, dry, hard, no odor or staining</li> <li>8.0 - 11.0 ft. Clayey Silt (ML) Light brown to light grey, some moisture, hard, no hydrocarbon odor or staining</li> <li>11.0 - 14.0 ft. Clayey Silt (ML) Light brown w/grey streaks, soft, some moisture, hard, no bydrocarbon odor or staining</li> </ul>	
	B-30-20.0 10:44	20.0 FT.		PID = 0 ♥ PID = 0 ♥	ML SC	<ul> <li>hydrocarbon odor or staining</li> <li>14.0 - 16.0 ft. Clayey Silt (ML) Partial recovery, light brown w/grey streaks, some moisture, fine pebbles, no hydrocarbon odor or staining</li> <li>16.0 - 20.0 ft. Clayey Silty-Sand (SC) Brown, moist, fine, no hydrocarbon odor or staining</li> <li>20.0 - 23.0 ft. Clayey Sandy Silt (ML) Partial Recovery Brown, most to wet, fine, no hydrocarbon odor or staining</li> </ul>	
25 - - - - - - - - - - - - - - - - - - -						TOTAL DEPTH: 23 FEET BGS. GROUNDWATER SAMPLE B-30-W COLLECTED AT 14:15 COLLECTED GRAB GROUNDWATER SAMPLE B-30-W at 14:15	



START DATE: 08/28/2014

COMPLETION DATE: 08/28/2014

**APPENDIX C** 

LABORATORY DATA REPORTS AND CHAIN OF CUSTODY RECORDS





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

	SunStar
1	<ul> <li>Laboratories, Inc.</li> </ul>
1	PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

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

PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

09 Se	ptember	2014
-------	---------	------

Jim Gribi Gribi Associates 1090 Adam Street, Suite K Benicia, CA 94510 RE: Maz Glass

Enclosed are the results of analyses for samples received by the laboratory on 08/30/14 10:20. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Katherine Running Crane

Katherine RunningCrane Project Manager

Gribi Associates 1090 Adam Street, Benicia CA, 94510	Suite K	Project Project	<b>Reported:</b> 09/09/14 16:14				
		ANALYTICAL	REPORT F	OR SAMPI	LES		
Sample ID		Laboratory ID	Matrix			Date Sampled	Date Received
B-29-20.0		T141798-01	Soil			08/28/14 09:15	08/30/14 10:20
B-29-W		T141798-02	Water			08/28/14 11:20	08/30/14 10:20
B-30-20.0		T141798-03	Soil			08/28/14 10:44	08/30/14 10:20
B-30-W		T141798-04	Water		1	08/28/14 14:15	08/30/14 10:20
Samıle ID:	R-29-20 0	DETI	ECTIONS S	SUMMARY	T141708 01		
No Results I	Detected			1 ator y 1D:	1141/20-01		
Sample ID:	B-29-W		Labor	ratory ID:	T141798-02		
Analyte Toluene			Result 0.72	Reporting Limit 0.50	Units ug/l	Method EPA 8260B	Notes
Sample ID:	B-30-20.0		Labor	ratory ID:	T141798-03		
No Results I	Detected						

Laboratory ID: T141798-04

No Results Detected

Sample ID: B-30-W

SunStar Laboratories, Inc.

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Katherine Running Crane

Katherine RunningCrane, Project Manager

_	SunStar Laboratories, Inc. PREMIDING QUALITY ANNATIONAL SUBVICES NATIONALE		25712 Commercentre Drive Lake Forest, California 92630 949.297.5020 Phone 949.297.5027 Fax
Gr	ibi Associates	Project: Maz Glass	

Gribi Associates	Project: Maz Glass	
1090 Adam Street, Suite K	Project Number: [none]	Reported:
Benicia CA, 94510	Project Manager: Jim Gribi	09/09/14 16:14

SunStar Laboratories, Provider Quality Assubited Statistics Na	Inc.						257 Lake	712 Commercen Forest, Califor 949.297.50 949.297.	tre Drive nia 92630 20 Phone 5027 Fax
Gribi Associates		Proje	ect: Maz C	Glass					
1090 Adam Street, Suite K	I	roject Numb	er: [none	1				Reported:	
Benicia CA, 94510	Р	roject Manag	er: Jim G	ribi				09/09/14 16:14	
		B- T1417	29-20.0 98-01 (S	oil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by F	PA Method 8260	SunStar L B	aborator	ries, Inc.					
Naphthalene	ND	5.0	ug/kg	1	4090252	09/02/14	09/03/14	EPA 8260B	
Benzene	ND	5.0	"						
Toluene	ND	5.0							
Ethylbenzene	ND	5.0							
m,p-Xylene	ND	10							
o-Xylene	ND	5.0							
C6-C12 (GRO)	ND	500							
Surrogate: Toluene-d8		102 %	85.5	-116	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.1 %	81.2	-123	"	"	"	"	
Surrogate: Dibromofluoromethane		108 %	95.7	-135	"	"	"	"	

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. 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 Running Grane

Katherine RunningCrane, Project Manager

Katherine RunningCrane, Project Manager

Katherine Running Grane

Page 2 of 10

Page 3 of 10

Sun Star Laboratories, PROVIDING QUALITY ANALYTICAL SERVICES N	Inc.						257 Lake	712 Commercer Forest, Califor 949.297.50 949.297	atre Drive nia 92630 )20 Phone (.5027 Fax
Gribi Associates		Proje	ct: Maz	Glass					
1090 Adam Street, Suite K	1	Project Numb	er: [none	)				Reported	:
Benicia CA, 94510	F	Project Manag	er: Jim C	Bribi				09/09/14 16:14	
		B T14179	-29-W 8-02 (W	ater)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by H	CPA Method 8260	<u>)B</u>			4000350	00/02/14	00/02/14	ED4 0200D	
Naphthalene	ND	1.0	ug/1	1	4090250	09/02/14	09/03/14	EPA 8260B	
Senzene	ND 0.72	0.30							
Sthylbenzene	0.72 ND	0.50							
n p-Xylene	ND	1.0							
-Xvlene	ND	0.50							
Cert-amvl methyl ether	ND	2.0							
ert-butyl alcohol	ND	10							
Di-isopropyl ether	ND	2.0							
thyl tert-butyl ether	ND	2.0							
Methyl tert-butyl ether	ND	1.0							
C6-C12 (GRO)	ND	50							
Surrogate: Toluene-d8		91.2 %	88.8	8-117	"	"	"	"	
urrogate: 4-Bromofluorobenzene		90.8 %	83.5	-119	"	"	"	"	
Surrogate: Dibromofluoromethane		123 %	81.1	-136	"	"	"	"	

PROVIDING QUALITY ANALYTICAL SERVICES N	Inc.						257 Lake	12 Commercer Forest, Califor 949.297.5( 949.297	ntre Driv nia 9263 )20 Phor .5027 Fa	
Gribi Associates		Proje	ect: Maz (	Glass				Demonted		
Benicia CA, 94510	n Street, Suite K Project Nur A, 94510 Project Man			j iribi				Reported: 09/09/14 16:14		
		B- T1417	30-20.0 98-03 (S	oil)						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note	
Volatile Organic Compounds by H Naphthalene	E <b>PA Method 8260</b> ND	<b>B</b> 5.0	ug/kg	1	4090252	09/02/14	09/03/14	EPA 8260B		
Benzene	ND	5.0	"					"		
Foluene	ND	5.0								
thylbenzene	ND	5.0								
n,p-Xylene	ND	10								
-Xylene	ND	5.0								
ert-amyl methyl ether	ND	20								
ert-butyl alcohol	ND	50								
Di-isopropyl ether	ND	20								
Di-isopropyl ether Ethyl tert-butyl ether	ND ND	20 20								
Di-isopropyl ether Ethyl tert-butyl ether Methyl tert-butyl ether	ND ND ND	20 20 20								
Di-isopropyl ether Ethyl tert-butyl ether Methyl tert-butyl ether C6-C12 (GRO)	ND ND ND ND	20 20 20 500								
Di-isopropyl ether Bthyl tert-butyl ether Aethyl tert-butyl ether 26-C12 (GRO) urrogate: Toluene-d8	ND ND ND ND	20 20 20 500 <i>100 %</i>	" " 85.5	-116		" " "		" " "		
Di-isopropyl ether Ethyl tert-butyl ether Methyl tert-butyl ether 26-C12 (GRO) Jurrogate: Jalene-d8 Jurrogate: 4-Bromofluorobenzene	ND ND ND	20 20 500 100 % 94.5 %	" " 85.5 81.2	-116 -123	" " "	" " " " "	" " "	" " " "		

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.

SunStar Laboratories, Inc.

Katherine Running Grane

Katherine RunningCrane, Project Manager

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.

Page 5 of 10

Katherine Running Crane

Katherine RunningCrane, Project Manager

Page 4 of 10

SunStar Laboratories, J PROVIDING QUALITY ANALYTICAL STRAVICES NAT							257 Lake	712 Commercer Forest, Califor 949.297.50 949.297	ntre Drive nia 92630 020 Phone 7.5027 Fax
Gribi Associates 1090 Adam Street, Suite K Benicia CA, 94510	F Pi	Proje Project Numb roject Manag	ct: Maz ( er: [none] er: Jim G	3lass ] ribi				<b>Reported</b> 09/09/14 16	: 5:14
		B T14179	-30-W 8-04 (Wa	ater)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by El	PA Method 8260	B 1.0	ug/l	1	4090250	09/02/14	09/03/14	EPA 8260B	
Benzene	ND	0.50	" ug/1	1	+090250	"	09/03/14	LIA 8200B	
Toluene	ND	0.50							
Ethylbenzene	ND	0.50							
m.p-Xvlene	ND	1.0							
o-Xylene	ND	0.50							
Tert-amyl methyl ether	ND	2.0							
Tert-butyl alcohol	ND	10							
Di-isopropyl ether	ND	2.0							
Ethyl tert-butyl ether	ND	2.0							
Methyl tert-butyl ether	ND	1.0							
C6-C12 (GRO)	ND	50							
Surrogate: Toluene-d8		93.0 %	88.8	-117	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		92.5 %	83.5	-119	"	"	"	"	
Surrogate: Dibromofluoromethane		126 %	81.1	136	"	"	"	"	



Gribi Associates	Project: Maz Glass	
1090 Adam Street, Suite K	Project Number: [none]	Reported:
Benicia CA, 94510	Project Manager: Jim Gribi	09/09/14 16:14

# Volatile Organic Compounds by EPA Method 8260B - Quality Control

SunStar Laboratories, Inc.

Reporting Spike Source %REC RPD Result Limit Units Level Result %REC Limits RPD Limit Note
---

# Batch 4090250 - EPA 5030 GCMS

Analyte

Blank (4090250-BLK1)				Prepared:	09/02/14	Analyze	d: 09/03/14	
Naphthalene	ND	1.0	ug/l					
Benzene	ND	0.50						
Toluene	ND	0.50						
Ethylbenzene	ND	0.50						
m,p-Xylene	ND	1.0						
o-Xylene	ND	0.50						
C6-C12 (GRO)	ND	50						
Surrogate: Toluene-d8	7.43		"	8.00		92.9	88.8-117	-
Surrogate: 4-Bromofluorobenzene	7.02		"	8.00		87.8	83.5-119	
Surrogate: Dibromofluoromethane	8.50		"	8.00		106	81.1-136	
LCS (4090250-BS1)				Prepared:	09/02/14	Analyze	d: 09/03/14	
Chlorobenzene	21.4	1.0	ug/l	20.0		107	75-125	
1,1-Dichloroethene	23.5	1.0		20.0		118	75-125	
Trichloroethene	20.7	1.0		20.0		104	75-125	
Benzene	21.5	0.50		20.0		108	75-125	
Toluene	16.6	0.50		20.0		83.0	75-125	
Surrogate: Toluene-d8	7.19		"	8.00		89.9	88.8-117	
Surrogate: 4-Bromofluorobenzene	8.12		"	8.00		102	83.5-119	
Surrogate: Dibromofluoromethane	9.52		"	8.00		119	81.1-136	
Matrix Spike (4090250-MS1)	Sour	ce: T14179	9-21	Prepared:	09/02/14	Analyze	d: 09/03/14	
Chlorobenzene	21.5	1.0	ug/l	20.0	ND	107	75-125	
1,1-Dichloroethene	22.5	1.0		20.0	ND	112	75-125	
Trichloroethene	17.2	1.0		20.0	ND	86.0	75-125	
Benzene	22.0	0.50		20.0	6.71	76.4	75-125	
Toluene	17.4	0.50		20.0	ND	87.0	75-125	
Surrogate: Toluene-d8	7.20		"	8.00		90.0	88.8-117	
Surrogate: 4-Bromofluorobenzene	8.24		"	8.00		103	83.5-119	
Surrogate: Dibromofluoromethane	10.2		"	8.00		128	81.1-136	

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.

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 Running Crane

Katherine RunningCrane, Project Manager

Katherine RunningCrane, Project Manager

Katherine Running Crane

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Page 7 of 10

SunStar Laboratories, Ir Providence Quality Assistical Statuces Nation	IC.							2571: Lake F	2 Commerc orest, Calif 949.297 949.2	centre Drive Cornia 92630 .5020 Phone 97.5027 Fax
Gribi Associates		Pr	oject: M	az Glass						
1090 Adam Street, Suite K		Project Nu	mber: [n	onel					Report	ed:
Benicia CA, 94510	Project Manager: Jim Gribi						09/09/14	16:14		
Volatile O	)rganic Com	nounds h	v EPA	Method	8260B -	Onality	v Contro	51		
	S	unStar ]	Labor	atories, l	Inc.	Quint	, contro	-		
		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
3atch 4090250 - EPA 5030 GCMS										
fatrix Spike Dup (4090250-MSD1)	Sour	ce: T14179	9-21	Prepared:	09/02/14	Analyze	1: 09/03/14			
hlorobenzene	21.7	1.0	ug/l	20.0	ND	108	75-125	1.11	20	
1-Dichloroethene	22.6	1.0		20.0	ND	113	75-125	0.444	20	
richloroethene	16.6	1.0		20.0	ND	83.0	75-125	3.55	20	
enzene	23.3	0.50		20.0	6.71	82.9	75-125	5.74	20	
oluene	16.9	0.50		20.0	ND	84.3	75-125	3.21	20	
urrogate: Toluene-d8	7.18		"	8.00		89.8	88.8-117			
urrogate: 4-Bromofluorobenzene	8.16		"	8.00		102	83.5-119			
urrogate: Dibromofluoromethane	10.1		"	8.00		126	81.1-136			
atch 4090252 - EPA 5030 GCMS										
Blank (4090252-BLK1)				Prepared:	09/02/14	Analyze	1: 09/03/14			
aphthalene	ND	5.0	ug/kg	-						
enzene	ND	5.0								
oluene	ND	5.0								
thylbenzene	ND	5.0								
,p-Xylene	ND	10								
Xylene	ND	5.0								
6-C12 (GRO)	ND	500								
urrogate: Toluene-d8	39.7		"	40.0		99.2	85.5-116			
urrogate: 4-Bromofluorobenzene	35.9		"	40.0		89.8	81.2-123			
urrogate: Dibromofluoromethane	39.4		"	40.0		98.4	95.7-135			
.CS (4090252-BS1)				Prepared:	09/02/14	Analyze	1: 09/03/14	Ļ		
hlorobenzene	119	5.0	ug/kg	100		119	75-125			
1-Dichloroethene	116	5.0		100		116	75-125			
richloroethene	109	5.0		100		109	75-125			
enzene	111	5.0		100		111	75-125			
oluene	103	5.0		100		103	75-125			

...

40.0

40.0

40.0

SunStar Laboratories, Inc.

Surrogate: 4-Bromofluorobenzene

Surrogate: Dibromofluoromethane

Surrogate: Toluene-d8

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.

85.5-116

105 81.2-123

112 95.7-135

93.8

Katherine Running Crane

Katherine RunningCrane, Project Manager

37.5

41.8

45.0

Page 8 of 10

_	SunStar	
-	<ul> <li>Laboratories, Inc.</li> </ul>	
	PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE	

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

Gribi Associates	Project: Maz Glass	
1090 Adam Street, Suite K	Project Number: [none]	Reported:
Benicia CA, 94510	Project Manager: Jim Gribi	09/09/14 16:14

# Volatile Organic Compounds by EPA Method 8260B - Quality Control

### SunStar Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4090252 - EPA 5030 GCMS										
Matrix Spike (4090252-MS1)	Sou	rce: T14179	8-01	Prepared:	09/02/14	Analyze	d: 09/03/14			
Chlorobenzene	117	5.0	ug/kg	99.4	ND	117	75-125			
1,1-Dichloroethene	117	5.0		99.4	ND	117	75-125			
Trichloroethene	110	5.0		99.4	ND	110	75-125			
Benzene	117	5.0		99.4	ND	118	75-125			
Toluene	104	5.0		99.4	ND	104	75-125			
Surrogate: Toluene-d8	37.4		"	39.8		94.0	85.5-116			
Surrogate: 4-Bromofluorobenzene	40.5		"	39.8		102	81.2-123			
Surrogate: Dibromofluoromethane	50.0		"	39.8		126	95.7-135			
Matrix Spike Dup (4090252-MSD1)	Sou	rce: T14179	8-01	Prepared:	09/02/14	Analyze	1: 09/03/14			
Chlorobenzene	114	5.0	ug/kg	100	ND	114	75-125	1.78	20	
1,1-Dichloroethene	118	5.0		100	ND	118	75-125	1.07	20	
Trichloroethene	99.0	5.0		100	ND	99.0	75-125	10.3	20	
Benzene	108	5.0		100	ND	108	75-125	8.05	20	
Toluene	94.2	5.0		100	ND	94.2	75-125	9.54	20	
Surrogate: Toluene-d8	37.4		"	40.0		93.6	85.5-116			
Surrogate: 4-Bromofluorobenzene	41.8		"	40.0		104	81.2-123			
Surrogate: Dibromofluoromethane	50.3		"	40.0		126	95.7-135			

SunStar Laboratories, Inc.

1.1

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 Running Crane

Katherine RunningCrane, Project Manager

Page 9 of 10

SunStar Laboratories, Inc. 25712 Commercentre Dr Lake Forest, CA 92630 949-297-5020 Client: Phone: Address Project Manager <u>دی د</u> Relinquished by: (signature) 22 22 22 23 -30 nea 등 Gribi Ð 'n 'n Srik ど(かい 含いい Date / Time n) Associa 28 uplec Date / Time Time 9315 11:20 Fax Ti , Tor ETT. Ser R Sample Type S by: (signature) FME 4 Vor 8 60 See 5 pature) tainer 8260 אלשויא נייע Date / Time 8260 + OXY Date/ XXXX 8260 BTEX, OXY CHY TPH-G Napthal Collector: Batch #: 8270 Project Name Date Time lime 8021 BTEX 5 8015M (gasoline) Chain of Custody seals Y/N/NA Seals intact? Y/N/NA 0 Turn 8015M (diesel) 6 Received good condition/cold 8015M Ext./Carbon Chain aro N 6010/7000 Title 22 Metals ţ 200 233 x x x EDF #: 2 2 2 Laboratory ID # Page: Client Project #: 5-6 Ö 8(3) (iy Comments/Preservative TAT Notes ç M Total # of containers

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

Gribi Associates	Project: Maz Glass	
1090 Adam Street, Suite K	Project Number: [none]	Reported:
Benicia CA, 94510	Project Manager: Jim Gribi	09/09/14 16:14

Notes and Definitions

Analyte DETECTED DET

SunStar

ND Analyte NOT DETECTED at or above the reporting limit

Laboratories, Inc.

PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

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 Running Crane

Katherine RunningCrane, Project Manager

Page 10 of 10

COC 134765

Sample disposal Instructions:

Disposal @ \$2.00 each

Return to client

Pickup

T

9.5.14

**Chain of Custody Record** 

SunStar Laboratories, Inc. Provining Quality Analytical Strevices Nationwines	Page 1 of
SAMPLE RECEIVING RE	VIEW SHEET
BATCH #	
Client Name: <u>Gril:</u> Project	Maz Glass
Received by: Der M Date/T	ime Received: 613014 1020
Delivered by : Client SunStar Courier 🖾 GSO 🗍 F	edEx Other
Total number of coolers received _D Temp criteria	= 6°C > 0°C (no <u>frozen</u> containers)
Temperature: cooler #1 $2 - 2$ °C +/- the CF (- 0.2°C) = $2 - 2 - 0$ °C	C corrected temperature
cooler #2°C +/- the CF (- $0.2^{\circ}$ C) =°C	C corrected temperature
cooler #3°C +/- the CF (- $0.2^{\circ}$ C) =°C	C corrected temperature
Samples outside temp. but received on ice, w/in 6 hours of final samp	oling. 🗌 Yes 🗍 No* 🏹 N/A
Custody Seals Intact on Cooler/Sample	XYes No* DIN/A
Sample Containers Intact	Yes No*
Sample labels match COC ID's	XYes 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 reques	ted Yes No* N/A
Complete shipment received in good condition with correct temperat preservatives and within method specified holding times. X Yes	ures, containers, labels, volumes
* Complete Non-Conformance Receiving Sheet if checked Cooler/Sa	ample Review - Initials and date 11 63/14
Comments:	



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

PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

17 September 2014	
Jim Gribi Gribi Associates 1090 Adam Street, Suite K Benicia, CA 94510	

**RE: Maz Glass** 

Enclosed are the results of analyses for samples received by the laboratory on 08/30/14 10:20. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Katherine Running Crane

Katherine RunningCrane Project Manager

PROVIDING QUALITY ANALYTICAL SERVICES	, Inc.		25713 Lake Fe	2 Commercentre Drive orest, California 92630 949.297.5020 Phone 949.297.5027 Fax
Gribi Associates		Project: Maz Glass		
1090 Adam Street, Suite K	Project		Reported:	
Benicia CA, 94510	Project	Manager: Jim Gribi		09/17/14 14:34
	ANALYTICAL	REPORT FOR SAMPLES		
Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SG-1	T141801-01	Air	08/28/14 16:04	08/30/14 10:20
SG-3	T141801-03	Air	08/28/14 15:09	08/30/14 10:20
SG-4	T141801-04	Air	08/28/14 15:33	08/30/14 10:20
SG-5	T141801-05	Air	08/28/14 15:50	08/30/14 10:20

### DETECTIONS SUMMARY

Air

T141801-06

Sample ID:	SG-1	Labo	Laboratory ID:			
			Reporting			
Analyte		Result	Limit	Units	Method	Notes
Heptane		5.1	4.2	ug/m³ Air	TO-15	
Oxygen		14.2	1.62	%	GC	
Nitrogen		62.1	0.62	%	GC	
Sample ID:	SG-3	Labo	ratory ID:	T141801-03		
			Reporting			
Analyte		Result	Limit	Units	Method	Notes
Oxygen		16.6	1.51	%	GC	
Nitrogen		49.7	0.51	%	GC	
Sample ID:	SG-4	Labo	ratory ID:	T141801-04		
Sumple 151	501	Labo	Denomina	1141001 04		
Amalinta		Dogul4	Keporting	Linita	Mathad	Notes
Analyte		Result	Linit	Units	method	INOLES
1,2,4-Trim	ethylbenzene	13	5.0	ug/m³ Aır	10-15	
Methane		240	7.7	ppm(v)	8015M	
Oxygen		5.87	1.54	%	GC	
Nitrogen		52.3	0.54	%	GC	

SunStar Laboratories, Inc.

SunStar

PURGE

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08/28/14 16:30

08/30/14 10:20

Katherine Running Crane

Katherine RunningCrane, Project Manager

SunStar Laboratories, Inc. Providing Quality Analytical Survices Nationwide				25 Lak	712 Commercentre Dri e Forest, California 926 949.297.5020 Pho 949.297.5027 F
Gribi Associates	Project: M	az Glass			
1090 Adam Street, Suite K	Project Number: [no	one]			Reported:
Benicia CA, 94510	Project Manager: Jir	n Gribi			09/17/14 14:34
Sample ID: SG-5	Labor	ratory ID:	T141801-05		
		Reporting			
Analyte	Result	Limit	Units	Method	Notes
Benzene	1700	160	ug/m³ Air	TO-15	TO-14
Toluene	5600	190	ug/m³ Air	TO-15	TO-14
Ethylbenzene	1200	220	ug/m³ Air	TO-15	TO-14
m,p-Xylene	3800	220	ug/m³ Air	TO-15	TO-14
o-Xylene	770	220	ug/m³ Air	TO-15	TO-14
Methane	150	7.6	ppm(v)	8015M	
Oxygen	12.5	1.53	%	GC	
Nitrogen	49.7	0.53	%	GC	
Sample ID: PURGE	Labor	ratory ID:	T141801-06		
		Reporting			
Analyte	Result	Limit	Units	Method	Notes
Oxygen	14.0	1.58	%	GC	
Nitrogen	53.5	0.58	%	GC	

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Gribi Associates	ribi Associates Project: Maz Glass								
1090 Adam Street, Suite K Benicia CA, 94510		Project Numl Project Manas	per: [none] ger: Jim Gi	ibi				Reported 09/17/14 14	l: 4:34
			SG-1						
		T141	801-01 (A	ir)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		SunStar L	aborator	ies, Inc.					
10-15									
Acetone	ND	12	ug/m <sup>3</sup> Air	1.62	4090224	09/02/14	09/08/14	TO-15	
,3-Butadiene	ND	4.5							
Carbon Disulfide	ND	3.2							
,1,2-trichloro-1,2,2-trifluoroethane CFC 113)	ND	7.7				"			
sopropyl alcohol	ND	13							
Bromodichloromethane	ND	6.8	"						
Bromoform	ND	11							
Bromomethane	ND	4.0							
Carbon tetrachloride	ND	6.4							
Chlorobenzene	ND	4.7							
Chloroethane	ND	2.7							
Chloroform	ND	5.0							
Chloromethane	ND	11							
Cyclohexane	ND	3.5							
leptane	5.1	4.2							
lexane	ND	3.0							
2 Dibromosthone (EDB)	ND	0.7							
2 Dishlarshanna	ND	/.0							
2 Dichlorobenzene	ND	6.1							
4 Dishlambanana	ND	6.1							
.,4-Dichlorodifluoromethene	ND	5.0							
1 Dichloroethane	ND	3.0 / 1							
2 Dichloroethane	ND	4.1							
1-Dichloroethene	ND	4.1							
is-1 2-Dichloroethene	ND	4.0							
rans_1 2-Dichloroethene	ND	4.0							
2-Dichloropropane	ND	4.0							
is-1 3-Dichloropropene	ND	4.7							
rans_1.3-Dichloropropene	ND	4.0							
Eductoria and a second second	ND	4.0							

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Katherine Running Crane

Katherine Running Grane Katherine RunningCrane, Project Manager

SunStar Laboratories, Inc.

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Katherine RunningCrane, Project Manager

Page 3 of 23

Gribi Associates		Proje	ect: Maz G	lass					
1090 Adam Street, Suite K	I	Project Numb			Reported	l:			
Benicia CA, 94510	Р	roject Manaş	ger: Jim Gr	ibi				09/17/14 14	4:34
		T141	SG-1 801-01 (A	ir)					
				,					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		SunStar L	aboratori	es, Inc.					
0-15									
Aethylene chloride	ND	3.5	ug/m³ Air	1.62	4090224	09/02/14	09/08/14	TO-15	
tyrene	ND	4.3							
,1,2,2-Tetrachloroethane	ND	7.0							
etrahydrofuran	ND	3.0							
etrachloroethene	ND	6.9							
,1,2-Trichloroethane	ND	5.6							
,1,1-Trichloroethane	ND	5.6							
richloroethene	ND	5.5							
richlorofluoromethane	ND	5.7							
,3,5-Trimethylbenzene	ND	5.0							
,2,4-Trimethylbenzene	ND	5.0							
inyl acetate	ND	3.6							
inyl chloride	ND	2.6							
,4-Dioxane	ND	18							
-Butanone (MEK)	ND	15				"			
-Methyl-2-pentanone (MIBK)	ND	42							
Benzene	ND	3.3				"			
oluene	ND	3.8							
thylbenzene	ND	4.4							
n,p-Xylene	ND	8.8							
-Xylene	ND	4.4	"			"			
urrogate: 4-Bromofluorobenzene		77.4 %	40-1	60	"	"	"	"	

SunStar Laboratories, Providing Quality Assaurica Stravices Nati	Inc.						257 Lake	712 Commercen Forest, Califor 949.297.50 949.297.	tre Drive nia 92630 20 Phone 5027 Fax
Gribi Associates		Proje	ect: Maz G	lass					
1090 Adam Street, Suite K	P	oject Numb	er: [none]					Reported:	
Benicia CA, 94510	Pr	oject Manag	er: Jim Gi	ibi				09/17/14 14:	34
		T1418	SG-1 801-01 (A	ir)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	5	SunStar La	aboratori	es, Inc.					
Total Volatile Organic Compounds	by TO-3 (modifi	ed)							
C6-C12 (GRO)	ND	7170	ug/m³ Air	1.62	4090228	09/02/14	09/06/14	TO-3/TO-14 m	
Fixed Gases ASTM D1946-90									
Helium	ND	1.62	%	1.62	4090225	09/02/14	09/05/14	GC	
Carbon Dioxide	ND	1.62							
Oxygen	14.2	1.62							

0.62 "

0.62 .

62.1

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Nitrogen

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Katherine Running Crane

Katherine RunningCrane, Project Manager

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Katherine Running Grane

Katherine RunningCrane, Project Manager

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SunStar Laboratories, I Provider Quality ANALYTICAL STEWICES NATIO	nc.						2571 Lake I	12 Commerce Forest, Califo 949.297.5 949.29	entre Drive rnia 92630 6020 Phone 7.5027 Fax
Gribi Associates		Proje	ect: Maz G	lass					
1090 Adam Street, Suite K		Project Numb	er: [none]					Reported	1:
Benicia CA, 94510	I	Project Manag	ger: Jim Gr	ribi				09/17/14 1	4:34
		T1418	SG-3 801-03 (A	ir)					
Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Thatyte	Result	C CL I	1	- T	Butch	Trepureu	7 mary 200	method	110104
TO 15		SunStar L	aborator	les, Inc.					
10-13 A gatang	ND	12	ng/m3 Air	1.51	4000224	00/02/14	00/08/14	TO 15	
1.2 Putadiana	ND	12	ug/III <sup>o</sup> Air	1.51	4090224	09/02/14	09/08/14	10-15	
1,5-Butadiene	ND	4.5							
L 1 2 tricklass 1 2 2 triffuorsethere	ND	3.2							
(CFC 113)	ND	1.1							
Isopropyl alcohol	ND	13							
Bromodichloromethane	ND	6.8							
Bromoform	ND	11							
Bromomethane	ND	4.0							
Carbon tetrachloride	ND	6.4							
Chlorobenzene	ND	4.7							
Chloroethane	ND	2.7							
Chloroform	ND	5.0							
Chloromethane	ND	11							
Cyclohexane	ND	3.5							
Heptane	ND	4.2							
Hexane	ND	3.6							
Dibromochloromethane	ND	8.7							
1.2-Dibromoethane (EDB)	ND	7.8							
1.2-Dichlorobenzene	ND	6.1							
1 3-Dichlorobenzene	ND	61							
1.4-Dichlorobenzene	ND	6.1							
Dichlorodifluoromethane	ND	5.0							
1.1-Dichloroethane	ND	4.1							
1.2-Dichloroethane	ND	4.1							
1.1-Dichloroethene	ND	4.0							
cis-1.2-Dichloroethene	ND	4.0							
trans-1.2-Dichloroethene	ND	4.0							
1.2-Dichloropropane	ND	4.7							
cis-1.3-Dichloropropene	ND	4.6							
trans-1.3-Dichloropropene	ND	4.6							
4-Ethyltoluene	ND	5.0							

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Laboratories, I PROVIDING QUALITY ANALYTICAL SERVICES NATI	nc.						257. Lake I	2 Commerce Forest, Califo 949.297.5 949.29	entre Driv rnia 9263 5020 Phot 7.5027 Fa
Gribi Associates		Proje	ect: Maz G	lass					
1090 Adam Street, Suite K		Project Numb	er: [none]					Reported	d:
Benicia CA, 94510	I	Project Manag	ger: Jim Gi	ribi				09/17/14 14	4:34
		T1418	SG-3 301-03 (A	ir)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		SunStar L	aborator	ies, Inc.					
TO-15									
Methylene chloride	ND	3.5	ug/m³ Air	1.51	4090224	09/02/14	09/08/14	TO-15	
Styrene	ND	4.3						"	
,1,2,2-Tetrachloroethane	ND	7.0							
Fetrahydrofuran	ND	3.0							
Tetrachloroethene	ND	6.9							
1,1,2-Trichloroethane	ND	5.6							
1,1,1-Trichloroethane	ND	5.6							
Frichloroethene	ND	5.5							
Trichlorofluoromethane	ND	5.7						"	
1,3,5-Trimethylbenzene	ND	5.0							
1,2,4-Trimethylbenzene	ND	5.0						"	
Vinyl acetate	ND	3.6							
Vinyl chloride	ND	2.6							
1,4-Dioxane	ND	18							
2-Butanone (MEK)	ND	15							
4-Methyl-2-pentanone (MIBK)	ND	42							
Benzene	ND	3.3							
Toluene	ND	3.8							
Ethylbenzene	ND	4.4							
n,p-Xylene	ND	8.8							
p-Xylene	ND	4.4							
Surrogate: 4-Bromofluorobenzene		71.0 %	40-1	60	"	"	"	"	
Methane by GC									
Methane	ND	7.6	ppm(v)	1.51	4090223	09/02/14	09/04/14	8015M	

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Page 7 of 23

Gribi Associates 1090 Adam Street, Suite K Benicia CA, 94510		Proje Project Numb Project Manag	ect: Maz G er: [none] er: Jim Gr	lass ibi				<b>Reported:</b> 09/17/14 14	:34
		T1418	SG-3 801-03 (Ai	ir)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
		SunStar L	aboratori	es, Inc.					
<u>Fotal Volatile Organic Compound</u> C6-C12 (GRO)	ls by TO-3 (moo ND	<b>dified)</b> 7170	ug/m³ Air	1.51	4090228	09/02/14	09/06/14	TO-3/TO-14 m	
Fixed Gases ASTM D1946-90	ND	1.51	0/	1.51	4000225	00/02/14	00/05/14	66	
Carbon Dioxide	ND	1.51	%	1.51	4090225	09/02/14 "	09/05/14	GC "	
Dxygen	16.6	1.51							
SunStar Laboratories, Inc.			The result	s in this rep	port apply to	the samples	analyzed in a	ccordance with th	e chain o

SunStar Laboratories, Inc. Previous QUALTY ANALYTICAL SERVICES NATIONWORE							257) Lake I	12 Commerce Forest, Califo 949.297.5 949.29	entre Drive rnia 92630 020 Phone 7.5027 Fax
Gribi Associates		Proie	ct: Maz G	lass					
1090 Adam Street, Suite K	1	Proiect Numb	er: [none]					Reported	1:
Benicia CA, 94510	Р	roject Manag	er: Jim G	ibi				09/17/14 14	4:34
		, ,							
		T1418	SG-4 801-04 (A	ir)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar I	aboratori	ios Inc					
TO-15		Sunstar La	aboratori	ics, mc.					
Acetone	ND	12	ug/m <sup>3</sup> Δir	1.54	4090224	09/02/14	09/08/14	TO-15	
1 3 Butadiana	ND	12	ug/III AII "	"	4090224	"	"	"	
Carbon Disulfide	ND	3.2							
1,1,2-trichloro-1,2,2-trifluoroethane	ND	7.7						"	
Isopropyl alcohol	ND	13							
Bromodichloromethane	ND	6.8							
Bromoform	ND	11				"			
Bromomethane	ND	4.0							
Carbon tetrachloride	ND	6.4				"			
Chlorobenzene	ND	4.7				"			
Chloroethane	ND	2.7							
Chloroform	ND	5.0							
Chloromethane	ND	11							
Cyclohexane	ND	3.5							
Heptane	ND	4.2							
Hexane	ND	3.6							
Dibromochloromethane	ND	8.7				"			
1,2-Dibromoethane (EDB)	ND	7.8							
1,2-Dichlorobenzene	ND	6.1				"			
1,3-Dichlorobenzene	ND	6.1				"			
1,4-Dichlorobenzene	ND	6.1							
Dichlorodifluoromethane	ND	5.0				"			
1,1-Dichloroethane	ND	4.1				"			
1,2-Dichloroethane	ND	4.1				"			
1,1-Dichloroethene	ND	4.0				"			
cis-1,2-Dichloroethene	ND	4.0				"			
trans-1,2-Dichloroethene	ND	4.0				"			
1,2-Dichloropropane	ND	4.7				"			
cis-1,3-Dichloropropene	ND	4.6				"			
trans-1,3-Dichloropropene	ND	4.6				"			
4-Ethyltoluene	ND	5.0				"			

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								) <del>-</del> ).2)	
Gribi Associates		Proje	ect: Maz G	lass					
1090 Adam Street, Suite K	]	Project Numb	per: [none]					Reported	l:
Benicia CA, 94510	Р	roject Manaş	ger: Jim Gr	ibi				09/17/14 14	4:34
		T1418	SG-4 801-04 (A	ir)					
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		SunStar L	aboratori	es, Inc.					
ГО-15									
Methylene chloride	ND	3.5	ug/m³ Air	1.54	4090224	09/02/14	09/08/14	TO-15	
tyrene	ND	4.3				"			
,1,2,2-Tetrachloroethane	ND	7.0							
etrahydrofuran	ND	3.0							
etrachloroethene	ND	6.9							
,1,2-Trichloroethane	ND	5.6							
,1,1-Trichloroethane	ND	5.6							
richloroethene	ND	5.5							
richlorofluoromethane	ND	5.7							
,3,5-Trimethylbenzene	ND	5.0							
,2,4-1 rimethylbenzene	13	5.0							
/inyl acetate	ND	3.6							
	ND	2.6							
,4-Dioxane	ND	18							
-Dutatione (MEK)	ND	15							
-memore (MIBK)	ND	42							
chizene	ND	2.5							
oluciic Maalbaaraara	ND	5.8							
anynoenzelle a p. Ywlana	ND	4.4							
-Xvlene	ND	0.0 4 4							
	110	76.9.0/	40.1	60	"	"	"	"	

SunStar Laboratories, I PROVIDENC QUALITY ANALYTICAL SERVICES NATIO	nc.			257 Lake	712 Commercen Forest, Califor 949.297.50 949.297.	tre Drive nia 9263( 20 Phone 5027 Fax			
Gribi Associates		Projec	t: Maz G	lass					
1090 Adam Street, Suite K	P	roject Numbe	r: [none]					Reported:	
Benicia CA, 94510	Pr	oject Manage	r: Jim Gr	ibi				09/17/14 14:	34
		S T14180	G-4 )1-04 (A	ir)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	: ۱	SunStar La	boratori	es, Inc.					
C6-C12 (GRO)	by TO-3 (modifi ND	ed) 7170 m	σ/m³ Air	1 54	4090228	09/02/14	09/06/14	TO-3/TO-14	
eo en2 (ento)	112	/1/0 u	5	1.01	1070220	0,702,11	0,001	m	
Fixed Gases ASTM D1946-90									
Helium	ND	1.54	%	1.54	4090225	09/02/14	09/05/14	GC	
Carbon Dioxide	ND	1.54							
Oxygen	5.87	1.54				"			
Nitrogen	52.3	0.54		0.54		"			

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Katherine RunningCrane, Project Manager

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SunStar Laboratories, I Providing Quality Analytical Stervices Natio	nc.						257: Lake I	12 Commerce Forest, Calife 949.297.: 949.29	entre Drive ornia 92630 5020 Phone 7.5027 Fax
Gribi Associates		Proj	ect: Maz G	lass					
1090 Adam Street, Suite K	Р	roject Num	ber: [none]					Reporte	d:
Benicia CA, 94510	Pr	oject Mana	ger: Jim Gr			09/17/14 1	4:34		
		T141	SG-5 801-05 (A	ir)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar I	aboratori	ies. Inc.					
TO-15				,					
Acetone	ND	120	ug/m³ Air	1.53	4090224	09/02/14	09/06/14	TO-15	TO-14
,3-Butadiene	ND	110	"						TO-14
Carbon Disulfide	ND	160	"						TO-14
,1,2-trichloro-1,2,2-trifluoroethane CFC 113)	ND	390							TO-14
sopropyl alcohol	ND	130				"			TO-14
Bromodichloromethane	ND	340				"			TO-14
Bromoform	ND	530	"						TO-14
Bromomethane	ND	200				"			TO-14
Carbon tetrachloride	ND	320	"						TO-14
Chlorobenzene	ND	230	"						TO-14
Chloroethane	ND	130	"						TO-14
Chloroform	ND	250	"						TO-14
Chloromethane	ND	110				"			TO-14
Cyclohexane	ND	170	"						TO-14
Ieptane	ND	210				"			TO-14
Iexane	ND	180	"						TO-14
Dibromochloromethane	ND	430	"						TO-14
,2-Dibromoethane (EDB)	ND	390				"			TO-14
,2-Dichlorobenzene	ND	310				"			TO-14
,3-Dichlorobenzene	ND	310							TO-14
,4-Dichlorobenzene	ND	310							TO-14
Dichlorodifluoromethane	ND	250				"			TO-14
,1-Dichloroethane	ND	210							TO-14
,2-Dichloroethane	ND	210							TO-14
,1-Dichloroethene	ND	200							TO-14
is-1,2-Dichloroethene	ND	200							TO-14
rans-1,2-Dichloroethene	ND	200	"						TO-14
,2-Dichloropropane	ND	240							TO-14
is-1,3-Dichloropropene	ND	230							TO-14
rans-1,3-Dichloropropene	ND	230	"						TO-14
4-Ethyltoluene	ND	250				"			TO-14

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SunStar 25712 Commercentre Drive Laboratories, Inc. Lake Forest, California 92630 949.297.5020 Phone PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE 949.297.5027 Fax Gribi Associates Project: Maz Glass 1090 Adam Street, Suite K Project Number: [none] **Reported:** Benicia CA, 94510 Project Manager: Jim Gribi 09/17/14 14:34 SG-5 T141801-05 (Air) Reporting Analyte Result Limit Units Dilution Batch Prepared Analyzed Method Note SunStar Laboratories, Inc. <u>TO-15</u> Methylene chloride ND 180 ug/m3 Air 4090224 09/02/14 TO-14 1.53 09/06/14 TO-15 ND 220 Styrene .. TO-14 1,1,2,2-Tetrachloroethane ND 350 TO-14 Tetrahydrofuran ND 150 TO-14 Tetrachloroethene ND 350 TO-14 1,1,2-Trichloroethane ND 280 TO-14 1,1,1-Trichloroethane ND 280 TO-14 270 Trichloroethene ND TO-14 Trichlorofluoromethane 290 ND TO-14 1,3,5-Trimethylbenzene ND 250 TO-14 1,2,4-Trimethylbenzene ND 250 TO-14 ND 180 Vinyl acetate TO-14 Vinyl chloride ND 130 TO-14 1,4-Dioxane ND 180 TO-14 2-Butanone (MEK) ND 150 TO-14 4-Methyl-2-pentanone (MIBK) ND 210 TO-14 ... Benzene 1700 160 .. TO-14 .. Toluene 5600 190 TO-14 .. .. Ethylbenzene 1200 220 TO-14 .. m,p-Xylene 3800 220 .. TO-14 o-Xylene 770 220 TO-14 Methane by GC Methane 150 7.6 ppm(v) 1.53 4090223 09/02/14 09/04/14 8015M

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SunStar Laboratories, I Providence Quality Assulptical Structures Nation	nc.						257 Lake	712 Commercer Forest, Califor 949.297.50 949.297	ntre Drive mia 92630 020 Phone 1.5027 Fax
Gribi Associates		Proje	ct: Maz G	lass					
1090 Adam Street, Suite K	Pr	oject Numb	er: [none]					Reported	
Benicia CA, 94510	Pro	ject Manag	er: Jim Gr	ibi				09/17/14 14	:34
		T1418	SG-5 01-05 (A	ir)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
	S	unStar La	aboratori	es, Inc.					
Total Volatile Organic Compounds	by TO-3 (modifi	ed)							
C6-C12 (GRO)	ND	7170 1	ug/m³ Air	1.53	4090228	09/02/14	09/06/14	TO-3/TO-14 m	
Fixed Gases ASTM D1946-90									
Helium	ND	1.53	%	1.53	4090225	09/02/14	09/05/14	GC	
Carbon Dioxide	ND	1.53							
Oxygen	12.5	1.53							
Nitrogen	49.7	0.53		0.53		"			

SunStar Laboratories, Providing Quality ANALYTICAL SERVICES NA	Inc.						257) Lake I	12 Commerce Forest, Califo 949.297.5 949.29	ntre Driv rnia 9263 020 Phon 7.5027 Fa	
Gribi Associates		Proje	ct: Maz	Glass						
1090 Adam Street, Suite K	P	roject Numb	er: [none	]				Reported	l:	
Benicia CA, 94510	Project Manager: Jim Gribi 09/17/14 14:									
Ander	Davila	P T1418 Reporting	URGE	Air)	Potek	Deserved	Analyzad	Mathad	Noter	
Anaiyie	Kesuit	EumSton L	horator	rica Inc	Datch	riepaieu	Anaryzeu	Method	INOICE	
Fixed Gases ASTM D1946-90		Sulistar La	aborator	nes, mc.						
Helium	ND	1.58	%	1.58	4090225	09/02/14	09/05/14	GC		
Carbon Dioxide	ND	1.58								
Oxygen	14.0	1.58								
Nitrogen	53.5	0.58		0.58						

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Katherine Running Grane

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Katherine RunningCrane, Project Manager

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SunStar Laboratories, In Providence Quality Annustical Statictes Nation	nc. NWIDE						25712 Lake Fo	Commerco orest, Calif 949.297 949.2	centre Driv ornia 9263 5020 Phon 97.5027 Fa	
Gribi Associates		Р	roject: Ma	z Glass						
1090 Adam Street Suite K		Project N	mber: [no	nel					Report	·he
Benicia CA 94510		Project Ma	magar lin	Gribi					00/17/14	14.34
Benefa CA, 94510		Tiojeet Ma	nager. Jin						0)/1//14	14.54
		SunStar	- Quant	tories, l	n Inc.					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4090224 - EPA 5030 GCMS										
Blank (4090224-BLK1)				Prepared:	09/02/14	Analyzed	1: 09/08/14			
Acetone	ND	12	ug/m³ Air							
,3-Butadiene	ND	4.5	~ "							
Carbon Disulfide	ND	3.2								
1,2-trichloro-1,2,2-trifluoroethane (CFC 13)	ND	7.7								
sopropyl alcohol	ND	13								
romodichloromethane	ND	6.8								
romoform	ND	11								
romomethane	ND	4.0								
arbon tetrachloride	ND	6.4								
hlorobenzene	ND	4.7								
hloroethane	ND	2.7								
hloroform	ND	5.0								
hloromethane	ND	11								
Cyclohexane	ND	3.5								
leptane	ND	4.2								
lexane	ND	3.6								
ibromochloromethane	ND	8.7								
,2-Dibromoethane (EDB)	ND	7.8								
,2-Dichlorobenzene	ND	6.1								
,3-Dichlorobenzene	ND	6.1								
4-Dichlorobenzene	ND	6.1								
ichlorodifluoromethane	ND	5.0								
1-Dichloroethane	ND	4.1								
2-Dichloroethane	ND	4.1								
1-Dichloroethene	ND	4.0								
s-1,2-Dichloroethene	ND	4.0								
ans-1,2-Dichloroethene	ND	4.0								
2-Dichloropropane	ND	4.7								
s-1,3-Dichloropropene	ND	4.6								
ans-1,3-Dichloropropene	ND	4.6								
Ethyltoluene	ND	5.0								
lethylene chloride	ND	3.5								
yrene	ND	4.3								
1,2,2-Tetrachloroethane	ND	7.0								
etrahydrofuran	ND	3.0								

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Laboratories, In PROVIDING QUALITY ANALYTICAL SERVICES NATION	IC.							25712 Lake Fo	2 Commerc orest, Calif 949.297. 949.2	entre Dri ornia 9263 5020 Pho 97.5027 Fa
Gribi Associates		P	roject: Ma	z Glass						
1090 Adam Street, Suite K		Project Nu	mber: [no	nel					Reporte	d:
Benicia CA 94510		Project Ma	nager: Iim	Gribi					09/17/14	14.34
Benefit Crk, 94510			and a second	01101	-				0)/1//14	14.54
		TO-15 SunStar	- Quality Labora	y Contro tories I	ol inc					
		Benesting	Labora	Sailes, 1	Source		W DEC		DDD	
Analyte	Result	Limit	Units	Level	Result	%REC	<sup>20</sup> KEC Limits	RPD	Limit	Notes
Batch 4090224 - EPA 5030 GCMS										
Blank (4090224-BLK1)				Prepared:	09/02/14	Analyzed	: 09/08/14			
Fetrachloroethene	ND	6.9	ug/m³ Air							
1,1,2-Trichloroethane	ND	5.6								
1,1,1-Trichloroethane	ND	5.6								
Frichloroethene	ND	5.5								
Frichlorofluoromethane	ND	5.7								
.3.5-Trimethylbenzene	ND	5.0								
2 4-Trimethylbenzene	ND	5.0								
Vinvl acetate	ND	3.6								
Vinyl chloride	ND	2.6								
4 Diovana	ND	19								
Putenene (MEV)	ND	16								
1 Methyl 2 pentanone (MIRK)	ND	13								
-wenyi-2-pentatione (with K)	ND	42								
Senzene	ND	3.3								
Zdeally and a	ND	5.0								
Etnylbenzene	ND	4.4								
n,p-Xylene	ND	8.8								
-Xylene	ND	4.4	"	15.2			40.160			
surrogate: 4-Bromojiuorobenzene	30.1			45.5		00.0	40-160			
Duplicate (4090224-DUP1)	Sour	rce: T1418	01-01	Prepared:	09/02/14	Analyzed	: 09/08/14			
Acetone	ND	12	ug/m³ Air		ND				30	
1,3-Butadiene	ND	4.5			ND				30	
Carbon Disulfide	ND	3.2			ND				30	
1,1,2-trichloro-1,2,2-trifluoroethane (CFC 113)	ND	7.7	"		ND				30	
sopropyl alcohol	ND	13			ND				30	
Bromodichloromethane	ND	6.8			ND				30	
Bromoform	ND	11			ND				30	
Bromomethane	ND	4.0			ND				30	
Carbon tetrachloride	ND	6.4			ND				30	
Chlorobenzene	ND	4.7			ND				30	
Chloroethane	ND	2.7			ND				30	
Chloroform	ND	5.0			ND				30	
Chloromethane	ND	11			ND				30	
Cyclohexane	ND	3.5			ND				30	
Hentane	4.99	4.2			5.13			2.67	30	

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SunStar Laboratories, PROVIDING QUALITY AWALYTICAL SERVICES N	Inc.							25712 Lake Fo	Commero orest, Calif 949.297 949.2	centre Driv ornia 9263 5020 Phon 97.5027 Fa
Gribi Associates		Pr	oiect: Ma	z Glass						
1000 Adam Street Suite K		Project Nu	nber [nc	nel					Poport	ad.
Popioio CA 04510		Project Nur	noer In	Cribi					00/17/14	14.24
Benicia CA, 94510		Project Mar	ager: Jin						09/17/14	14:54
		TO-15 - SunStar 1	Qualit Labora	y Contro tories 1	ol Inc					
		- Sunsui	Luboru							
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4090224 - EPA 5030 GCMS										
Duplicate (4090224-DUP1)	So	urce: T14180	1-01	Prepared:	09/02/14	Analyzed	: 09/08/14			
Hexane	ND	3.6	ug/m³ Air		ND				30	
Dibromochloromethane	ND	8.7			ND				30	
1,2-Dibromoethane (EDB)	ND	7.8			ND				30	
,2-Dichlorobenzene	ND	6.1			ND				30	
,3-Dichlorobenzene	ND	6.1			ND				30	
,4-Dichlorobenzene	ND	6.1			ND				30	
Dichlorodifluoromethane	ND	5.0			ND				30	
,1-Dichloroethane	ND	4.1			ND				30	
,2-Dichloroethane	ND	4.1			ND				30	
,1-Dichloroethene	ND	4.0			ND				30	
is-1,2-Dichloroethene	ND	4.0			ND				30	
rans-1,2-Dichloroethene	ND	4.0			ND				30	
,2-Dichloropropane	ND	4.7			ND				30	
tis-1,3-Dichloropropene	ND	4.6			ND				30	
rans-1,3-Dichloropropene	ND	4.6			ND				30	
l-Ethyltoluene	ND	5.0			ND				30	
Methylene chloride	ND	3.5			ND				30	
Styrene	ND	4.3			ND				30	
1,2,2-Tetrachloroethane	ND	7.0			ND				30	
Fetrahydrofuran	ND	3.0			ND				30	
Fetrachloroethene	ND	6.9			ND				30	
,1,2-Trichloroethane	ND	5.6			ND				30	
,1,1-Trichloroethane	ND	5.6			ND				30	
Trichloroethene	ND	5.5			ND				30	
richlorofluoromethane	ND	5.7			ND				30	
,3,5-Trimethylbenzene	ND	5.0			ND				30	
,2,4-Trimethylbenzene	ND	5.0			ND				30	
/invl acetate	ND	3.6			ND				30	
/inyl chloride	ND	2.6			ND				30	
.4-Dioxane	ND	18			ND				30	
-Butanone (MEK)	ND	15			ND				30	
-Methyl-2-pentanone (MIBK)	ND	42			ND				30	
Senzene	ND	33			ND				30	
Toluene	ND	3.8			ND				30	
Thylbenzene	ND	4.4			ND				30	
	ND	0.0			ND				20	

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PROVIDING QUALITY ANALYTICAL SERVICES	, Inc.							25712 Lake Fo	Commero orest, Calif 949.297 949.2	entre Driv ornia 9263 .5020 Phot 97.5027 Fa		
Gribi Associates		Pr	oject: Ma	z Glass					<b>D</b>	,		
1090 Adam Street, Suite K     Project Number: [none]       Benicia CA, 94510     Project Manager: Jim Gribi										09/17/14 14:34		
		TO-15 SunStar	· Qualit Labora	y Contro tories, l	ol înc.							
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes		

 Duplicate (4090224-DUP1)
 Source: T141801-01
 Prepared: 09/02/14
 Analyzed: 09/08/14

 o-Xylene
 ND
 4.4
 ug/m³ Air
 ND
 30

 Jurrogate: 4-Bromofluorobenzene
 36.2
 "
 45.3
 80.0
 40-160

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SunStar Laboratories Providing Quality ANALYTICAL SERVICES	, Inc.							25712 Lake Fo	Commerco orest, Calif 949.297. 949.2	centre Driv ornia 9263 5020 Phor 97.5027 Fa
Gribi Associates		Рг	oject: M	az Glass						
1090 Adam Street, Suite K		Project Nu	mber: [n	one]					Report	ed:
Benicia CA, 94510		Project Mar	nager: Jir	n Gribi					09/17/14	14:34
	141	SunStar	Labora	atories, I	inc.					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
3atch 4090223 - General Prep V	OC-GC									
Blank (4090223-BLK1)				Prepared:	09/02/14	Analyzed	: 09/04/14			
lethane	ND	5.0	ppm(v)							
Duplicate (4090223-DUP1)	So	urce: T1418(	01-01	Prepared:	09/02/14	Analyzed	: 09/04/14			
Aethane .	4.44	8.1	ppm(v)		3.89			13.2	20	

PROVIDING QUALITY ANALYTICAL SERVICES	S, Inc.						25712 Lake Fo	Commerco orest, Calif 949.297. 949.29	centr forni .5020 97.50
Gribi Associates		Projec	ct: Maz Glass						
1090 Adam Street, Suite K		Project Numbe	er: [none]					Report	ed:
Benicia CA, 94510		Project Manage	er: Jim Gribi					09/17/14	14:34
1 otar 1	volatile Organi	SunStar La	boratories,	Inc.	- Quan	y Contro	01		
Analyte	Result	SunStar Lal	boratories,	Source Result	• Quant	%REC	RPD	RPD Limit	
Analyte Batch 4090228 - EPA 5030 GCM	Result	SunStar Lal	boratories, Spike	Source Result	- Quan	%REC Limits	RPD	RPD Limit	N
1 otal Analyte Batch 4090228 - EPA 5030 GCM Blank (4090228-BLK1)	Result	SunStar Lal	boratories, Spike Inits Level Prepared	Source Result	• Quant %REC Analyzed	%REC Limits	RPD	RPD Limit	Ν
Analyte Batch 4090228 - EPA 5030 GCM Blank (4090228-BLK1) C6-C12 (GRO)	Result ND	SunStar La Reporting Limit U 7170 ug/r	Spire	Source Result	* Quand %REC Analyzed	%REC Limits : 09/06/14	RPD	RPD Limit	N
Analyte Batch 4090228 - EPA 5030 GCM Blank (4090228-BLK1) C6-C12 (GRO) Duplicate (4090228-DUP1)	Result 15 ND Soi	SunStar Lal Reporting Limit U 7170 ug/r urce: T141801-0	Spike Spike Units Level Prepared m <sup>3</sup> Air	Inc. Source Result : 09/02/14 : 09/02/14	• Quand %REC Analyzed	%REC Limits : 09/06/14 : 09/06/14	RPD	RPD Limit	1

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SunStar Laboratories Providere Quality Analytical Service	S, Inc. S NATIONWIDE							25712 Lake Fo	Commero orest, Calif 949.297 949.2	centre Drive čornia 92630 .5020 Phone 97.5027 Fax
Gribi Associates		Pr	oject: M	az Glass						
1090 Adam Street, Suite K		Project Nu	mber: [n	onel					Report	ed:
Benicia CA, 94510		Project Mar	nager: Jin	n Gribi					09/17/14	14:34
	Fixed Ga	ses ASTM	I D1946	5-90 - Qu	ality Co	ntrol				
	:	SunStar	Labora	atories, I	inc.					
		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4090225 - General Prep V	OC-GC									
Blank (4090225-BLK1)				Prepared:	09/02/14	Analyzed	: 09/05/14			
Helium	ND	1.00	%							
Carbon Dioxide	ND	1.00								
Oxygen	ND	1.00								
Nitrogen	ND	1.00								
Duplicate (4090225-DUP1)	Sou	rce: T1418(	)1-01	Prepared:	09/02/14	Analyzed	: 09/05/14			
Helium	ND	1.62	%		ND					
Carbon Dioxide	0.41	1.62			0.41			0.794	20	
Oxygen	14.2	1.62			14.2			0.171	20	
Nitrogen	62.1	0.62			62.1			0.0958	20	

SunStar Laboratories, Inc. Providence Quality Analytical Statistics Nationwate	25712 Commercentre Drive Lake Forest, California 92630 949.297.5020 Phone 949.297.5027 Fax
--	---

Gribi Associates	Project: Maz Glass	
1090 Adam Street, Suite K	Project Number: [none]	Reported:
Benicia CA, 94510	Project Manager: Jim Gribi	09/17/14 14:34

#### Notes and Definitions

- TO-14 TO-15 analysis of sample was not performed due to high concentration of analyte(s). Sample was analyzed utilizing method TO-14 and reporting limit has been adjusted accordingly.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported

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- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

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SunStar			Deres I of
PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE			rage 1 of
SAMPLE RECEIVING REVI	EW SH	EET	
BATCH #			
Client Name: Project:	1AZ GUAS	5	
Received by: Date/Time H	Received:		
Delivered by : Client SunStar Courier GSO FedEx	Other		
Total number of coolers received $\underline{}$ Temp criteria = 6°	C > 0°C (no	<u>frozen</u> cor	itainers)
Temperature: cooler #1 <u>20.2</u> °C +/- the CF (-0.2°C) = <u>20.0</u> °C cor	rected temperate	ure	
cooler #2°C +/- the CF (- 0.2°C) =°C cor	rected temperate	ure	
cooler #3°C +/- the CF (- $0.2^{\circ}$ C) =°C cor	rected temperati	ure	
Samples outside temp. but received on ice, w/in 6 hours of final sampling.	Yes	No*	XN/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*	M/A
Complete shipment received in good condition with correct temperatures, preservatives and within method specified holding times.	containers, la o*	abels, volu	mes
* Complete Non-Conformance Receiving Sheet if checked Cooler/Sample	Review - Initia	als and date	BC 9.2.14

Comments:

COC 134766

· ·		<u>.</u>		<u></u>		- <b>r</b> -				·×			14-01	1									
SSAT-	SSAT-	SSAT-	SSAT-	SSAT-	SSAT-	SSAT-	SSAT-	SSAT-	SSAT-	SSAT-	SSAT-	SSAT-	SSAT-	Canister		Shipping I	Client:		(949)297-5027 (949)297-5027				
0070	0660	0714	0031	2047	7012	0616	0437	0697	0678	0606	0162	0615	0657	Serial #	- 7- - -	nformation			fax *				
8/26/2014	8/26/2014	8/26/2014	8/26/2014	8/26/2014	8/26/2014	8/26/2014	8/26/2014	8/26/2014	8/26/2014	8/26/2014	8/26/2014	8/26/2014	8/26/2014	Date	CHECK		GRIBI	S	PLEASE DO				
-30	-30	-30	40			-30	-30	-30	-30	-30	-30	-30	-30	(~30 +/- 2 psia)	Pressure		Cam	unSta	) <b>NOT</b> WRIT				
PURGE CAN	PURGE CAN	PURGE CAN	NITROGEN FILLED	MANIFOLD (150)	MANIFOLD (150)			Purge	SG-2	SG5	361	SG-3	SG-4	IJ	Sample	Sampling Information	ster Dat 4_12+2	ar Lab	'E ON OR PLAC				
8-28-14	8-28-14	8-28-14	8-28-14	8-28-14	8-28-14			P1-82-8	8-28-14	8-28-14	8-28-14	8-28-14	8-28-14	Date	Sample	P	a She	orat	E LABELS				
-30	-30/	- 30/-15	+ 40					8	-30	- 30	-30	-30	-30	Pressure	Initial		et	orie	ON SUI				
P	-15	- 15/0	+30					j.	1	12	in <b>R</b>	1	a	Pressure	Final			Ň	1MA CAN				
		2:47/342						1:20	4:08	3:40	3:53	2:59	3:23	Start Time	Samole								
	•	2:5)/3:18					č	4:20	4:18	3:S0	4:04	3:09	3:33	Finish Ti	Sample								
	SSAT- 0070 8/26/2014 -30 PURGE CAN 8-28-14 -30 -4	SSAT-     0660     8/26/2014     -30     purge can     8-26-14     -30/     -15       SSAT-     0070     8/26/2014     -30     purge can     8-26-14     -30     -4	SSAT-     0714     8/26/2014     -30     PURGE CAN     8-26-14     - 30/-15     - 15/O'     2:47/3v2     2:51/3:1       SSAT-     0660     8/26/2014     -30     PURGE CAN     8-26-14     -30/     -15     -     -     -       SSAT-     0070     8/26/2014     -30     PURGE CAN     8-26-14     -30     -     <	SSAT-       0031       8/26/2014       40       NITROEEN FILLED       8-28-/4       40       40         SSAT-       0714       8/26/2014       -30       PURGE CAN       8-26-/4       - 30/-15/-       2:47/342       2:51/3:1         SSAT-       0660       8/26/2014       -30       PURGE CAN       8-26-/4       -30/-       -15/-       2:47/342       2:51/3:1         SSAT-       0070       8/26/2014       -30       PURGE CAN       8-26-/4       -30/-       -15       -         SSAT-       0070       8/26/2014       -30       PURGE CAN       8-26-/4       -30       -4	SSAT-       2047       8/26/2014       MANIFOLD (150)       8-28-14       40       MANIFOLD (150)       8-28-14       40       40         SSAT-       0031       8/26/2014       40       NITROGEN FILLED       8-28-14       40	$\begin{array}{ c c c c c c c c } \hline SSAT- & 7012 & 8/26/2014 & MANIFOLD (150) & 8-28-14 & & & & & & & & & & & & & & & & & & &$	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	SSAT-         0697         8/26/2014         -30         PuRce         8-28-14         -30         4:30         4:30         4:30         4:30           SSAT-         0437         8/26/2014         -30         MANIFOLD (150)         8-28-14         -30         4:30         5:31/3:1         5:30         4 <t< td=""><td>SSAT-         0678         8/26/2014         -30         SG-2         8-28-14         -30         1 4:08         4:08</td><td><math display="block">\begin{array}{c c c c c c c c c c c c c c c c c c c </math></td><td><math display="block"> \begin{array}{ c c c c c c c c c c c c c c c c c c c</math></td><td><math display="block"> \begin{array}{ c c c c c c c c c c c c c c c c c c c</math></td><td>ortm         SAT-         0657         <math>\theta/26/2014</math>         -30         SG-4         <math>\theta-2B-14</math>         -30         <math>g''</math> <math>3:23</math> <math>3:23</math> <math>3:23</math> <math>3:23</math> <math>3:23</math> <math>3:23</math> <math>3:23</math> <math>3:23</math> <math>3:33</math>           SAT-         0615         <math>\theta/26/2014</math>         -30         SC-3         <math>\theta-2B-14</math>         -30         <math>-1</math> <math>2:59</math> <math>3:c9</math>           SAT-         0616         <math>\theta/26/2014</math>         -30         SC-5         <math>\theta-2B-14</math>         -30         <math>m_0</math> <math>3:53</math> <math>4:o4</math>           SAT-         0616         <math>\theta/26/2014</math>         -30         SC-2         <math>\theta-2B-14</math>         -30         <math>-2</math> <math>3:40</math> <math>3:53</math> <math>4:o4</math>           SSAT-         0617         <math>\theta/26/2014</math>         -30         SC-2         <math>\theta-2B-14</math>         -30         <math>-1</math> <math>4:06</math> <math>4:6</math> <math>3:53</math> <math>4:o4</math> <math>3:54</math> <math>4:o4</math> <math>3:54</math> <math>4:o4</math> <math>3:54</math> <math>3:54</math><!--</td--><td>Gamaster Serial #         Date         (-30 +/- 2 psia)         ID         Date         Freesure         Freesure         Freesure         Start fine         Finish file           SSAT         0657         8/26/2014         -30         SG-4         8-28-14         -30         <math>3:23</math>         3:33           SSAT         0162         8/26/2014         -30         SG-3         8-28-14         -30         -1         2:59         3:33           SSAT         0162         8/26/2014         -30         SG-3         8-28-14         -30         -1         2:59         3:33           SSAT         0666         8/26/2014         -30         SG-5         8-28-14         -30         -2         3:40         3:53         4:04           SSAT         0666         8/26/2014         -30         SG-5         8-28-14         -30         -1         4:08         3:53         4:04           SSAT         0697         8/26/2014         -30         SG-5         8-28-14         -30         -1         4:08         3:53         4:04         3:55           SSAT         0616         8/26/2014         -30         SG-5         8-28-14         -30         -1         4:36         4:36&lt;</td><td>CHERK         Pressure         Sample         Sample         Sample         Sample         Sample         Sample         Sample         Initial         Final         Sample         Initial         Final         Sample         Sample</td><th></th><th>Calient: GRIBI JIM 8-26-14 12:2           Singling Information           <th <="" colspan="4" th=""><td><math display="block">\begin{array}{c c c c c c c c c c c c c c c c c c c </math></td></th></th></td></t<>	SSAT-         0678         8/26/2014         -30         SG-2         8-28-14         -30         1 4:08         4:08	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	ortm         SAT-         0657 $\theta/26/2014$ -30         SG-4 $\theta-2B-14$ -30 $g''$ $3:23$ $3:23$ $3:23$ $3:23$ $3:23$ $3:23$ $3:23$ $3:23$ $3:33$ SAT-         0615 $\theta/26/2014$ -30         SC-3 $\theta-2B-14$ -30 $-1$ $2:59$ $3:c9$ SAT-         0616 $\theta/26/2014$ -30         SC-5 $\theta-2B-14$ -30 $m_0$ $3:53$ $4:o4$ SAT-         0616 $\theta/26/2014$ -30         SC-2 $\theta-2B-14$ -30 $-2$ $3:40$ $3:53$ $4:o4$ SSAT-         0617 $\theta/26/2014$ -30         SC-2 $\theta-2B-14$ -30 $-1$ $4:06$ $4:6$ $3:53$ $4:o4$ $3:54$ $4:o4$ $3:54$ $4:o4$ $3:54$ $3:54$ </td <td>Gamaster Serial #         Date         (-30 +/- 2 psia)         ID         Date         Freesure         Freesure         Freesure         Start fine         Finish file           SSAT         0657         8/26/2014         -30         SG-4         8-28-14         -30         <math>3:23</math>         3:33           SSAT         0162         8/26/2014         -30         SG-3         8-28-14         -30         -1         2:59         3:33           SSAT         0162         8/26/2014         -30         SG-3         8-28-14         -30         -1         2:59         3:33           SSAT         0666         8/26/2014         -30         SG-5         8-28-14         -30         -2         3:40         3:53         4:04           SSAT         0666         8/26/2014         -30         SG-5         8-28-14         -30         -1         4:08         3:53         4:04           SSAT         0697         8/26/2014         -30         SG-5         8-28-14         -30         -1         4:08         3:53         4:04         3:55           SSAT         0616         8/26/2014         -30         SG-5         8-28-14         -30         -1         4:36         4:36&lt;</td> <td>CHERK         Pressure         Sample         Sample         Sample         Sample         Sample         Sample         Sample         Initial         Final         Sample         Initial         Final         Sample         Sample</td> <th></th> <th>Calient: GRIBI JIM 8-26-14 12:2           Singling Information           <th <="" colspan="4" th=""><td><math display="block">\begin{array}{c c c c c c c c c c c c c c c c c c c </math></td></th></th>	Gamaster Serial #         Date         (-30 +/- 2 psia)         ID         Date         Freesure         Freesure         Freesure         Start fine         Finish file           SSAT         0657         8/26/2014         -30         SG-4         8-28-14         -30 $3:23$ 3:33           SSAT         0162         8/26/2014         -30         SG-3         8-28-14         -30         -1         2:59         3:33           SSAT         0162         8/26/2014         -30         SG-3         8-28-14         -30         -1         2:59         3:33           SSAT         0666         8/26/2014         -30         SG-5         8-28-14         -30         -2         3:40         3:53         4:04           SSAT         0666         8/26/2014         -30         SG-5         8-28-14         -30         -1         4:08         3:53         4:04           SSAT         0697         8/26/2014         -30         SG-5         8-28-14         -30         -1         4:08         3:53         4:04         3:55           SSAT         0616         8/26/2014         -30         SG-5         8-28-14         -30         -1         4:36         4:36<	CHERK         Pressure         Sample         Sample         Sample         Sample         Sample         Sample         Sample         Initial         Final         Sample         Initial         Final         Sample         Sample		Calient: GRIBI JIM 8-26-14 12:2           Singling Information           Singling Information <th <="" colspan="4" th=""><td><math display="block">\begin{array}{c c c c c c c c c c c c c c c c c c c </math></td></th>	<td><math display="block">\begin{array}{c c c c c c c c c c c c c c c c c c c </math></td>				$\begin{array}{c c c c c c c c c c c c c c c c c c c $

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



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

Gribi Associates	Project: Maz Glass	
1090 Adam Street, Suite K	Project Number: [none]	Reported:
Benicia CA, 94510	Project Manager: Jim Gribi	09/23/14 17:21

# ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SG-2	T141902-01	Air	09/15/14 09:00	09/16/14 08:55

# DETECTIONS SUMMARY

Sample ID: SG-2	Labor	atory ID:	T141902-01		
		Reporting			
Analyte	Result	Limit	Units	Method	Notes
Cyclohexane	310	3.5	ug/m³ Air	TO-15	
Heptane	46	4.2	ug/m³ Air	TO-15	
Hexane	320	3.6	ug/m³ Air	TO-15	
1,3,5-Trimethylbenzene	56	5.0	ug/m³ Air	TO-15	
Methane	170	7.8	ppm(v)	8015M	
C6-C12 (GRO)	7600	7170	ug/m³ Air	TO-3/TO-14 m	
Carbon Dioxide	3.87	1.57	%	GC	
Oxygen	13.2	1.57	%	GC	
Nitrogen	51.0	0.57	%	GC	

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Katherine Running Crane

Katherine RunningCrane, Project Manager

23 September 2014

Jim Gribi Gribi Associates 1090 Adam Street, Suite K Benicia, CA 94510 RE: Maz Glass

Enclosed are the results of analyses for samples received by the laboratory on 09/16/14 08:55. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Katherine Running Grane

Katherine RunningCrane Project Manager

Page 1 of 12

SunStar Laboratories, I Providing Quality Assustingal Statistics Nation	nc.						257 Lake	12 Commerce Forest, Califo 949.297.5 949.29	entre Drive ornia 92630 5020 Phone 7.5027 Fax
Gribi Associates		Proi	iect: Maz G	lass					
1090 Adam Street, Suite K	F	Project Num	ber: [none]	1400				Reporte	d:
Benicia CA, 94510	P	roject Mana	ger: Jim G	ribi				09/23/14 1	7:21
			0	-					
		т141	SG-2 902-01 (A	ir)					
				<b>II</b> )					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar I	aborator	ies, Inc.					
<u>TO-15</u>									
Acetone	ND	12	ug/m³ Air	3.14	4091619	09/16/14	09/19/14	TO-15	
1,3-Butadiene	ND	4.5				"			
Carbon Disulfide	ND	3.2							
1,1,2-trichloro-1,2,2-trifluoroethane (CFC 113)	ND	7.7							
Isopropyl alcohol	ND	13				"			
Bromodichloromethane	ND	6.8							
Bromoform	ND	11				"			
Bromomethane	ND	4.0							
Carbon tetrachloride	ND	6.4				"			
Chlorobenzene	ND	4.7							
Chloroethane	ND	2.7				"			
Chloroform	ND	5.0							
Chloromethane	ND	11							
Cyclohexane	310	3.5							
Heptane	46	4.2							
Hexane	320	3.6				"			
Dibromochloromethane	ND	8.7							
1,2-Dibromoethane (EDB)	ND	7.8				"			
1,2-Dichlorobenzene	ND	6.1							
1,3-Dichlorobenzene	ND	6.1				"			
1,4-Dichlorobenzene	ND	6.1				"			
Dichlorodifluoromethane	ND	5.0				"			
1,1-Dichloroethane	ND	4.1				"			
1,2-Dichloroethane	ND	4.1				"			
1,1-Dichloroethene	ND	4.0							
cis-1,2-Dichloroethene	ND	4.0							
trans-1,2-Dichloroethene	ND	4.0							
1,2-Dichloropropane	ND	4.7							
cis-1,3-Dichloropropene	ND	4.6							
trans-1,3-Dichloropropene	ND	4.6							
4-Ethyltoluene	ND	5.0							

Katherine Running Grane

Katherine RunningCrane, Project Manager

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Gribi Associates	1	Proje	ect: Maz G	lass				Demented	
Benicia CA, 94510	F	Project Manas	er: [none] er: Jim Gi	ibi				09/23/14 17	1: 7:21
			<u>sc 2</u>	-					
		T1419	902-01 (A	ir)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		SunStar L	aboratori	ies, Inc.					
ГО-15									
Methylene chloride	ND	3.5	ug/m³ Air	3.14	4091619	09/16/14	09/19/14	TO-15	
Styrene	ND	4.3							
1,1,2,2-Tetrachloroethane	ND	7.0							
Fetrahydrofuran	ND	3.0							
Tetrachloroethene	ND	6.9							
1,1,2-Trichloroethane	ND	5.6							
1,1,1-Trichloroethane	ND	5.6							
Trichloroethene	ND	5.5							
Trichlorofluoromethane	ND	5.7							
1,3,5-Trimethylbenzene	56	5.0							
1,2,4-Trimethylbenzene	ND	5.0							
Vinyl acetate	ND	3.6							
Vinyl chloride	ND	2.6							
1,4-Dioxane	ND	18							
2-Butanone (MEK)	ND	15							
4-Methyl-2-pentanone (MIBK)	ND	42							
Benzene	ND	3.3							
Гoluene	ND	3.8							
Ethylbenzene	ND	4.4							
n,p-Xylene	ND	8.8							
p-Xylene	ND	4.4							
Surrogate: 4-Bromofluorobenzene		80.6 %	40-1	60	"	"	"	"	
Methane by GC									
Methane	170	7.8	ppm(y)	1.57	4091612	09/16/14	09/16/14	8015M	

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Katherine RunningCrane, Project Manager

Page 3 of 12

Gribi Associates	1	Proje Project Numb	ct: Maz C	lass				Papartad	
Benicia CA, 94510	F	roject Manag	er: Jim G	ribi				09/23/14 17	:21
		T1419	SG-2 02-01 (A	ir)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
		SunStar L	aborator	ies, Inc.					
Fotal Volatile Organic Compoun	ds by TO-3 (modi	<b>fied</b> )	(		4001.000	00/16/14	00/10/14	TO 0 TO 14	
.0-C12 (GRO)	7600	/1/0	ug/m <sup>3</sup> Air	1.57	4091620	09/16/14	09/19/14	m	
Fixed Gases ASTM D1946-90									
Helium	ND	1.57	%	1.57	4091611	09/16/14	09/17/14	GC	
Carbon Dioxide	3.87	1.57							
Vitrogen	51.0	0.57		0.57		"		"	

SunStar Laboratories, In Provideo Quality Assistantical Survices Nation	nc.							25712 Lake Fo	2 Commerco prest, Calif 949.297 949.2	centre Drive fornia 92630 5020 Phone 97.5027 Fax
Gribi Associates 1090 Adam Street, Suite K Benicia CA, 94510		Project Nu Project Ma	roject: Ma: imber: [noi nager: Jim	z Glass ne] Gribi					<b>Report</b> 09/23/14	e <b>d:</b> 17:21
		TO-15	- Quality	Contro	ol					
	5	SunStar	Labora	tories, l	Inc.					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4001610 FPA 5030 CCMS										
Datti 4091019 - EI A 5050 (JCMIS				D	00/16/14	A	00/10/1	4		
Blank (4091619-BLK1)	ND	1.2		Prepared:	09/16/14	Analyzec	1: 09/19/14	ł		
Acetone	ND	12	ug/m³ Air							
1,3-Butadiene	ND	4.5								
1,1,2-trichloro-1,2,2-trifluoroethane (CFC	ND	3.2 7.7								
Isopropyl alcohol	ND	13								
Bromodichloromethane	ND	6.8								
Bromoform	ND	11								
Bromomethane	ND	4.0								
Carbon tetrachloride	ND	6.4								
Chlorobenzene	ND	4.7								
Chloroethane	ND	2.7								
Chloroform	ND	5.0								
Chloromethane	ND	11								
Cyclohexane	ND	3.5								
Heptane	ND	4.2								
Hexane	ND	3.6								
Dibromochloromethane	ND	8.7								
1,2-Dibromoethane (EDB)	ND	7.8								
1,2-Dichlorobenzene	ND	6.1								
1,3-Dichlorobenzene	ND	6.1								
1,4-Dichlorobenzene	ND	6.1								
Dichlorodifluoromethane	ND	5.0								
1,1-Dichloroethane	ND	4.1								
1,2-Dichloroethane	ND	4.1								
1,1-Dichloroethene	ND	4.0								
trans 1.2 Dishlaraathana	ND	4.0								
1 2-Dichloropropage	ND	4.0								
cis-1 3-Dichloropropene	ND	4.7								
trans-1 3-Dichloropropene	ND	4.0								
4-Ethyltoluene	ND	4.0								
Methylene chloride	ND	3.5								
Styrene	ND	43								
1.1.2.2-Tetrachloroethane	ND	7.0								
Tetrahydrofuran	ND	3.0								

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Katherine Running Crane

Katherine RunningCrane, Project Manager

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PROVIDENC QUALITY AMALYTICAL SERVICES NATIO	nc.							25712 Lake Fo	Commero rest, Calif 949.297 949.2	centre Dr fornia 926 .5020 Pho 97.5027 F
Gribi Associates		P	roject: Ma	z Glass						
1090 Adam Street, Suite K		Project Nu	mber: [nc	nel					Report	ed:
Benicia CA 94510		Project Ma	nager Iin	Gribi					09/23/14	17.21
		TO 15	O 14	Contra	.1				09/20/11	17.21
		10-15 SunStor	- Quant	y Contro torios I	n ne					
		Sunstan	Labora	101105, 1	inc.					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4091619 - EPA 5030 GCMS										
Blank (4091619-BLK1)				Prepared:	09/16/14	Analyzed	: 09/19/14			
Fetrachloroethene	ND	6.9	ug/m³ Air							
,1,2-Trichloroethane	ND	5.6								
,1,1-Trichloroethane	ND	5.6								
Frichloroethene	ND	5.5								
richlorofluoromethane	ND	5.7								
,3,5-Trimethylbenzene	ND	5.0								
,2,4-Trimethylbenzene	ND	5.0								
/inyl acetate	ND	3.6								
/inyl chloride	ND	2.6								
,4-Dioxane	ND	18								
-Butanone (MEK)	ND	15								
I-Methyl-2-pentanone (MIBK)	ND	42								
Benzene	ND	3.3								
Foluene	ND	3.8								
Ethylbenzene	ND	4.4								
n,p-Xylene	ND	8.8								
o-Xylene	ND	4.4								
Surrogate: 4-Bromofluorobenzene	26.1		"	45.3		57.8	40-160			
Duplicate (4091619-DUP1)	Sou	rce: T1419	02-01	Prepared:	09/16/14	Analyzed	: 09/19/14			
Acetone	ND	12	ug/m³ Air		ND				30	
,3-Butadiene	ND	4.5			ND				30	
Carbon Disulfide	ND	3.2			ND				30	
,1,2-trichloro-1,2,2-trifluoroethane (CFC 13)	ND	7.7			ND				30	
sopropyl alcohol	ND	13			ND				30	
Bromodichloromethane	ND	6.8			ND				30	
fromotorm	ND	11			ND				30	
Bromomethane	ND	4.0			ND				30	
arbon tetrachloride	ND	6.4			ND				30	
niorobenzene	ND	4.7			ND				30	
Informethane	ND	2.7			ND				30	
.nioroiorm	ND	5.0			ND				30	
niorometnane	ND	11			ND			0.44	30	
yclonexane	316	3.5			308			2.64	30	
leptane	49.5	4.2			45.9			7.41	30	

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Katherine RunningCrane, Project Manager

Page 6 of 12

SunStar Laboratories, PROVIDING QUALITY ANALYTICAL STERVICES NJ	Inc.							25712 Lake F	2 Commercorest, Calif 949.297 949.2	centre Driv Fornia 9263 5020 Phon 97.5027 Fa
Gribi Associates 1090 Adam Street, Suite K Benicia CA, 94510		Pro Project Nun Project Man	oject: Ma nber: [no ager: Jim	z Glass ne] ı Gribi					<b>Report</b> 09/23/14	e <b>d:</b> 17:21
		TO-15 -	Quality	y Contro	ol					
	S	SunStar I	Labora	tories, I	nc.					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4091619 - EPA 5030 GCMS										
Duplicate (4091619-DUP1)	Sour	ce: T14190	2-01	Prepared:	09/16/14	Analyzed	l: 09/19/14	Ļ		
Hexane	335	3.6 1	1g/m³ Air		322			3.93	30	
Dibromochloromethane	ND	8.7			ND				30	
1,2-Dibromoethane (EDB)	ND	7.8			ND				30	
1,2-Dichlorobenzene	ND	6.1			ND				30	
1,3-Dichlorobenzene	ND	6.1			ND				30	
1,4-Dichlorobenzene	ND	6.1			ND				30	
Dichlorodifluoromethane	ND	5.0			ND				30	
1,1-Dichloroethane	ND	4.1			ND				30	
1,2-Dichloroethane	ND	4.1			ND				30	
1,1-Dichloroethene	ND	4.0			ND				30	
cis-1,2-Dichloroethene	ND	4.0			ND				30	
trans-1,2-Dichloroethene	ND	4.0			ND				30	
1,2-Dichloropropane	ND	4.7			ND				30	
cis-1,3-Dichloropropene	ND	4.6			ND				30	
trans-1,3-Dichloropropene	ND	4.6			ND				30	
4-Ethyltoluene	ND	5.0			ND				30	
Methylene chloride	ND	3.5			ND				30	
Styrene	ND	4.3			ND				30	
1,1,2,2-Tetrachloroethane	ND	7.0			ND				30	
Tetrahydrofuran	ND	3.0			ND				30	
Tetrachloroethene	ND	6.9			ND				30	
1,1,2-Trichloroethane	ND	5.6			ND				30	
1,1,1-Trichloroethane	ND	5.6			ND				30	
Trichloroethene	ND	5.5			ND				30	
Trichlorofluoromethane	ND	5.7			ND				30	
1,3,5-Trimethylbenzene	55.1	5.0			55.8			1.13	30	
1,2,4-Trimethylbenzene	ND	5.0			ND				30	
Vinyl acetate	ND	3.6			ND				30	
Vinyl chloride	ND	2.6			ND				30	
1,4-Dioxane	ND	18			ND				30	
2-Butanone (MEK)	ND	15			ND				30	
4-Methyl-2-pentanone (MIBK)	ND	42			ND				30	
Benzene	ND	3.3			ND				30	
Toluene	ND	3.8			ND				30	
Ethylbenzene	ND	4.4			ND				30	
m.p-Xvlene	ND	8.8			ND				30	

SunStar Laboratories, Inc.

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Katherine Running Grane

Katherine RunningCrane, Project Manager

Page 7 of 12

SunStar Laboratories, Provider Quality Assistment Structures	Inc.							25712 Lake Fo	Commerco orest, Calif 949.297. 949.2	centre Dri ornia 926. 5020 Phot 97.5027 Fa
Gribi Associates		Pr	oject: M	az Glass						
1090 Adam Street, Suite K		Project Nu	mber: [n	one]					Report	ed:
Benicia CA, 94510		Project Mar	nager: Jir	n Gribi					09/23/14	17:21
		TO-15	· Qualit Labora	ty Contro atories, 1	) [nc.					
		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4091619 - EPA 5030 GCM	S									
Duplicate (4091619-DUP1)	So	urce: T14190	2-01	Prepared:	09/16/14	Analyzed	: 09/19/14			
-Xylene	ND	44	ug/m3 Air		ND				30	

45.3

35.6

SunStar Laboratories	, Inc.							25712 Lake Fo	2 Commerco prest, Calif 949.297. 949.2	centre Drive fornia 9263( 5020 Phone 97.5027 Fax
Gribi Associates		Pr	roject: M	az Glass						
1090 Adam Street, Suite K		Project Nu	mber: [n	one]					Report	ed:
Benicia CA, 94510		Project Mar	nager: Jir	n Gribi					09/23/14	17:21
Analyte	Result	SunStar Reporting Limit	Labora Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4091612 - General Prep V	DC-GC									
Blank (4091612-BLK1)				Prepared	& Analyze	ed: 09/16/	14			
Methane	ND	5.0	ppm(v)							
Duplicate (4091612-DUP1)	So	urce: T14190	02-01	Prepared	& Analyze	ed: 09/16/	14			
Methane	171	7.8	ppm(v)		167			2.56	20	

SunStar Laboratories, Inc.

Surrogate: 4-Bromofluorobenzene

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78.7 40-160

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Katherine Running Crane

Katherine RunningCrane, Project Manager

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Katherine Running Crane

Katherine RunningCrane, Project Manager

Page 8 of 12

Inc.						25712 Lake Fo	Commero orest, Calif 949.297 949.2	centre Driv čornia 9263 .5020 Phon 97.5027 Fa
	Project	Maz Glass						
	Project Number	[none]					Report	ed:
	Project Manager	Jim Gribi					09/23/14	17:21
Result	Reporting Limit Un	Spike ts Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
5								
		Prepared	09/16/14	Analyzed	: 09/19/14			
ND	7170 ug/m	Air						
Sour	ce: T141902-01	Prepared	09/16/14	Analyzed	: 09/19/14			
7480	7170 ug/m	Air	7600			1.49	30	
	olatile Organic S Result S ND Sour 7480	Inc. Project: Project Number: Project Manager: olatile Organic Compounds I SunStar Lab Reporting Result Limit Uni S ND 7170 ug/m <sup>3</sup> Source: T141902-01 7480 7170 ug/m <sup>3</sup>	Project: Maz Glass Project Number: [none] Project Manager: Jim Gribi olatile Organic Compounds by TO-3 (m SunStar Laboratories, J Reporting Spike Limit Units Spike Limit Units Spike Result Limit Units Spike Prepared: ND 7170 ug/m <sup>3</sup> Air Source: T141902-01 Prepared: 7480 7170 ug/m <sup>3</sup> Air	Project: Maz Glass Project Number: [none] Project Manager: Jim Gribi olatile Organic Compounds by TO-3 (modified) SunStar Laboratories, Inc. Result Reporting Spike Source Result Units Experiment Source Prepared: 09/16/14 ND 7170 ug/m <sup>3</sup> Air Source: T141902-01 Prepared: 09/16/14 7480 7170 ug/m <sup>3</sup> Air 7600	Project: Maz Glass         Project Number: [none]         Project Manager: Jim Gribi         olatile Organic Compounds by TO-3 (modified) - Qualitic         SunStar Laboratories, Inc.         Reporting       Spike         Result       Limit         Units       Source         Prepared: 09/16/14       Analyzed         ND       7170       ug/m³ Air         Source: T141902-01       Prepared: 09/16/14       Analyzed         7480       7170       mog a Air	Project: Maz Glass Project Number: [none] Project Manager: Jim Gribi olatile Organic Compounds by TO-3 (modified) - Quality Contro SunStar Laboratories, Inc. Result Limit Units Spike Source % REC Level Result % REC Limits S Prepared: 09/16/14 Analyzed: 09/19/14 ND 7170 ug/m <sup>3</sup> Air Source: T141902-01 Prepared: 09/16/14 Analyzed: 09/19/14 7480 7170 ug/m <sup>3</sup> Air	Project: Maz Glass         Project Number: [none]         Project Manager: Jim Gribi         olatile Organic Compounds by TO-3 (modified) - Quality Control SunStar Laboratories, Inc.         Result       Reporting         SunStar Laboratories, Inc.         Prepared: 09/16/14         Analyzed: 09/19/14         ND       7170         ND       7170         Prepared: 09/16/14       Analyzed: 09/19/14         ND       7170         Y120       Prepared: 09/16/14         Analyzed: 09/19/14       149	25712 Commerc         Lake Forest, Calif         949.297         949.297         Project: Maz Glass         Project Number: [none]         Project Manager: Jim Gribi         09/23/14         olatile Organic Compounds by TO-3 (modified) - Quality Control         SunStar Laboratories, Inc.         Result       Reporting         Spike       Source         %REC       Imits         Result       Units         Limit       Units         Prepared: 09/16/14       Analyzed: 09/19/14         ND       7170 ug/m³ Air         Source:       T141902-01         Prepared: 09/16/14       Analyzed: 09/19/14

SunStar Laboratories PROVIDING QUALITY ANALYTICAL SERVICES	S <mark>, Inc.</mark> S NATIONWIDE							25712 Lake Fo	2 Commerco Drest, Calif 949.297 949.2	centre Drive Cornia 92630 .5020 Phone 97.5027 Fax
Gribi Associates		Pre	oject: M	az Glass						
1090 Adam Street, Suite K		Project Nur	nber: [n	one]					Report	ed:
Benicia CA, 94510		Project Man	ager: Jii	n Gribi					09/23/14	17:21
	Fixed Ga	ases ASTM	D1946	5-90 - Qu	ality Co	ntrol				
		SunStar I	Labora	atories, l	nc.					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4091611 - General Prep V	OC-GC									
Blank (4091611-BLK1)				Prepared:	09/16/14	Analyzed	: 09/17/14			
Helium	ND	1.00	%							
Carbon Dioxide	ND	1.00								
Oxygen	ND	1.00								
Nitrogen	ND	1.00								
Duplicate (4091611-DUP1)	So	urce: T14190	2-01	Prepared:	09/16/14	Analyzed	: 09/17/14			
Helium	ND	1.57	%		ND					
Carbon Dioxide	3.90	1.57			3.87			0.849	20	
Oxygen	13.1	1.57			13.2			0.560	20	
Nitrogen	50.9	0.57			51.0			0.288	20	

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Katherine RunningCrane, Project Manager

Katherine Running Grane

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Katherine RunningCrane, Project Manager

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SunStar Laboratories, Inc. 25712 Commercentre Dr Lake Forest, CA 92630 949-297-5020	Chain of Custody Record	
client Gribi Associates	- Date: 9/15/14 Page: 1	Of
Address:Fax:	Collector: 1 Grib 1 / & Ref-Vurbe/Client Project	Doit#
Project Manager: ) Grub	Batch #Y922EDF #	
Sample Date Sample	To an	otal # of containers
00.6 h15116 1-05		
56-4 (Dup) 11 927		
		STD. TAT
Relinguished by: (u)grature Time Time Time Time Time Time Time Tim	Received by (signeric) Date / Time C Total # of containers TPH Received by: (signature) Date / Time Seals intact?/WNNA TPH	H-G/WOCS Ug/M3
GSD 86/4 X:55 Relinquished by: (signature) Date / Time P	Received by: (signature) Date / Time Turn around time:	
Sample disposal Instructions: Disposal @ \$2.00 each	Return to client Pickup C	COC 134820
Drive 2630 hone Fax		n of

25712 Commercentre D Lake Forest, California 92 949.297.5020 Pl 949.297.5027

Gribi Associates	Project: Maz Glass	
1090 Adam Street, Suite K	Project Number: [none]	Reported:
Benicia CA, 94510	Project Manager: Jim Gribi	09/23/14 17:21

Notes and Definitions

Analyte DETECTED DET

SunStar

Analyte NOT DETECTED at or above the reporting limit ND

Laboratories, Inc.

PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

NR Not Reported

Sample results reported on a dry weight basis dry

RPD Relative Percent Difference

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Page 12

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Client:		GRIBI	JIM 9-5-14	4+2					
Shipping Info	ormation			Sampling Information					
		CHECK	Pressure	Sample	Sample	Initial	Final	Sample	Sample
Canister Se	rial #	Date	(-30 +/- 2 psia)	IJ	Date	Pressure	Pressure	Start Time	Finish Time
SSAT-	0438	9/5/2014	-30	SG-2	9-15-14	- 26	1	9:00	80:08
SSAT-	0651	9/5/2014	-30	SG-4	9-15-14	-29	1	9:39	9:49
SSAT-	0714	9/5/2014	-30	SG4	9-15-14	-30	1	9:27	9.36
SSAT-	0453	9/5/2014	-30	PURGE CAN	9-15-14	-30	- ان	8:44	8:47
SSAT-	2045	9/5/2014		MANIFOLD (150)		- 13	-	9:18	9:24
SSAT-	2051	9/5/2014		MANIFOLD (150)					
					1				
			-						
						5m;			
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**Canister Data Sheet** 

SunStar Laboratories

Effective Date: 01/01/2013 Form F-LP0005-1.2

SunStar Laboratories Inc. 25712 Commercentre Dr. Lake Forest, CA 92630 (949)297-5020 (949)297-5027 fax

EASE DO NOT WRITE ON

OR PLACE

LABELS ON

SUMMA

;

SAMPLE RECEIVING REVIE	EW SH	EET	
BATCH #			
Client Name: Project:	MAZ (	ALASS	•
Received by: Date/Time R	eceived:	9-16-14	8:55
Delivered by : 🗌 Client 🗌 SunStar Courier 🐹 GSO 🗌 FedEx	Other		
Total number of coolers received Temp criteria = $6^{\circ}$ C	c > 0°C (no	<u>frozen</u> co	ntainers)
Temperature: cooler #1 _20.2 °C +/- the CF (- 0.2 °C) = $20.0$ °C corrections	ected temperat	ure	
cooler #2°C +/- the CF (- 0.2°C) =°C corr	ected temperat	ure	
cooler #3°C +/- the CF (- $0.2^{\circ}$ C) =°C corr	ected temperat	ure	
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	<b>X</b> 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, c preservatives and within method specified holding times. Xes INC	ontainers, la	abels, volu	mes
* Complete Non-Conformance Receiving Sheet if checked Cooler/Sample R	eview - Initi	als and date	82 9.16
Comments:			
· · · · · · · · · · · · · · · · · · ·			· · ·



25712 Commercentre Driv Lake Forest, California 9263 949.297.5020 Phon 949.297.5027 Fa 1

SS-4

e Drive a 92630 9 Phone 927 Fax	SunStar Laboratories Providing Quality Assalytical Survies	s, Inc.		2571 Lake F	2 Commercentre Drive orest, California 92630 949.297.5020 Phone 949.297.5027 Fax
	Gribi Associates 1090 Adam Street, Suite K Benicia CA, 94510	Project Project	Project: 9-16-14 Number: [none] Manager: Jim Gribi		<b>Reported:</b> 09/30/14 17:00
		ANALYTICAL	REPORT FOR SAMPLES		
	Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
	SS-1	T141900-01	Soil	09/15/14 10:30	09/16/14 08:55
	SS-2	T141900-02	Soil	09/15/14 10:20	09/16/14 08:55
	SS-3	T141900-03	Soil	09/15/14 10:35	09/16/14 08:55

T141900-04

### DETECTIONS SUMMARY

Soil

Sample ID:	SS-1	Labora	atory ID:	T141900-01		
		]	Reporting			
Analyte		Result	Limit	Units	Method	Notes
Barium		170	1.0	mg/kg	EPA 6010B	
Chromium		30	2.0	mg/kg	EPA 6010B	
Cobalt		8.9	2.0	mg/kg	EPA 6010B	
Copper		21	1.0	mg/kg	EPA 6010B	
Lead		16	3.0	mg/kg	EPA 6010B	
Nickel		39	2.0	mg/kg	EPA 6010B	
Vanadium		37	5.0	mg/kg	EPA 6010B	
Zinc		61	1.0	mg/kg	EPA 6010B	
Sample ID:	SS-2	Labora	atory ID:	T141900-02		
Sample ID:	SS-2	Labora	atory ID: Reporting	T141900-02		
Sample ID: Analyte	<b>SS-2</b>	Labora Result	atory ID: Reporting Limit	T141900-02 Units	Method	Notes
Sample ID: Analyte Barium	SS-2	Labora Result 200	Reporting Limit	T141900-02 Units mg/kg	Method EPA 6010B	Notes
Sample ID: Analyte Barium Chromium	SS-2	Labora Result 200 29	Reporting Limit 1.0 2.0	T141900-02 Units mg/kg mg/kg	<b>Method</b> EPA 6010B EPA 6010B	Notes
Sample ID: Analyte Barium Chromium Cobalt	<u>SS-2</u>	Labora Result 200 29 13	Atory ID:           Reporting           Limit           1.0           2.0           2.0	Units mg/kg mg/kg mg/kg	<b>Method</b> EPA 6010B EPA 6010B EPA 6010B	Notes
Sample ID: Analyte Barium Chromium Cobalt Copper	<u>88-2</u>	Labora Result 200 29 13 26	Atory ID:           Reporting           Limit           1.0           2.0           1.0	Units mg/kg mg/kg mg/kg mg/kg	Method EPA 6010B EPA 6010B EPA 6010B EPA 6010B	Notes
Sample ID: Analyte Barium Chromium Cobalt Copper Lead	<u>SS-2</u>	Labora Result 200 29 13 26 69	Atory ID:           Reporting           Limit           1.0           2.0           1.0           3.0	T141900-02 Units mg/kg mg/kg mg/kg mg/kg	Method EPA 6010B EPA 6010B EPA 6010B EPA 6010B EPA 6010B	Notes
Sample ID: Analyte Barium Chromium Cobalt Copper Lead Nickel	<u>SS-2</u>	Labora Result 200 29 13 26 69 40	Atory ID:           Reporting           Limit           1.0           2.0           2.0           3.0           2.0	T141900-02 Units mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	Method EPA 6010B EPA 6010B EPA 6010B EPA 6010B EPA 6010B	Notes
Sample ID: Analyte Barium Chromium Cobalt Copper Lead Nickel Vanadium	<u>SS-2</u>	Labora Result 200 29 13 26 69 40 36	Atory ID:           Reporting           Limit           1.0           2.0           2.0           3.0           2.0           5.0	T141900-02 Units mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	Method EPA 6010B EPA 6010B EPA 6010B EPA 6010B EPA 6010B EPA 6010B	Notes
Sample ID: Analyte Barium Chromium Cobalt Copper Lead Nickel Vanadium Zinc	<u>88-2</u>	Labora Result 200 29 13 26 69 40 36 94	atory ID:           Reporting           Limit           1.0           2.0           1.0           3.0           2.0           5.0           1.0	T141900-02 Units mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	Method EPA 6010B EPA 6010B EPA 6010B EPA 6010B EPA 6010B EPA 6010B EPA 6010B	Notes

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09/15/14 10:40

09/16/14 08:55

Katherine Running Crane

Katherine RunningCrane, Project Manager

30 September 2014

Jim Gribi Gribi Associates 1090 Adam Street, Suite K Benicia, CA 94510 RE: 9-16-14

Enclosed are the results of analyses for samples received by the laboratory on 09/16/14 08:55. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Katherine Running Crane

Katherine RunningCrane Project Manager

SunStar Laboratories, Inc. PROVIDENC QUALITY ANALYTICAL SERVICES NATIONWIDE				25712 Lake Fo	2 Commercentre Drive prest, California 92630 949.297.5020 Phone 949.297.5027 Fax
Jribi Associates	Project: 9-1	6-14			
090 Adam Street, Suite K	Project Number: [no	one]			Reported:
senicia CA, 94510	Project Manager: Jin	n Gribi			09/30/14 17:00
Sample ID: SS-2	Labor	atory ID:	T141900-02		
		Reporting			
Analyte	Result	Limit	Units	Method	Notes
Mercury	0.25	0.10	mg/kg	EPA 7471A Soil	
Sample ID: SS-3	Labor	atory ID:	T141900-03		
		Reporting			
Analyte	Result	Limit	Units	Method	Notes
C13-C28 (DRO)	18	10	mg/kg	EPA 8015C	
C29-C40 (MORO)	120	10	mg/kg	EPA 8015C	
Barium	150	1.0	mg/kg	EPA 6010B	
Chromium	10	2.0	mg/kg	EPA 6010B	
Cobalt	44	2.0	mg/kg	EPA 6010B	
Copper	8.9	1.0	mg/kg	EPA 6010B	
Lead	10	3.0	mg/kg	EPA 6010B	
Nickel	20	2.0	mg/kg	EPA 6010B	
Vanadium	17	5.0	mg/kg	EPA 6010B	
Zinc	42	1.0	mg/kg	EPA 6010B	
Mercury	0.29	0.10	mg/kg	EPA 7471A Soil	
Sample ID: SS-4	Labor	atory ID:	T141900-04		
		Reporting			
Analyte	Result	Limit	Units	Method	Notes
Barium	130	1.0	mg/kg	EPA 6010B	
Chromium	9.7	2.0	mg/kg	EPA 6010B	
Cobalt	25	2.0	mg/kg	EPA 6010B	
Copper	8.8	1.0	mg/kg	EPA 6010B	
Lead	11	3.0	mg/kg	EPA 6010B	
Nickel	16	2.0	mg/kg	EPA 6010B	
Vanadium	15	5.0	mg/kg	EPA 6010B	
Zinc	36	1.0	mg/kg	EPA 6010B	

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Katherine RunningCrane, Project Manager

Page 2 of 24

SunStar Laboratories Providing Quality ANALYTICAL SERVICES	, Inc.						257 Lake	12 Commercer Forest, Califor 949.297.50 949.297	ntre Driv mia 92630 020 Phon 7.5027 Fa:
Gribi Associates		Proje	ect: 9-16-	14					
1090 Adam Street, Suite K		Project Numb	er: [none	]				Reported	:
Benicia CA, 94510	I	Project Manag	er: Jim G	ribi				09/30/14 17	:00
		T1/10	SS-1	ojl)					
		11419	00-01 (3	011)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar L	aborator	ies, Inc.					
Extractable Petroleum Hydroca	rbons by 8015C								
C6-C12 (GRO)	ND	10	mg/kg	1	4091615	09/16/14	09/17/14	EPA 8015C	
C13-C28 (DRO)	ND	10							
C29-C40 (MORO)	ND	10							
Surrogate: p-Terphenyl		95.2 %	65-	135	"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	4091616		09/16/14	EPA 6010B	
Silver	ND	2.0							
Arsenic	ND	5.0							
Barium	170	1.0					09/16/14		
Beryllium	ND	1.0							
Cadmium	ND	2.0					09/16/14		
Chromium	30	2.0							
Cobalt	8.9	2.0							
Copper	21	1.0					09/16/14		
Lead	16	3.0					09/16/14		
Molybdenum	ND	5.0							
Nickel	39	2.0							
Selenium	ND	5.0							
Thallium	ND	2.0							
Vanadium	37	5.0					09/16/14		
Zinc	61	1.0					09/16/14		
Cold Vapor Extraction EPA 747	0/7471								
Mercury	ND	0.10	mg/kg	1	4091614	09/16/14	09/16/14	EPA 7471A Soil	

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Laboratories, PROVIDING QUALITY ANALYTICAL SERVICES N	Inc.						Lake	Forest, Califor 949.297.5 949.297	nia 9263( 020 Phone 7.5027 Fax
Gribi Associates 1090 Adam Street, Suite K Benicia CA, 94510	P Pi	Proje roject Numb roject Manag	ect: 9-16- er: [none er: Jim C	14 ] rribi				<b>Reported</b> 09/30/14 17	: 7:00
		T1419	00-01 (S	oil)					
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar L	aborato	ries, Inc.					
Volatile Organic Compounds by I	EPA Method 8260	В							
Bromobenzene	ND	5.0	ug/kg	1	4091617	09/16/14	09/17/14	EPA 8260B	
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				"			
rans-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 Dishlammanan	ND	5.0							

Katherine Running Grane

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PROVIDING QUALITY ANALYTICAL SERVICES N	Inc.						257 Lake	12 Commercer Forest, Califor 949.297.50 949.297	ntre Driv mia 9263 020 Phot 7.5027 Fa
Gribi Associates		Proje	ct: 9-16-14						
1090 Adam Street, Suite K	I	roject Numb	er: [none]					Reported	:
Benicia CA, 94510	P	roject Manag	er: Jim Gril	bi				09/30/14 17	:00
		T1419	SS-1 00-01 (Soi	1)					
		Reporting	· · ·						
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		SunStar L	aboratorie	s, Inc.					
Volatile Organic Compounds by F	EPA Method 8260	В							
cis-1.3-Dichloropropene	ND	5.0	ug/kg	1	4091617	09/16/14	09/17/14	EPA 8260B	
rans-1.3-Dichloropropene	ND	5.0	"						
Hexachlorobutadiene	ND	5.0	"						
sopropylbenzene	ND	5.0							
-Isopropyltoluene	ND	5.0							
Methylene chloride	ND	5.0							
Vanhthalene	ND	5.0							
Propylbenzene	ND	5.0							
Styrene	ND	5.0							
1.2.2.Tetrachloroethane	ND	5.0							
1 1 2 Tetrachloroothane	ND	5.0							
Fatrachloroothana	ND	5.0							
2.2 Trichlorobonzono	ND	5.0							
2.4 Trichlanchennen	ND	5.0							
1,2,4- Trichlonothana	ND	5.0							
1.1 Trichloroothane	ND	5.0							
Frichlersethere	ND	5.0							
Frichlorofluoromothene	ND	5.0							
2.2 Trichlassenana	ND	5.0							
1,2,5-1 Hemoropropane	ND	5.0							
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	ND	5.0							
(,2,4- I rimethylbenzene	ND	5.0							
Panzona	ND	5.0							
Selizene	ND	5.0							
Sthylbenzene	ND ND	5.0							
n n Yvlene	ND	10							
-Xvlene	ND	5.0							
Surrogate: A-Bromofluorobenzene	110	95.6%	81.2.1	23		"	"	"	
Surrogate: 4-Bromofluorovenzene		130.0%	01.2-1.	25		"		"	
arrogale. Dibromojiuoromeinane		150 %	95.7-1.	55					

SunStar Laboratories, Inc.

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Katherine RunningCrane, Project Manager

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Katherine RunningCrane, Project Manager

SunStar Laboratorie Providing Quality Analytical Serv	es, Inc.						257 Lake	712 Commerce Forest, Califor 949.297.5 949.297	ntre Drive rnia 92630 020 Phone 7.5027 Fax
Gribi Associates		Proje	ect: 9-16-	14					
1090 Adam Street, Suite K		Project Numb	er: [none	]				Reported	:
Benicia CA, 94510	I	Project Manag	ger: Jim G	ribi				09/30/14 17	:00
<b>-</b>		T1410	SS-2	oil)					
		11415	00-02 (3	<b>01</b> )					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar L	aborator	ies, Inc.					
Extractable Petroleum Hydro	carbons by 8015C								
C6-C12 (GRO)	ND	10	mg/kg	1	4091615	09/16/14	09/17/14	EPA 8015C	
C13-C28 (DRO)	ND	10							
C29-C40 (MORO)	ND	10							
Surrogate: p-Terphenyl		93.2 %	65-	135	"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	4091616	"	09/16/14	EPA 6010B	
Silver	ND	2.0							
Arsenic	ND	5.0							
Barium	200	1.0							
Beryllium	ND	1.0				"	09/16/14		
Cadmium	ND	2.0				"	09/16/14		
Chromium	29	2.0							
Cobalt	13	2.0				"			
Copper	26	1.0							
Lead	69	3.0							
Molybdenum	ND	5.0							
Nickel	40	2.0							
Selenium	ND	5.0							
Thallium	ND	2.0							
Vanadium	36	5.0							
Zinc	94	1.0							
STLC Metals by 6000/7000 Se	ries Methods								
Lead	2.6	0.10	mg/l	1	4092506	09/25/14	09/29/14	STLC Waste Extraction Test	

Laboratories, I PROVIDING QUALITY ANALYTICAL SERVICES NATIO	nc.						257 Lake	12 Commerce Forest, Califor 949.297.5 949.297	ntre Dri rnia 926 020 Pho 7.5027 F
Gribi Associates		Proje	ect: 9-16-	14					
1090 Adam Street, Suite K	1	Project Numb	er: [none	1				Reported	:
Benicia CA, 94510	Р	roject Manag	ger: Jim G	ribi				09/30/14 17	:00
			66.2						
		T1419	55-2 00-02 (S	oil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
		SunStar L	aborator	ies, Inc.					
Cold Vapor Extraction EPA 7470/74	71								
Mercury	0.25	0.10	mg/kg	1	4091614	09/16/14	09/16/14	EPA 7471A Soil	
Volatile Organic Compounds by EP	A Method 8260	B							
Bromobenzene	ND	5.0	ug/kg	1	4091617	09/16/14	09/17/14	EPA 8260B	
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				"			
ert-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							
rans-1,2-Dichloroethene	ND	5.0							
12 D. 11	ND	5.0							

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Katherine RunningCrane, Project Manager

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SunStar Laboratories, PROVIDENC QUALITY ANALYTICAL SERVICES N	257 Lake	25712 Commercentre Drive Lake Forest, California 92630 949.297.5020 Phone 949.297.5027 Fax							
Gribi Associates		Project: 9-16-14							
1090 Adam Street, Suite K	Project Number: [none] Project Manager: Jim Gribi							Reported	:
Benicia CA, 94510							09/30/14 17:0		
•			SS-2						
		T1419	00-02 (S	oil)					
Analyte	Result	Reporting	Units	Dilution	Batch	Prenared	Analyzed	Method	Notes
7 mary to	rttourt	SunStar I	aborator	ies Inc					
Volatile Organic Compounds by I	EPA Method 8260	Bundtar E	aboi atoi	ics, me.					
1,3-Dichloropropane	ND	5.0	ug/kg	1	4091617	09/16/14	09/17/14	EPA 8260B	
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							
m,p-Xylene	ND	10							
o-Xylene	ND	5.0							
Surrogate: 4-Bromofluorobenzene		91.1 %	81.2	-123	"	"	"	"	_
Surrogate: Dibromofluoromethane		133 %	95.7	-135	"	"	"	"	

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Katherine RunningCrane, Project Manager

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SunStar Laboratories, In Providing Quality Assisticat Stavices National	C.						2571 Lake I	12 Commerce Forest, Califo 949.297.5 949.29	entre Driv rnia 9263 020 Phon 7.5027 Fa		
Gribi Associates Project: 9-16-14											
1090 Adam Street, Suite K	Project Number: [none]						Reported:				
Benicia CA, 94510	nicia CA, 94510 Project Manager: Jim Gribi						09/30/14 17:00				
		T1419	SS-2 00-02 (S	Soil)							
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note		
		SunStar L	aborato	ries, Inc.							

# Volatile Organic Compounds by EPA Method 8260B

Surrogate: Toluene-d8 94.0 % 85.5-116 4091617 09/16/14 09/17/14 EPA 8260B

SunStar Laboratories, Inc.

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Katherine RunningCrane, Project Manager

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PROVIDING QUALITY ANALYTICAL SERVI	ES, Inc.						257 Lake	712 Commercer Forest, Califor 949.297.50 949.297	ntre Driv mia 9263 020 Phon 7.5027 Fa
Gribi Associates		Proje	ect: 9-16-	14					
1090 Adam Street, Suite K		Project Numb			Reported	:			
Benicia CA, 94510	1	Project Manag	er: Jim G	ribi				09/30/14 17	:00
			SS-3						
		T1419	00-03 (S	oil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar L	aborator	ies, Inc.					
Extractable Petroleum Hydro	carbons by 8015C								
C6-C12 (GRO)	ND	10	mg/kg	1	4091615	09/16/14	09/17/14	EPA 8015C	
C13-C28 (DRO)	18	10							
C29-C40 (MORO)	120	10							
Surrogate: p-Terphenyl		105 %	65-	135	"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	4091616		09/16/14	EPA 6010B	
Silver	ND	2.0							
Arsenic	ND	5.0							
Barium	150	1.0							
Beryllium	ND	1.0							
Cadmium	ND	2.0							
Chromium	10	2.0							
Cobalt	44	2.0							
Copper	8.9	1.0							
Lead	10	3.0							
Molybdenum	ND	5.0							
Nickel	20	2.0							
Selenium	ND	5.0							
Thallium	ND	2.0							
Vanadium	17	5.0							
Zinc	42	1.0	"						
Cold Vapor Extraction EPA 7	470/7471								
Mercury	0.29	0.10	mg/kg	1	4091614	09/16/14	09/16/14	EPA 7471A Soil	

Laboratories, Inc. PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE Gribi Associates Project: 9-16-14 1090 Adam Street, Suite K Project Number: [none] Benicia CA, 94510 Project Manager: Jim Gribi SS-3 T141900-03 (Soil) Reporting Analyte Result Limit Units Dilution Batch Prepared SunStar Laboratories, Inc. Volatile Organic Compounds by EPA Method 8260B Bromobenzene 5.0 ND ug/kg 4091617 09/16/14 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 5.0 tert-Butylbenzene ND 5.0 Carbon tetrachloride ND Chlorobenzene ND 5.0 Chloroethane ND 5.0 5.0 Chloroform ND 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

ND

5.0

5.0

5.0

5.0

5.0

5.0

5.0

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5.0

5.0

5.0

SunStar Laboratories, Inc.

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Katherine Running Crane

Katherine RunningCrane, Project Manager

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25712 Commercentre Drive

Reported:

09/30/14 17:00

Method

EPA 8260B

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Analyzed

09/17/14

949.297.5027 Fax

Note

Lake Forest, California 92630 949.297.5020 Phone

1,1-Dichloropropene
SunStar Laboratories, Inc.

1,4-Dichlorobenzene

1,1-Dichloroethane

1,2-Dichloroethane

1.1-Dichloroethene

cis-1,2-Dichloroethene

1,2-Dichloropropane

1,3-Dichloropropane

2,2-Dichloropropane

trans-1,2-Dichloroethene

Dichlorodifluoromethane

SunStar

							949.297	.5027 Fax
Gribi Associates 1090 Adam Street, Suite K Proj	Proje ect Numb			Reported	:			
Benicia CA, 94510 Proje	ect Manag	er: Jim G	ribi				09/30/14 17	:00
		SS-3						
	T1419	00-03 (S	oil)					
Analyte Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Su	nStar La	aborator	ies, Inc.					
Volatile Organic Compounds by EPA Method 8260B								
cis-1,3-Dichloropropene ND	5.0	ug/kg	1	4091617	09/16/14	09/17/14	EPA 8260B	
trans-1,3-Dichloropropene ND	5.0							
Hexachlorobutadiene ND	5.0							
lsopropylbenzene 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							
Tomene ND	5.0							
Etnyibenzene ND	5.0							
ND	10							
ND	5.0	01.2	100					
surrogate: 4-Bromofluorobenzene	93.0%	81.2	-125					
Surrogate: Dibromofluoromethane	131%	95.7	-155					

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Katherine RunningCrane, Project Manager

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PROVIDING QUALITY ANALYTICAL SERVIC	S, Inc.						Lake	12 Commerce Forest, Califor 949.297.5 949.297	ntre Driv rnia 9263 020 Phor 7.5027 Fa
Gribi Associates		Proje	ect: 9-16-	14					
1090 Adam Street, Suite K		Project Numb		Reported	:				
Benicia CA, 94510		Project Manag	er: Jim G	ribi				09/30/14 17	2:00
		T1410	SS-4	-9)					
		1 1419	00-04 (5	011)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		SunStar L	aborator	ies, Inc.					
Extractable Petroleum Hydroc	arbons by 8015C								
C6-C12 (GRO)	ND	10	mg/kg	1	4091615	09/16/14	09/17/14	EPA 8015C	
C13-C28 (DRO)	ND	10							
C29-C40 (MORO)	ND	10							
Surrogate: p-Terphenyl		99.2 %	65-	135	"	"	"	"	
Metals by EPA 6010B									
Antimony	ND	3.0	mg/kg	1	4091616	"	09/16/14	EPA 6010B	
Silver	ND	2.0							
Arsenic	ND	5.0							
Barium	130	1.0							
Beryllium	ND	1.0							
Cadmium	ND	2.0							
Chromium	9.7	2.0							
Cobalt	25	2.0							
Copper	8.8	1.0							
Lead	11	3.0							
Molybdenum	ND	5.0							
Nickel	16	2.0							
Selenium	ND	5.0							
Thallium	ND	2.0							
Vanadium	15	5.0							
Zinc	36	1.0							
Cold Vapor Extraction EPA 74	70/7471								
Mercury	0.30	0.10	mg/kg	1	4091614	09/16/14	09/16/14	EPA 7471A	

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SunStar Laboratories, PROVIDING QUALITY ANALYTICAL STRATEGY N	Inc.						257 Lake	712 Commercer Forest, Califor 949.297.50 949.297	ntre Drive mia 92630 020 Phone 7.5027 Fax
Gribi Associates 1090 Adam Street, Suite K Benicia CA. 94510	F	Proje Project Numb roject Manag	ect: 9-16- per: [none per: Jim C	14 ] iribi				<b>Reported</b> 09/30/14 17	:
Benefit Cri, 94910		ojeet manag	aa .					07/50/14 17	.00
		T1419	SS-4 00-04 (S	oil)					
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar L	aborato	ries, Inc.					
Volatile Organic Compounds by H	PA Method 8260	В							
Bromobenzene	ND	5.0	ug/kg	1	4091617	09/16/14	09/17/14	EPA 8260B	
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-Dichloropropage	ND	5.0							
1.3-Dichloropropane	ND	5.0							
2.2 Dichloropropage	ND	5.0							
1.1 Dishlarananana	ND	5.0							

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PROVIDING QUALITY ANALYTICAL SERVICES NJ	Laboratories, Inc. Providing Quality Analytical Services Nationwide										
Gribi Associates 1090 Adam Street, Suite K Benicia CA, 94510	I P	Proje Project Numb roject Manag	ct: 9-16- er: [none er: Jim G	14 ] rribi				<b>Reported</b> 09/30/14 17	: ::00		
		T1410	SS-4								
		Reporting	00-04 (3	011)							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note		
		SunSton L	honotor	ning Ing							
		Sulistar La	aboratoi	les, mc.							
Volatile Organic Compounds by E	PA Method 8260	B									
is-1,3-Dichloropropene	ND	5.0	ug/kg	1	4091617	09/16/14	09/17/14	EPA 8260B			
rans-1,3-Dichloropropene	ND	5.0									
lexachlorobutadiene	ND	5.0									
sopropylbenzene	ND	5.0									
Isopropyltoluene	ND	5.0									
Aethylene chloride	ND	5.0									
Naphthalene	ND	5.0									
I-Propyidenzene	ND	5.0									
1.2.2 Tatra ablamathana	ND	5.0									
1.1.2 Tatrachlonosthana	ND	5.0									
-,1,1,2-1 etrachioroethane	ND	5.0									
2.3 Trichlorobenzene	ND	5.0									
2.4 Trichlorobenzene	ND	5.0									
1.2 Trichloroethane	ND	5.0									
1 1-Trichloroethane	ND	5.0									
Frichloroethene	ND	5.0									
Frichlorofluoromethane	ND	5.0									
.2.3-Trichloropropane	ND	5.0									
.3.5-Trimethylbenzene	ND	5.0									
.2.4-Trimethylbenzene	ND	5.0									
/inyl chloride	ND	5.0									
senzene	ND	5.0									
`oluene	ND	5.0									
Ethylbenzene	ND	5.0									
n,p-Xylene	ND	10									
Xylene	ND	5.0									
urrogate: 4-Bromofluorobenzene		94.2 %	81.2	-123	"	"	"	"			
Surrogate: Dibromofluoromethane		131 %	95.7	-135	"	"	"	"			
Surrogate: Toluene-d8		92.1%	85.5	116		"	"	"			

SunStar Laboratories, Inc.

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Katherine Running Crane

Katherine RunningCrane, Project Manager

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SunStar Laboratories, Provider Quality Assistments Survices N	Inc.							25712 Lake Fo	Commer orest, Calif 949.297 949.2	centre Drive Cornia 92630 .5020 Phone 97.5027 Fax	
Gribi Associates		Pr	oject: 9-	16-14							
1090 Adam Street, Suite K		Project Number: [none]							Reported:		
Benicia CA, 94510		Project Manager: Jim Gribi							09/30/14	17:00	
Extr	ractable Petrole	eum Hydi	rocarbo	ons by 80	15C - Q	uality C	ontrol				
	5	SunStar	Labora	atories, l	nc.						
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch 4091615 - EPA 3550B GC											
Blank (4091615-BLK1)				Prepared:	09/16/14	Analyzed	1: 09/17/14				
C6-C12 (GRO)	ND	10	mg/kg								
C13-C28 (DRO)	ND	10									
C29-C40 (MORO)	ND	10									
Surrogate: p-Terphenyl	97.2		"	100		97.2	65-135				
LCS (4091615-BS1)				Prepared:	09/16/14	Analyzed	1: 09/17/14				
C13-C28 (DRO)	460	10	mg/kg	500		91.8	75-125				
Surrogate: p-Terphenyl	94.2		"	100		94.2	65-135				
Matrix Spike (4091615-MS1)	Sou	rce: T1419(	00-01	Prepared:	09/16/14	Analyzed	1: 09/18/14				
C13-C28 (DRO)	460	10	mg/kg	500	ND	91.3	75-125				
Surrogate: p-Terphenyl	93.5		"	100		93.5	65-135				
Matrix Spike Dup (4091615-MSD1)	Sou	Source: T141900-01		Prepared: 09/16/14 Analyzed: 09/18/1			1: 09/18/14				
C13-C28 (DRO)	460	10	mg/kg	500	ND	92.0	75-125	0.871	20		
Surrogate: p-Terphenyl	94.8		"	100		94.8	65-135				

SunStar Laboratories, PROVIDING QUALITY ANNAYTICAL SERVICES NA	Inc.							25712 Lake Fo	Commerco rest, Calif 949.297, 949.2	centre Drive ornia 92630 5020 Phone 97.5027 Fax
Gribi Associates		Pr								
1090 Adam Street, Suite K		Project Nu	mber: [n	one]					Report	ed:
Benicia CA, 94510		Project Manager: Jim Gribi								17:00
	5	SunStar	Labor	atories, l	nc.					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4091616 - EPA 3050B										
Blank (4091616-BLK1)				Prepared	& Analyz	ed: 09/16/	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 (4091616-BS1)				Prepared	& Analyz	ed: 09/16/	14			
Arsenic	99.9	5.0	mg/kg	100		99.9	75-125			
Barium	103	1.0		100		103	75-125			
Cadmium	101	2.0		100		101	75-125			
Chromium	103	2.0		100		103	75-125			
Lead	102	3.0		100		102	75-125			
Matrix Spike (4091616-MS1)	Sou	rce: T1419(	00-01	Prepared	& Analyz	ed: 09/16/	14			
Arsenic	107	5.0	mg/kg	100	2.27	105	75-125			
Barium	294	1.0		100	173	121	75-125			
Cadmium	105	2.0		100	0.707	104	75-125			
Chromium	141	2.0		100	30.2	111	75-125			
Lead	116	3.0		100	16.0	100	75-125			

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Katherine Running Grane

Katherine RunningCrane, Project Manager

Katherine RunningCrane, Project Manager

Katherine Running Grane

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SunStar Laboratories, In Providing Quality Analytical Survices National	C.							25712 Lake Fo	Commerco orest, Calif 949.297 949.2	centre Drive Cornia 92630 .5020 Phone 97.5027 Fax
Gribi Associates		Pr	oject: 9-	16-14						
1090 Adam Street, Suite K Project Number: [none]										ed:
Benicia CA, 94510 Project Manager: Jim Gribi									09/30/14	17:00
	Metal	s by EPA SunStar	6010B Labora	- Quality atories, l	Contro	)I				
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4091616 - EPA 3050B										
Matrix Spike Dup (4091616-MSD1)	Sou	rce: T1419(	00-01	Prepared	& Analyz	ed: 09/16/	14			
Arsenic	98.8	5.0	mg/kg	100	2.27	96.5	75-125	8.20	20	
Barium	264	1.0		100	173	91.5	75-125	10.5	20	
Cadmium	98.4	2.0		100	0.707	97.7	75-125	6.53	20	
Chromium	131	2.0		100	30.2	101	75-125	7.83	20	
Lead	110 3.0 " 100 16.0 94.2 75-125								20	

SunStar Laboratories, I PROVIDENC QUALITY ANALYTICAL STREET, NATI		25712 Lake Fo	2 Commerc orest, Calif 949.297. 949.2	centre Driv fornia 9263 .5020 Phon 97.5027 Fa						
Gribi Associates		Pr	oject: 9-	16-14						
1090 Adam Street, Suite K		Project Nu			Report	ed:				
Benicia CA, 94510		Project Manager: Jim Gribi								17:00
STI	LC Metals b	y 6000/700	0 Serie	es Metho	ds - Qua	lity Con	itrol			
		SunStar .	Labor	atories, 1	Inc.					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4092506 - STLC Extraction										
Blank (4092506-BLK1)				Prepared	: 09/25/14	Analyzed	1: 09/29/14			
_ead	ND	0.10	mg/l							
LCS (4092506-BS1)				Prepared	: 09/25/14	Analyzed	l: 09/29/14			
Lead	10.3	0.10	mg/l	10.0		103	75-125			
Matrix Spike (4092506-MS1)	So	urce: T14190	0-02	Prepared	: 09/25/14	Analyzed	l: 09/29/14			
Lead	11.0	0.10	mg/l	10.0	2.64	83.4	75-125			
Matrix Spike Dup (4092506-MSD1)	Source: T141900-02 Prepared: 09/25/14 Analyzed: 09/29/					l: 09/29/14				
Lead	10.9	0.10	mg/l	10.0	2.64	82.4	75-125	0.904	30	

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SunStar Laboratories, Inc.

Katherine Running Crane

Katherine RunningCrane, Project Manager

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Katherine Running Grane

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SunStar Laboratories, Providing Quality Analytical Services N	Inc.							25712 Lake Fo	2 Commer orest, Calif 949.297 949.2	centre Drive fornia 92630 .5020 Phone 97.5027 Fax
Gribi Associates		Pr	oject: 9-	16-14						
1090 Adam Street, Suite K	1	Project Nu		Report	ed:					
Benicia CA, 94510	Project Manager: Jim Gribi								09/30/14	17:00
	Cold Vapor Extraction EPA 7470/7471 - Quality Control									
	S	unStar 1	Labora	atories, l	nc.					
	<b>D</b>	Reporting	** *	Spike	Source	* DEC	%REC	0.000	RPD	N .
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4091614 - EPA 7471A Soil										
Blank (4091614-BLK1)				Prepared	& Analyze	ed: 09/16/	14			
Mercury	ND	0.10	mg/kg							
LCS (4091614-BS1)				Prepared	& Analyze	ed: 09/16/	14			
Mercury	0.407	0.10	mg/kg	0.417		97.7	80-120			
Matrix Spike (4091614-MS1)	Source: T141900-01 Prepared & Analyzed: 09/16/14									
Mercury	0.484	0.10	mg/kg	0.417	0.0555	103	75-125			
Matrix Spike Dup (4091614-MSD1)	Source	e: T14190	00-01	Prepared	& Analyze	ed: 09/16/	14			
Mercury	0.491	0.10	mg/kg	0.417	0.0555	104	75-125	1.41	20	

SunStar Laboratories, Inc Providing Quality Analytical Services Nationway	<b>5.</b>	25712 Commercentre Drive Lake Forest, California 92630 949.297.5020 Phone 949.297.5027 Fax
Gribi Associates	Project: 9-16-14	

Benicia CA, 94510 Project Manager: Jim Gribi 09/30/14 1	1090 Adam Street, Suite K	Project Number: [none]	Reported:
	Benicia CA, 94510	Project Manager: Jim Gribi	09/30/14 17:00

#### Volatile Organic Compounds by EPA Method 8260B - Quality Control

#### SunStar Laboratories, Inc.

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

#### Batch 4091617 - EPA 5030 GCMS

Blank (4091617-BLK1)				Prepared: 09/16/14 Analyzed: 09/17/14
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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Katherine Running Crane

Katherine RunningCrane, Project Manager

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Katherine RunningCrane, Project Manager

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PROVIDING QUALITY ANALYTICAL SERVICES NATIO	nc.							25712 Lake Fo	Commerco orest, Calif 949.297. 949.2	centre Drive fornia 9263 5020 Phone 97.5027 Fax
Gribi Associates		Pr	oject: 9-1	6-14						
1090 Adam Street, Suite K		Project Nu	mber: [nc	onel					Report	ed:
Benicia CA 94510		Project Mar	nager: Iin	ı Gribi					09/30/14	17.00
Demen Crit, 7 1010		r roject mai	uger: viii	1 01101					09/00/11	17.00
Volatile (	Organic Con	ipounds t	oy EPA	Method	8260B -	Quality	y Contro	ol		
		SunStar	Labora	tories, I	nc.					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4091617 - EPA 5030 GCMS										
Blank (4091617-BLK1)				Prepared:	09/16/14	Analyzed	1: 09/17/14	Ļ		
o-Isopropyltoluene	ND	5.0	ug/kg							
Methylene chloride	ND	5.0								
Naphthalene	ND	5.0								
1-Propylbenzene	ND	5.0								
Styrene	ND	5.0								
,1,2,2-Tetrachloroethane	ND	5.0								
1,1,1,2-Tetrachloroethane	ND	5.0								
Fetrachloroethene	ND	5.0								
1,2,3-Trichlorobenzene	ND	5.0								
1,2,4-Trichlorobenzene	ND	5.0								
,1,2-Trichloroethane	ND	5.0								
,1,1-Trichloroethane	ND	5.0								
Frichloroethene	ND	5.0								
Frichlorofluoromethane	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								
Foluene	ND	5.0								
Ethylbenzene	ND	5.0								
n,p-Xylene	ND	10								
p-Xylene	ND	5.0								
Surrogate: 4-Bromofluorobenzene	42.7		"	40.0		107	81.2-123			
Surrogate: Dibromofluoromethane	49.9		"	40.0		125	95.7-135			
Surrogate: Toluene-d8	37.8		"	40.0		94.4	85.5-116			
LCS (4091617-BS1)				Prepared:	09/16/14	Analyzed	1: 09/17/14			
Chlorobenzene	110	5.0	ug/kg	100		110	75-125			
I, I-Dichloroethene	115	5.0		100		115	75-125			
Inchloroethene	117	5.0		100		117	75-125			
Senzene	114	5.0		100		114	75-125			
loluene	88.0	5.0		100		88.0	75-125			
Surrogate: 4-Bromofluorobenzene	41.4		"	40.0		104	81.2-123			
Surrogate: Dibromofluoromethane	50.0		"	40.0		125	95.7-135			
Surrogate: Toluene-d8	36.6		"	40.0		91.5	85.5-116			

#### SunStar 25712 Commercentre Drive Lake Forest, California 92630 949.297.5020 Phone Laboratories, Inc. PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

Gribi Associates	Project: 9-16-14	
1090 Adam Street, Suite K	Project Number: [none]	Reported:
Benicia CA, 94510	Project Manager: Jim Gribi	09/30/14 17:00

#### 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 4091617 - EPA 5030 GCMS										

Matrix Spike (4091617-MS1)	Sour	ce: T14190	0-01	Prepared:	09/16/14	Analyze	d: 09/17/14			
Chlorobenzene	114	5.0	ug/kg	100	ND	114	75-125			
1,1-Dichloroethene	115	5.0		100	ND	115	75-125			
Trichloroethene	95.7	5.0		100	ND	95.7	75-125			
Benzene	116	5.0		100	ND	116	75-125			
Toluene	90.2	5.0		100	ND	90.2	75-125			
Surrogate: 4-Bromofluorobenzene	41.6		"	40.0		104	81.2-123			
Surrogate: Dibromofluoromethane	52.2		"	40.0		131	95.7-135			
Surrogate: Toluene-d8	37.2		"	40.0		93.0	85.5-116			
Matrix Spike Dup (4091617-MSD1)	Sour	ce: T14190	0-01	Prepared:	09/16/14	Analyze	d: 09/17/14			
Chlorobenzene	115	5.0	ug/kg	100	ND	115	75-125	1.09	20	
1,1-Dichloroethene	109	5.0		100	ND	109	75-125	5.51	20	
Trichloroethene	97.5	5.0		100	ND	97.5	75-125	1.86	20	
Benzene	118	5.0		100	ND	118	75-125	1.62	20	
Toluene	90.8	5.0		100	ND	90.8	75-125	0.552	20	
Surrogate: 4-Bromofluorobenzene	43.0		"	40.0		108	81.2-123			
Surrogate: Dibromofluoromethane	52.8		"	40.0		132	95.7-135			
Surrogate: Toluene-d8	37.2		"	40.0		92.9	85.5-116			

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Katherine Running Crane

Katherine RunningCrane, Project Manager

Katherine RunningCrane, Project Manager

Katherine Running Crane

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949.297.5027 Fax

Pao	UNSTAT Laboratories, In VIDING QUALITY AMALYTICAL SERVICES NATIONW	С.	25712 Commercentre Drive Lake Forest, California 9263( 949.297.5020 Phone 949.297.5027 Fax
Gribi As	sociates	Project: 9-16-14	
1090 Ad Benicia (	am Street, Suite K CA, 94510	Project Number: [none] Project Manager: Jim Gribi	<b>Reported:</b> 09/30/14 17:00
		Notes and Definitions	
DET	Analyte DETECTED		
ND	Analyte NOT DETECTED at or ab	ove the reporting limit	
NR	Not Reported		
dry	Sample results reported on a dry we	eight basis	
	Balativa Basaant Difference		



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Page 1 of

SunStar Laboratories, Inc.

### SAMPLE RECEIVING REVIEW SHEET

ВАТСН #	
Client Name: GRIBI Project: 9.	-16-14
Received by: Date/Time R	Received: 9.16.14 8:55
Delivered by : Client SunStar Courier X GSO FedEx	Other
Total number of coolers received Temp criteria = $6^{\circ}$ C	C > 0°C (no <u>frozen</u> containers)
Temperature: cooler #1 <u>5.4</u> °C +/- the CF (-0.2°C) = <u>5.2</u> °C corr	rected temperature
cooler #2°C +/- the CF (- $0.2^{\circ}$ C) =°C corr	rected temperature
cooler #3°C +/- the CF (- 0.2°C) =°C corr	rected 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* XN/A
Complete shipment received in good condition with correct temperatures, preservatives and within method specified holding times.	containers, labels, volumes Io*
* Complete Non-Conformance Receiving Sheet if checked Cooler/Sample	Review - Initials and date <u>BC 9-16-14</u>
Comments:	



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

PROVIDING	QUALITY	ANALYTICAL	SERVICES	NATIONWIDE	

06 October 2014		
Jim Gribi		
Gribi Associates		
1090 Adam Street, Suite K		
Benicia, CA 94510		
RE: Maz Glass		

Enclosed are the results of analyses for samples received by the laboratory on 09/27/14 08:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Katherine Running Crane

Katherine RunningCrane Project Manager

15	SunSta	ır			
+	- Lal	oorator	ries, I	nc.	
P	INTERNO QUALT	TY ANALYTICAL S	ERVICES NATI	ONWIDE	

Gribi Associates

Benicia CA, 94510

1090 Adam Street, Suite K

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

Reported:

10/06/14 15:55

## Project Manager: Jim Gribi ANALYTICAL REPORT FOR SAMPLES

Project Number: [none]

Project: Maz Glass

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
\$G-2	T141992-01	Air	09/25/14 11:12	09/27/14 08:30
\$G-5	T141992-02	Air	09/25/14 11:33	09/27/14 08:30
SG-5D	T141992-03	Air	09/25/14 11:42	09/27/14 08:30
\$G-2-2.5	T141992-04	Soil	09/25/14 13:35	09/27/14 08:30
\$G-2-5.0	T141992-05	Soil	09/25/14 14:25	09/27/14 08:30
\$G-5-2.5	T141992-06	Soil	09/25/14 13:45	09/27/14 08:30
\$G-5-5.0	T141992-07	Soil	09/25/14 14:05	09/27/14 08:30

#### DETECTIONS SUMMARY

Sample ID: SG-2	Labor	atory ID:	T141992-01		
		Reporting			
Analyte	Result	Limit	Units	Method	Notes
Cyclohexane	1900	170	ug/m³ Air	TO-15	TO-14
Hexane	1000	180	ug/m³ Air	TO-15	TO-14
Methane	77	8.1	ppm(v)	8015M	AO-1
Carbon Dioxide	5.30	1.62	%	GC	
Oxygen	2.01	1.62	%	GC	
Nitrogen	58.3	0.62	%	GC	
Sample ID: SG-5	Labor	atory ID:	T141992-02		
		Reporting			
Analyte	Result	Limit	Units	Method	Notes
Methane	18	8.0	ppm(v)	8015M	AO-1
Carbon Dioxide	2.01	1.59	%	GC	
Oxygen	9.28	1.59	%	GC	
Nitrogen	54.7	0.59	%	GC	

SunStar Laboratories, Inc.

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PROVIDING QUALITY ANALYTICAL SERVICES NATIONWO	IDE.			949.297.5020 Phot 949.297.5027 Fa
bi Associates	Project: Maz Glass			
0 Adam Street, Suite K	Project Number: [none]			Reported:
ancia CA, 94510	Project Manager: Jim Gribi			10/00/14 13:33
Sample ID: SG-5D	Laboratory ID:	T141992-03		
	Reporting			
Analyte	Result Limit	Units	Method	Notes
Carbon Dioxide	2.01 1.58	%	GC	
Nitrogen	<b>53 5</b> 0.58	70 %	GC	
rungen	555 655	,0	60	
Sample ID: SG-2-2.5	Laboratory ID:	T141992-04		
No Results Detected				
Sample ID: SG-2-5.0	Laboratory ID:	T141992-05		
No Results Detected				
Sample ID: SG-5-2.5	Laboratory ID:	T141992-06		
No Results Detected				
Sample ID: SG-5-5.0	Laboratory ID:	T141992-07		
No Results Detected				
No Results Delected				

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SunStar 25712 Commercentre Drive Laboratories, Inc. Lake Forest, California 92630 949.297.5020 Phone PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE 949.297.5027 Fax Project: Maz Glass Gribi Associates 1090 Adam Street, Suite K Project Number: [none] **Reported:** Benicia CA, 94510 Project Manager: Jim Gribi 10/06/14 15:55 **SG-2** T141992-01 (Air) Reporting Analyte Result Limit Units Dilution Batch Prepared Analyzed Method Note: SunStar Laboratories, Inc. **TO-15** Acetone ND 120 ug/m3 Air 1.62 4092924 09/29/14 10/02/14 TO-15 TO-14 1,3-Butadiene ND 110 .. ... .. TO-14 Carbon Disulfide ND 160 .. .. ... .. TO-14 1,1,2-trichloro-1,2,2-trifluoroethane ND 390 .. ... TO-14 (CFC 113) Isopropyl alcohol ND 130 TO-14 Bromodichloromethane ND 340 TO-14 Bromoform ND 530 TO-14 Bromomethane ND 200 TO-14 Carbon tetrachloride ND 320 TO-14 230 Chlorobenzene ND TO-14 Chloroethane 130 ND TO-14 250 Chloroform ND TO-14 110 Chloromethane ND TO-14 Cyclohexane 1900 170 TO-14 Heptane 210 ND TO-14 Hexane 1000 180 TO-14 Dibromochloromethane ND 430 TO-14 1,2-Dibromoethane (EDB) ND 390 TO-14 1,2-Dichlorobenzene ND 310 TO-14 ... 1,3-Dichlorobenzene ND 310 TO-14 ... 1,4-Dichlorobenzene ND 310 TO-14 Dichlorodifluoromethane 250 ND TO-14 1,1-Dichloroethane ND 210 .. ... TO-14 1.2-Dichloroethane ND 210 .. TO-14 1,1-Dichloroethene ND 200 ... TO-14 cis-1,2-Dichloroethene ND 200 TO-14 trans-1,2-Dichloroethene ND 200 TO-14 1,2-Dichloropropane ND 240 TO-14 cis-1,3-Dichloropropene ND 230 TO-14 trans-1,3-Dichloropropene ND 230 TO-14 4-Ethyltoluene ND 250 TO-14

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PROVIDING QUALITY ANALYTICAL SERVICES NATION	WIDE:							949.297.5 949.29	5020 Phon 7.5027 Fa
Gribi Associates		Proj	ect: Maz G	lass					
1090 Adam Street, Suite K	1	Project Numl	per: [none]					Reporte	d: 
Benicia CA, 94510	ł	roject Manag	ger: Jim Gi	161				10/06/14 1	5:55
		T1 41	SG-2	• •					
		1141	992-01 (A	ir)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		SunStar L	aboratori	es, Inc.					
FO-15									
Methylene chloride	ND	180	ug/m³ Air	1.62	4092924	09/29/14	10/02/14	TO-15	TO-14
ityrene	ND	220				"			TO-14
,1,2,2-Tetrachloroethane	ND	350	"						TO-14
Fetrahydrofuran	ND	150							TO-14
Tetrachloroethene	ND	350				"			TO-14
,1,2-Trichloroethane	ND	280				"			TO-14
,1,1-Trichloroethane	ND	280	"						TO-14
Trichloroethene	ND	270				"			TO-14
richlorofluoromethane	ND	290	"						TO-14
,3,5-Trimethylbenzene	ND	250	"						TO-14
,2,4-Trimethylbenzene	ND	250	"						TO-14
/inyl acetate	ND	180	"						TO-14
/inyl chloride	ND	130				"			TO-14
,4-Dioxane	ND	180	"						TO-14
-Butanone (MEK)	ND	150				"			TO-14
-Methyl-2-pentanone (MIBK)	ND	210							TO-14
Benzene	ND	160							TO-14
oluene	ND	190							TO-14
Ethylbenzene	ND	220							TO-14
n,p-Xylene	ND	220							TO-14
o-Xylene	ND	220							TO-14
Methane by GC									
1. di	77	0.1		1.62	4002026	00/20/14	00/20/14	001614	10

SunStar 25712 Commercentre Drive Lake Forest, California 92630 Laboratories, Inc. 949.297.5020 Phone PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE 949.297.5027 Fax Gribi Associates Project: Maz Glass 1090 Adam Street, Suite K Project Number: [none] **Reported:** Benicia CA, 94510 Project Manager: Jim Gribi 10/06/14 15:55 SG-2 T141992-01 (Air) Reporting Analyte Result Limit Units Dilution Batch Prepared Analyzed Method Note: SunStar Laboratories, Inc. Total Volatile Organic Compounds by TO-3 (modified) C6-C12 (GRO) ND 7170 ug/m3 Air 1.62 4092925 09/29/14 10/02/14 TO-3/TO-14 m Fixed Gases ASTM D1946-90 Helium 0.00 % 1.62 4092927 09/29/14 09/30/14 GC .. **Carbon Dioxide** 5.30 1.62 ... ... .. ... ... 2.01 1.62 .. .. .. .. .. .. Oxygen

0.62 "

...

0.62

..

...

...

58.3

SunStar Laboratories, Inc.

Nitrogen

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SunStar Laboratories, I PROVIDENC QUALITY ANALYTICAL SERVICES NATIO	nc.						257 Lake I	12 Commerce Forest, Califo 949.297.5 949.29	entre Drive rnia 92630 6020 Phone 7.5027 Fax
Gribi Associates		Proie	ect: Maz G	lass					
1090 Adam Street, Suite K	F	Project Numb	er: [none]					Reported	1:
Benicia CA, 94510	P	roject Manag	ger: Jim Gi	ribi				10/06/14 1	5:55
		, ,							
		T1419	SG-5 992-02 (A	ir)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar L	aborator	ies, Inc.					
TO-15									
Acetone	ND	12	ug/m³ Air	1.59	4092924	09/29/14	10/02/14	TO-15	
1,3-Butadiene	ND	4.5	"						
Carbon Disulfide	ND	3.2							
1,1,2-trichloro-1,2,2-trifluoroethane (CFC 113)	ND	7.7							
Isopropyl alcohol	ND	13							
Bromodichloromethane	ND	6.8							
Bromoform	ND	11							
Bromomethane	ND	4.0							
Carbon tetrachloride	ND	6.4							
Chlorobenzene	ND	4.7							
Chloroethane	ND	2.7							
Chloroform	ND	5.0							
Chloromethane	ND	11							
Cyclohexane	ND	3.5							
Heptane	ND	4.2							
Hexane	ND	3.6							
Dibromochloromethane	ND	8.7							
1,2-Dibromoethane (EDB)	ND	7.8							
1,2-Dichlorobenzene	ND	6.1							
1,3-Dichlorobenzene	ND	6.1							
1,4-Dichlorobenzene	ND	6.1							
Dichlorodifluoromethane	ND	5.0							
1,1-Dichloroethane	ND	4.1							
1,2-Dichloroethane	ND	4.1							
1,1-Dichloroethene	ND	4.0							
cis-1,2-Dichloroethene	ND	4.0							
trans-1,2-Dichloroethene	ND	4.0							
1,2-Dichloropropane	ND	4.7							
cis-1,3-Dichloropropene	ND	4.6							
trans-1,3-Dichloropropene	ND	4.6							
4-Ethyltoluene	ND	5.0							

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Gribi Associates 1090 Adam Street, Suite K Benicia CA, 94510	I P	Proje Project Numb roject Manag	ect: Maz G per: [none] ger: Jim G	ilass				<b>Reported</b> 10/06/14 15	<b>1:</b> 5:55
		T1419	SG-5 992-02 (A	ir)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		SunStar L	aborator	ies, Inc.					
ТО-15									
Methylene chloride	ND	3.5	ug/m³ Air	1.59	4092924	09/29/14	10/02/14	TO-15	
Styrene	ND	4.3	"						
,1,2,2-Tetrachloroethane	ND	7.0							
Fetrahydrofuran	ND	3.0							
Tetrachloroethene	ND	6.9							
1,1,2-Trichloroethane	ND	5.6							
1,1,1-Trichloroethane	ND	5.6							
Trichloroethene	ND	5.5							
Trichlorofluoromethane	ND	5.7							
1,3,5-Trimethylbenzene	ND	5.0							
1,2,4-Trimethylbenzene	ND	5.0							
Vinyl acetate	ND	3.6							
Vinyl chloride	ND	2.6							
1,4-Dioxane	ND	18							
2-Butanone (MEK)	ND	15							
4-Methyl-2-pentanone (MIBK)	ND	42							
Benzene	ND	3.3							
Foluene	ND	3.8							
Ethylbenzene	ND	4.4							
n,p-Xylene	ND	8.8							
p-Xylene	ND	4.4							
		554%	40-1	60	"	"	"	"	

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Gribi Associates 1090 Adam Street, Suite K Benicia CA, 94510	P Pr	Project: Maz Glass Project Number: [none] Project Manager: Jim Gribi						<b>Reported:</b> 10/06/14 15:	:55
		S T14199	G-5 2-02 (A	ir)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
	:	SunStar Lal	ooratori	ies, Inc.					
Total Volatile Organic Compoun	ds by TO-3 (modifi	ed)							
26-C12 (GRO)	ND	7170 ug	g/m³ Air	1.59	4092925	09/29/14	10/02/14	TO-3/TO-14 m	
ixed Gases ASTM D1946-90									
Ielium	0.00		%	1.59	4092927	09/29/14	09/30/14	GC	
Carbon Dioxide	2.01	1.59	"						
Dxygen	9.28	1.59							

SunStar Laboratories, I PROVIDING QUALITY ANALYTICAL SERVICES NATIV	nc.						257 Lake I	12 Commerce Forest, Califo 949.297.5 949.29	entre Drive rnia 92630 5020 Phone 7.5027 Fax
Gribi Associates 1090 Adam Street, Suite K Benicia CA, 94510	I P	Proje Project Numb Project Manag	ect: Maz G ber: [none] ger: Jim Gi	ilass ribi				<b>Reported</b> 10/06/14 12	d: 5:55
		T1410	SG-5D	•)					
		1141	992-03 (A	1 <b>r</b> )					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar L	aborator	ies, Inc.					
<u>TO-15</u>									
Acetone	ND	12	ug/m³ Air	1.58	4092924	09/29/14	10/02/14	TO-15	
1,3-Butadiene	ND	4.5	"						
Carbon Disulfide	ND	3.2	"						
1,1,2-trichloro-1,2,2-trifluoroethane (CFC 113)	ND	7.7							
Isopropyl alcohol	ND	13	"						
Bromodichloromethane	ND	6.8	"						
Bromoform	ND	11	"						
Bromomethane	ND	4.0							
Carbon tetrachloride	ND	6.4	"						
Chlorobenzene	ND	4.7							
Chloroethane	ND	2.7	"						
Chloroform	ND	5.0							
Chloromethane	ND	11	"						
Cyclohexane	ND	3.5	"						
Heptane	ND	4.2	"						
Hexane	ND	3.6	"						
Dibromochloromethane	ND	8.7	"						
1,2-Dibromoethane (EDB)	ND	7.8	"						
1,2-Dichlorobenzene	ND	6.1	"						
1,3-Dichlorobenzene	ND	6.1	"						
1,4-Dichlorobenzene	ND	6.1	"						
Dichlorodifluoromethane	ND	5.0	"						
1,1-Dichloroethane	ND	4.1	"						
1,2-Dichloroethane	ND	4.1	"						
1,1-Dichloroethene	ND	4.0							
cis-1,2-Dichloroethene	ND	4.0							
trans-1,2-Dichloroethene	ND	4.0							
1,2-Dichloropropane	ND	4.7							
cis-1,3-Dichloropropene	ND	4.6							
trans-1,3-Dichloropropene	ND	4.6							
4-Ethyltoluene	ND	5.0	"						

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SunStar Laboratories, Inc Providing Quality Annutrical Statictics Nationward	E						257] Lake I	12 Commerce Forest, Califo 949.297.5 949.29'	entre Driv rnia 92630 020 Phon 7.5027 Faz
Gribi Associates		Proj	ect: Maz G	lass					
1090 Adam Street, Suite K		Project Numl	ber: [none]					Reported	1:
Benicia CA, 94510		Project Manag	ger: Jim Gr	ibi				10/06/14 13	5:55
		5 T141	SG-5D 992-03 (A	ir)					
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar L	aboratori	es, Inc.					
<u>FO-15</u>									
Methylene chloride	ND	3.5	ug/m³ Air	1.58	4092924	09/29/14	10/02/14	TO-15	
tyrene	ND	4.3				"			
,1,2,2-Tetrachloroethane	ND	7.0							
etrahydrofuran	ND	3.0				"			
etrachloroethene	ND	6.9				"			
,1,2-Trichloroethane	ND	5.6				"			
,1,1-Trichloroethane	ND	5.6							
richloroethene	ND	5.5							
richlorofluoromethane	ND	5.7				"			
,3,5-Trimethylbenzene	ND	5.0				"			
,2,4-Trimethylbenzene	ND	5.0							
'inyl acetate	ND	3.6							
'inyl chloride	ND	2.6							
4-Dioxane	ND	18							
-Butanone (MEK)	ND	15							
-Methyl-2-pentanone (MIBK)	ND	42							
enzene	ND	3.3				"			
oluene	ND	3.8							
thylbenzene	ND	4.4							
n,p-Xylene	ND	8.8							
-Xylene	ND	4.4							
urrogate: 4-Bromofluorobenzene		59.5 %	40-1	60	"	"	"	"	
Aethane by GC									
Aethane	ND	7.9	ppm(v)	1.58	4092926	09/29/14	09/29/14	8015M	AO-

SunStar Laboratories, I PROVIDENC QUALITY ANALYTICAL STREAM	Inc.						257 Lake	712 Commercer Forest, Califor 949.297.5( 949.297	ntre Driv mia 9263 020 Phon 7.5027 Fa
Gribi Associates		Proje	ct: Maz G	lass					
1090 Adam Street, Suite K	F	roject Numb	er: [none]				Reported:		
Benicia CA, 94510	P	roject Manag			10/06/14 15	:55			
		S T1419	G-5D 92-03 (A	ir)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborator	ies, Inc.					
<u>Total Volatile Organic Compounds</u> C6-C12 (GRO)	by TO-3 (modif ND	<b>ied)</b> 7170 i	ug/m³ Air	1.58	4092925	09/29/14	10/02/14	TO-3/TO-14 m	
Fixed Gases ASTM D1946-90									
Helium	0.00		%	1.58	4092927	09/29/14	09/30/14	GC	
Carbon Dioxide	2.01	1.58							
Oxygen	10.8	1.58				"			
Nitrogen	53.5	0.58		0.58					

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SunStar Laboratories, Providing Quality ANALYTICAL SERVICES N	SunStar Laboratories, Inc. Providing Quality Analytical Services Nationwide										
Gribi Associates		Proje	ct: Maz	Glass							
1090 Adam Street, Suite K	1	Project Numb	er: [none	]				Reported	:		
Benicia CA, 94510	F	Project Manager: Jim Gribi						10/06/14 15	:55		
		S( T1419	G-2-2.5 92-04 (8	oil)							
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note		
Volatile Organic Compounds by E	PA Method 8260	B 50	aborato	. к.з, шс.	4002020	00/20/14	00/20/14	EBA 0200B			
Paprana	ND	5.0	ug/kg "	1	4092930	09/29/14	09/29/14	EPA 8200B			
Toluene	ND	5.0									
Sthylbenzene	ND	5.0									
n.p-Xvlene	ND	10									
-Xvlene	ND	5.0									
ert-amyl methyl ether	ND	20									
ert-butyl alcohol	ND	50									
Di-isopropyl ether	ND	20									
Ethyl tert-butyl ether	ND	20									
Methyl tert-butyl ether	ND	20									
C6-C12 (GRO)	ND	500									
Surrogate: Toluene-d8		95.9 %	85.5	-116	"	"	"	"			
urrogate: 4-Bromofluorobenzene		100 %	81.2	-123	"	"	"	"			
Surrogate: Dibromofluoromethane		123 %	95.7	-135	"	"	"	"			

SunStar Laboratories, Providing Quality Analytical Statistics N	257 Lake	12 Commercer Forest, Califor 949.297.50 949.297	ntre Drive nia 92630 20 Phone 5027 Fa:						
Gribi Associates		Proje	ct: Maz (	Glass					
1090 Adam Street, Suite K	I	roject Numb		Reported:	:				
Benicia CA, 94510	P			10/06/14 15	:55				
		S( T1419	G-2-5.0 92-05 (S	oil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organic Compounds by I	EPA Method 8260	SunStar L: B	aborator	ies, Inc.					
Naphthalene	ND	5.0	ug/kg	1	4092930	09/29/14	09/29/14	EPA 8260B	
Benzene	ND	5.0							
Foluene	ND	5.0							
Ethylbenzene	ND	5.0							
n,p-Xylene	ND	10							
-Xylene	ND	5.0							
ert-amyl methyl ether	ND	20							
ert-butyl alcohol	ND	50							
Di-isopropyl ether	ND	20							
Ethyl tert-butyl ether	ND	20							
Methyl tert-butyl ether	ND	20							
C6-C12 (GRO)	ND	500	"						
urrogate: Toluene-d8		99.2 %	85.5	-116	"	"	"	"	
urrogate: 4-Bromofluorobenzene		105 %	81.2	-123	"	"	"	"	
Dihana di Dihana di sana di sa s		121 0/	05.7	125	"	"	"	"	

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Katherine RunningCrane, Project Manager

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SunStar Laboratories, Providing Quality ANALYTICAL SERVICES N	Inc.						257 Lake	12 Commercer Forest, Califor 949.297.50 949.297	ntre Driv nia 9263 )20 Phon .5027 Fa
Gribi Associates		Proje	ect: Maz	Glass					
1090 Adam Street, Suite K	1	Project Numb	er: [none	]				Reported	:
Benicia CA, 94510	F	Project Manag	er: Jim C	ribi				10/06/14 15	:55
		S( T1419	G-5-2.5 92-06 (S	oil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
Volatile Organic Compounds by E	CPA Method 826(	<u>)B</u>	ng/kg	1	4092930	09/29/14	09/29/14	EPA 8260B	
Renzene	ND	5.0	" "		"	"	"	"	
oluene	ND	5.0							
thylbenzene	ND	5.0							
n,p-Xylene	ND	10							
-Xylene	ND	5.0							
ert-amyl methyl ether	ND	20							
ert-butyl alcohol	ND	50							
Di-isopropyl ether	ND	20							
thyl tert-butyl ether	ND	20							
fethyl tert-butyl ether	ND	20							
26-C12 (GRO)	ND	500							
urrogate: Toluene-d8		99.1 %	85.5	-116	"	"	"	"	
urrogate: 4-Bromofluorobenzene		99.9 %	81.2	-123	"	"	"	"	
urrogate: Dibromofluoromethane		126 %	95.7	-135	"	"	"	"	

SunStar Laboratories, Providing Quality Amalytical Statistics N	Inc.						257 Lake	12 Commercer Forest, Califor 949.297.50 949.297	ntre Driv nia 9263 )20 Phon .5027 Fa
Gribi Associates		Proje	ect: Maz G	Blass					
1090 Adam Street, Suite K	I	Project Numb	er: [none	]				Reported:	:
Benicia CA, 94510	P	roject Manag	er: Jim G	ribi				10/06/14 15	:55
		S	G-5-5.0						
		T1419	92-07 (S	oil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar L	aborator	ies, Inc.					
Volatile Organic Compounds by l	EPA Method 8260	В							
Naphthalene	ND	5.0	ug/kg	1	4092930	09/29/14	09/29/14	EPA 8260B	
Benzene	ND	5.0							
Toluene	ND	5.0							
Ethylbenzene	ND	5.0							
n,p-Xylene	ND	10							
-Xylene	ND	5.0							
ert-amyl methyl ether	ND	20							
ert-butyl alcohol	ND	50							
Di-isopropyl ether	ND	20							
thyl tert-butyl ether	ND	20							
lethyl tert-butyl ether	ND	20							
C6-C12 (GRO)	ND	500							
urrogate: Toluene-d8		97.0 %	85.5	-116	"	"	"	"	
urrogate: 4-Bromofluorobenzene		99.8 %	81.2	123	"	"	"	"	

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SunStar Laboratories, In Providing Quality Analytical Statuces Natio	nc.							25712 Lake Fo	Commerc rest, Calif 949.297 949.2	centre Driv Fornia 9263 5020 Phone 97.5027 Faz
Gribi Associates		Р	roject: Ma	z Glass						
1090 Adam Street Suite K		Project N	umber: [no	nel					Report	·he
Benicia CA 94510		Project Ma	nager: Iim	Gribi					10/06/14	15.55
		TO-15	- Ouelit	v Contro					10/00/11	10.00
		SunStar	Labora	tories, l	ínc.					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4092924 - EPA 5030 GCMS										
Blank (4092924-BLK1)				Prepared:	09/29/14	Analyzed	: 10/02/14			
Acetone	ND	12	ug/m³ Air	-						
,3-Butadiene	ND	4.5								
arbon Disulfide	ND	3.2								
1,2-trichloro-1,2,2-trifluoroethane (CFC 13)	ND	7.7								
opropyl alcohol	ND	13								
romodichloromethane	ND	6.8								
romoform	ND	11								
romomethane	ND	4.0								
arbon tetrachloride	ND	6.4								
hlorobenzene	ND	4.7								
hloroethane	ND	2.7								
hloroform	ND	5.0								
hloromethane	ND	11								
lyclohexane	ND	3.5								
eptane	ND	4.2								
exane	ND	3.6								
ibromochloromethane	ND	8.7								
2-Dibromoethane (EDB)	ND	7.8								
2-Dichlorobenzene	ND	6.1								
3-Dichlorobenzene	ND	6.1								
4-Dichlorobenzene	ND	6.1								
ichlorodifluoromethane	ND	5.0								
1-Dichloroethane	ND	4.1								
2-Dichloroethane	ND	4.1								
1-Dichloroethene	ND	4.0								
s-1,2-Dichloroethene	ND	4.0								
ans-1,2-Dichloroethene	ND	4.0								
2-Dichloropropane	ND	4.7								
s-1,3-Dichloropropene	ND	4.6								
ans-1,3-Dichloropropene	ND	4.6								
Ethyltoluene	ND	5.0								
ethylene chloride	ND	3.5								
yrene	ND	4.3								
1,2,2-Tetrachloroethane	ND	7.0								
etrahydrofuran	ND	3.0								

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Bunstar Laboratories, Ir Providing Quality Analytical Services Nation	IC.							25712 Lake Fo	2 Commerc prest, Calif 949.297. 949.2	entre Driv ornia 9263 5020 Phor 97.5027 Fa
Gribi Associates		P	roject: Ma	z Glass						
1090 Adam Street Suite K		Project Nu	mber: [no	nel					Report	·he
Papiaia CA 04510		Project Nu	nogor: Jim	Gribi					10/06/14	.u. 15.55
Benela CA, 94510		Floject Ma	nager. Jini	GHDI					10/00/14	13.33
		TO-15 SunStar	- Quality Labora	y Contro tories 1	ol Inc					
		Reporting	Labora	Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4092924 - EPA 5030 GCMS										
Blank (4092924-BLK1)				Prepared:	09/29/14	Analyzed	: 10/02/14			
retrachloroethene	ND	6.9	ug/m³ Air							
,1,2-Trichloroethane	ND	5.6								
,1,1-Trichloroethane	ND	5.6								
Frichloroethene	ND	5.5								
Frichlorofluoromethane	ND	5.7								
,3,5-Trimethylbenzene	ND	5.0								
,2,4-Trimethylbenzene	ND	5.0								
/inyl acetate	ND	3.6								
/inyl chloride	ND	2.6								
,4-Dioxane	ND	18								
-Butanone (MEK)	ND	15								
-Methyl-2-pentanone (MIBK)	ND	42								
Benzene	ND	3.3								
Foluene	ND	3.8								
Ethylbenzene	ND	4.4								
n,p-Xylene	ND	8.8								
o-Xylene	ND	4.4								
Surrogate: 4-Bromofluorobenzene	25.9		"	45.3		57.1	40-160			
Duplicate (4092924-DUP1)	So	urce: T1419	92-01	Prepared:	09/29/14	Analyzed	: 10/02/14			
Acetone	ND	120	ug/m³ Air		ND				30	TO-I
1,3-Butadiene	ND	110			ND				30	TO-
Carbon Disulfide	ND	160			ND				30	TO-I
,1,2-trichloro-1,2,2-trifluoroethane (CFC 13)	ND	390			ND				30	TO-1
sopropyl alcohol	ND	130			ND				30	TO-
Bromodichloromethane	ND	340			ND				30	TO-
Bromoform	ND	530			ND				30	TO-
Bromomethane	ND	200			ND				30	TO-
Carbon tetrachloride	ND	320			ND				30	TO-
Chlorobenzene	ND	230			ND				30	TO-
Chloroethane	ND	130			ND				30	TO-
Chloroform	ND	250			ND				30	TO-
Chloromethane	ND	110			ND				30	TO-
Cyclohexane	1900	170			1950			2.36	30	TO-1
Jeptane	ND	210			ND				30	TO-1

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SunStar Laboratories, Ir Providing Quality Analytical Survices Nation	NC.							25712 Lake Fo	Commero orest, Calif 949.297 949.2	centre Drive fornia 92630 5020 Phone 97.5027 Fax
Gribi Associates		Pr	oject: Ma	z Glass						
1090 Adam Street, Suite K		Project Nu	mber: [no	nel					Report	ed:
Benicia CA 94510		Project Mar	nager: Iim	Gribi					10/06/14	15.55
Benieu Cri, 94510		TO 15	Ouelit	v Contro					10/00/14	15.55
		SunStar 1	Labora	tories, l	// Inc.					
Analyse	Domit	Reporting	Unito	Spike	Source	% BEC	%REC	DDD	RPD Limit	Notes
Anaryte	Kesuit	Lillit	Units	Level	Result	70 KEC	Linits	KFD	Lillin	INOLES
Batch 4092924 - EPA 5030 GCMS										
Duplicate (4092924-DUP1)	So	urce: T14199	02-01	Prepared:	09/29/14	Analyzed	1: 10/02/14			
Iexane	946	180	ug/m³ Air		1020			7.42	30	TO-14
Dibromochloromethane	ND	430			ND				30	TO-14
,2-Dibromoethane (EDB)	ND	390			ND				30	TO-14
2-Dichlorobenzene	ND	310			ND				30	TO-14
,3-Dichlorobenzene	ND	310			ND				30	TO-14
4-Dichlorobenzene	ND	310			ND				30	TO-14
ichlorodifluoromethane	ND	250			ND				30	TO-14
1-Dichloroethane	ND	210			ND				30	TO-14
2-Dichloroethane	ND	210			ND				30	TO-14
1-Dichloroethene	ND	200			ND				30	TO-14
s-1,2-Dichloroethene	ND	200			ND				30	TO-14
ans-1,2-Dichloroethene	ND	200			ND				30	TO-14
2-Dichloropropane	ND	240			ND				30	TO-14
s-1,3-Dichloropropene	ND	230			ND				30	TO-14
ans-1,3-Dichloropropene	ND	230			ND				30	TO-14
Ethyltoluene	ND	250			ND				30	TO-14
lethylene chloride	ND	180			ND				30	TO-14
tvrene	ND	220			ND				30	TO-14
1.2.2-Tetrachloroethane	ND	350			ND				30	TO-14
etrahvdrofuran	ND	150			ND				30	TO-14
etrachloroethene	ND	350			ND				30	TO-14
1.2-Trichloroethane	ND	280			ND				30	TO-14
1.1-Trichloroethane	ND	280			ND				30	TO-14
richloroethene	ND	270			ND				30	TO-14
richlorofluoromethane	ND	290			ND				30	TO-14
3.5-Trimethylbenzene	ND	250			ND				30	TO-14
2.4-Trimethylbenzene	ND	250			ND				30	TO-14
invl acetate	ND	180			ND				30	TO-14
invl chloride	ND	130			ND				30	TO-14
4-Dioxane	ND	180			ND				30	TO-14
Butanone (MEK)	ND	150			ND				30	TO 14
Methyl-2-pentanone (MIBK)	ND	210			ND				30	TO 14
enzene	ND	210			ND				30	TO 14
aluana	ND	100			ND				20	TO 14
Juche daulhanzana	ND	190			ND				20	TO 14
uryioenzene	ND	220			ND				20	TO 14
i,p=A yiene	UND 1	220			IND				50	10-14

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SunStar Laboratories, In Providence Quality Assistment Services Nation	NC.							25712 Lake Fe	2 Commerco prest, Calif 949.297. 949.2	centre Drive ornia 92630 5020 Phone 97.5027 Fax
Gribi Associates		Pı	oject: Ma	z Glass						
1090 Adam Street, Suite K		Project Nu	mber: [no	one]				Reported:		
Benicia CA, 94510		Project Ma	nager: Jin	ı Gribi					10/06/14	15:55
		TO-15	- Qualit	y Contro	bl					
		SunStar	Labora	tories, l	lnc.					
		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 4092924 - EPA 5030 GCMS										
Duplicate (4092924-DUP1)	S	ource: T1419	92-01	Prepared:	09/29/14	Analyzed	I: 10/02/14			
o-Xylene	ND	220	ug/m3 Air		ND				30	TO-14

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SunStar Laboratories Providence Quality Analytical Services	, Inc.							25712 Lake Fo	2 Commer prest, Calif 949.297 949.2	centre Driv Cornia 9263 .5020 Phor 97.5027 Fa	
Gribi Associates		Pı	oject: M	az Glass							
1090 Adam Street, Suite K		Project Number: [none]							Reported:		
Benicia CA, 94510		Project Mar	nager: Jir	n Gribi					10/06/14	15:55	
Analyte	Result	Reporting	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch 4092926 - General Prep V	OC-GC										
Blank (4092926-BLK1)				Prepared	& Analyz	ed: 09/29/	14				
Methane	ND	5.0	ppm(v)								
Duplicate (4092926-DUP1)	So	urce: T1419	92-01	Prepared	& Analyz	ed: 09/29/	14				
Aethane	64.0	8.1	ppm(v)		77.1			18.6	20		

SunStar Laboratories Providing Quality ANALYTICAL SERVICE	S, <mark>Inc.</mark> s Naticonvide							25712 Lake Fo	2 Commerco orest, Calif 949.297. 949.2	centro fornia .5020 97.50
Gribi Associates		P	roject: Ma	z Glass					_	_
1090 Adam Street, Suite K		Project Number: [none] Project Manager: Jim Gribi							Report	ed:
Denicia CA, 74510 Froject Manager. Jini Orior									10/00/14	15.55
	Pasult	Reporting	Units	Spike	Source Result	%RFC	%REC	RPD	RPD Limit	
Analyte	INC SUIT		N / H H H / N							- NG
Analyte Batch 4092925 - EPA 5030 GCN	AS	Linit	Cints	Lever	resur			IC D	Dinit	N
Analyte Batch 4092925 - EPA 5030 GCN Blank (4092925-BLK1)	AS	Linit	Cints	Prepared:	09/29/14	Analyzed	: 10/02/14	III D		N
Analyte Batch 4092925 - EPA 5030 GCN Blank (4092925-BLK1) C6-C12 (GRO)	AS ND	7170	ug/m³ Air	Prepared:	09/29/14	Analyzed	: 10/02/14			N
Analyte Batch 4092925 - EPA 5030 GCN Blank (4092925-BLK1) C6-C12 (GRO) Duplicate (4092925-DUP1)	AS ND So	7170 7170	ug/m³ Air 92-01	Prepared: Prepared:	09/29/14	Analyzed	: 10/02/14	MD		N

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PROVIDING QUALITY ANALYTICAL SERVICES NATION	IC.							25712 Lake Fo	Commerco rest, Calif 949.297. 949.2	centre Driv ornia 9263 5020 Phon 97.5027 Fa
Gribi Associates		Pr	oject: M	az Glass						
1090 Adam Street Suite K		Project Nu	mber: [n	onel					Report	·he
Benicia CA 94510		Project Mar	ager lir	n Gribi					10/06/14	15.55
Volatila O	rania Co	nnounda k	TT TDA	Mothod	8760D	Quality	Contro		10/00/14	15.55
Volatile O		SunStar 1	Labora	atories, l	nc.	Quanty	, Contro	L		
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4092930 - EPA 5030 GCMS										
Blank (4092930-BLK1)				Prepared	& Analyz	ed: 09/29/	14			
Japhthalene	ND	5.0	ug/kg							
enzene	ND	5.0								
oluene	ND	5.0								
thylbenzene	ND	5.0								
,p-Xylene	ND	10								
Xylene	ND	5.0								
ert-amyl methyl ether	ND	20								
ert-butyl alcohol	ND	50								
i-isopropyl ether	ND	20								
thyl tert-butyl ether	ND	20								
fethyl tert-butyl ether	ND	20								
6-C12 (GRO)	ND	500								
urrogate: Toluene-d8	39.0		"	40.0		97.6	85 5-116			
urrogate: 4-Bromofluorobenzene	413		"	40.0		103	81 2-123			
urrogate: Dibromofluoromethane	50.7		"	40.0		127	95.7-135			
CE (4002020 DE1)				Deserved	00/20/14	A	1. 00/20/14			
CS (4092930-BS1)	07.4	5.0		Prepared:	09/29/14	Anaryzec	1: 09/30/14			
I Disklargathang	97.4	5.0	ug/kg "	100		97.4	75 125			
, 1-Dichloroethene	88./ 88.0	5.0		100		88.7	75 125			
Incinoroettiette	88.0	5.0		100		00.U 82.1	75 125			
oluene	85.0	5.0		100		85.0	75-125			
	05.0	5.0		100		03.0	05.5.115			
urrogate: Ioluene-d8	37.5			40.0		93.8	85.5-116			
urrogate: 4-Bromofluorobenzene	42.8			40.0		107	81.2-123			
urrogate: Dibromofluoromethane	52.2			40.0		130	95.7-135			
Aatrix Spike (4092930-MS1)	501 106	arce: T14199	2-04	Prepared:	09/29/14	Analyzed	1: 09/30/14			
I Disklargathang	100	5.0	ug/kg "	100	ND	100	75 125			
i-Dichloroethene	89.8	5.0		100	ND	89.8	75 125			
enzene	84.0	5.0		100	ND	84.0	75 125			
chizene	88.1	5.0		100	ND	00.1	75 125			
onuene	87.0	5.0		100	ND	8/.0	/5-125			
urrogate: Toluene-d8	36.0		"	40.0		90.0	85.5-116			
urrogate: 4-Bromofluorobenzene	40.0		"	40.0		99.9	81.2-123			
urrogate: Dibromofluoromethane	50.4		"	40.0		126	95.7-135			

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_	SunStar Laboratories, Inc.	25712 Commercentre Drive Lake Forest, California 92630 949.297.5020 Phone 940.207 ZBOT Envir
1		949.297.5027 Fax

Gribi Associates	Project: Maz Glass	
1090 Adam Street, Suite K	Project Number: [none]	Reported:
Benicia CA, 94510	Project Manager: Jim Gribi	10/06/14 15:55

#### Volatile Organic Compounds by EPA Method 8260B - Quality Control

#### SunStar Laboratories, Inc.

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

#### Batch 4092930 - EPA 5030 GCMS

Matrix Spike Dup (4092930-MSD1)	Sourc	Prepared:	09/29/14	Analyze						
Chlorobenzene	106	5.0	ug/kg	100	ND	106	75-125	0.0946	20	
1,1-Dichloroethene	85.2	5.0		100	ND	85.2	75-125	5.14	20	
Trichloroethene	81.6	5.0		100	ND	81.6	75-125	3.67	20	
Benzene	88.8	5.0		100	ND	88.8	75-125	0.735	20	
Toluene	88.4	5.0		100	ND	88.4	75-125	0.853	20	
Surrogate: Toluene-d8	36.0		"	40.0		90.0	85.5-116			
Surrogate: 4-Bromofluorobenzene	39.0		"	40.0		97.4	81.2-123			
Surrogate: Dibromofluoromethane	53.0		"	40.0		132	95.7-135			

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SunStar Laboratories PROVIDING QUALITY ANALYTICAL SERVICE	S, Inc. 5 Naticannide							25712 Lake Fe	2 Commerco prest, Calif 949.297. 949.2	centre Driv Cornia 9263 .5020 Phon 97.5027 Fa:	
Gribi Associates		Pr	oject: M	az Glass							
1090 Adam Street, Suite K		Project Nu	mber: [n	onel					Report	ed:	
Benicia CA, 94510		Project Manager: Jim Gribi						10/06/14 15:55			
	Fixed Ga	ases ASTM	I D1946	5-90 - Qu	ality Co	ntrol					
		SunStar	Labora	atories, I	lnc.						
Analyte	Result	Reporting	Units	Spike Level	Source Result	%REC	%REC	RPD	RPD Limit	Notes	
Rotch 4002027 Conoral Prop V											
lank (4092927-BLK1)	00-00			Prepared	09/29/14	Analyzed	: 09/30/14				
Ielium	0.00		%	1							
arbon Dioxide	ND	1.00									
xygen	ND	1.00									
litrogen	ND	1.00									
Duplicate (4092927-DUP1)	So	urce: T14199	02-01	Prepared	09/29/14	Analyzed	: 09/30/14				
lelium	0.00		%		0.00						
arbon Dioxide	5.28	1.62			5.30			0.521	20		
xygen	2.33	1.62			2.01			14.9	20		
litrogen	59.1	0.62			59.2			0.182	20		



Gribi Associates	Project: Maz Glass	
1090 Adam Street, Suite K	Project Number: [none]	Reported:
Benicia CA, 94510	Project Manager: Jim Gribi	10/06/14 15:55

#### Notes and Definitions

- TO-14 TO-15 analysis of sample was not performed due to high concentration of analyte(s). Sample was analyzed utilizing method TO-14 and reporting limit has been adjusted accordingly.
- AO-1 Sample Collected in Summa Canister, Hold Time Increased Accordingly
- Analyte DETECTED DET
- Analyte NOT DETECTED at or above the reporting limit ND
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

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SunStar Laboratories Inc. 25712 Commercentre Dr. Lake Forest, CA 92630 (949)297-5020 (949)297-5027 fax

. .

Form F-LP0005-1.2 Effective Date: 01/01/2013

PLEASE DO NOT WRITE ON OR PLACE LABELS ON SUMMA CANS

# SunStar Laboratories

## **Canister Data Sheet**

Client:		GRIBI	_JIM_9-18-1	.4_9+2						1 He
Shipping Inf	formation			Sampling Information						1
		CHECK	Pressure	Sample	Sample	Initial	Final	Sample	Sample	1
Canister S	erial #	Date	(-30 +/- 2 psia)	ID	Date	Pressure	Pressure	Start Time	Finish Time	
SSAT-	0439	9/18/2014	-30	SG - 2	09-25-14	-27	-1	11:12	11:19	2.8-4:
SSAT-	0636	9/18/2014	-30	<u> 56 5</u>	09-25-14	-28 -2		11:33	11:41	2.3-3.5
SSAT-	0661	9/18/2014	-30							
SSAT-	0675	9/18/2014	-30	5G-5D	09-25-14	-28	-1	11:42	11:50	2.0-4.
SSAT-	0676	9/18/2014	-30							
SSAT-	0707	9/18/2014	-30							
SSAT-	0663	9/18/2014	~30	PURGE CAN	<b>09</b>  25   14	-30	-15	11:05	11:08	
SSAT-	0688	9/18/2014	-30	PURGE CAN		-15	- 2	11:28	//:31	_
SSAT-	0713	9/18/2014	40	NITROGEN FILLED	09-25-14	-30	-15			
SSAT-	2052	9/18/2014		MANIFOLD (150)						
SSAT-	2059	9/18/2014		MANIFOLD (150)						
•										
		· · ·								
				· · · · · · · · · · · · · · · · · · ·						
								L		

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

Client: Grbi A	ssociat	es		-	-		Da	ate:	Nor	7 z	611 Ma	14	<u> </u>	1.0	e 4	Pa	age:_		l		Of	ſ	
Address		Eav:			-		• C	ojeci		Gn	5	TE		lat	-12-1	haller:		raia	~+ #.				
Profile.	-1.	Fax			· •,	-	Ê					$\mu$	~	<u>, č 1</u>	(0)			oje	Cl #:_				
Project Manager:					- <u> </u>	1	5 B	aicn #	F		141	992	2			EU	v⊢ #:_						
		- - - -			10-3/10-15 TPH-6+	+ 0XY	01EA, UAT 01117+174-6+	BTEX	1 (gasoline)	1 (diesel)	I Ext./Carbon Chain	000 Title 22 Metals	D-1946zHe, CO2, O2N	have		atory ID #							t of containers
			Sample	Container	9	09		21 E	15N	15N	15N	10/7	Ĕ	to to		pore	1						tal #
Sample ID	Date Sampled	Time	Туре	Туре	3	8	8 8	8	8	8	8	8	ě.	2		0		C	omm	ents	Prese	rvative	P
56-2	9125114	11:12	Vapor	12 SUHM	4×							[	X	X		a	5	55A	·T-	04	39		
56-5		11:33	Vapor	1/	Ň								X	×Ļ	_	02	5	<u>S</u> A	Γ-	0	636	5	
5G-5D		11:42	Varoi	"	<u> </u>								Xľ	×		03	2	5 A	1	-0	575	5	
56-2-2.5		13:35	SOIL	Jar	_	>	< _									04							
56-2-5.0		1425	Soil	1)	-		<									05							
56-5-2.5		1345	Soil	1/			×									06							
56-5-50	<b>V</b>	140.5	Soil	11		>	< 					-		-	-	70	_						
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Relinquished by: (signature)	9/26/14		Received b	y; (signature)	2	ם 2،	ate /	Time	f	Cha	in of	To Cus	tal #	of co seals	ontaine	rs IA		44	FI		Voteš -		7
Relinquished by: (signature)	Relinquished by: (signature) Date / Time Received by: (signature)					D	ate /	Time			Seals intact?						100-	an a	<b>۲</b>		L	· [	
GSO 9.27.14 Relinquished by: (signature)	<i>8</i> :30 Date / Ti	me	Received b	y: (signature)	<b>727/14 8:30</b> e) Date / Time										2					<u>87</u>			
Sample disposal Instructions: D	isposal @ \$2.00	each	Return	to client		Pick	qu			linur	i arc	Juna	i ame	e:			- 🗆						

Chain of Custody Record

COC134883

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#### SAMPLE RECEIVING REVIEW SHEET

BATCH #										
Client Name: Greiße	Project: <u>Maz GLASS</u>									
Received by: Date/Time Received: 2:30										
Delivered by :  Client SunStar Courier GSO FedEx Other										
Total number of coolers received Temp cr	riteria = 6°C > 0°C (no <u>frozen</u> containers)									
Temperature: cooler #1 <u>/2</u> °C +/- the CF (-0.2°C) = <u>/ <math>\sigma</math></u> °C corrected temperature										
$\frac{g_{0x}}{e^{\frac{1}{20.2}}}$ °C +/- the CF (- 0.2°C) = $\frac{g_{0.0}}{20.0}$ °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 fina	ıl 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										
Proper containers received for analyses requested on COC										
Proper preservative indicated on COC/containers for analyses requested										
Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times. $\boxed{\mathbf{Y}}$ Yes $\boxed{\mathbf{No}^*}$										
* Complete Non-Conformance Receiving Sheet if checked Cooler/Sample Review - Initials and date <u>St 9.27.14</u>										

Comments: