July 13, 2012

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

Attention: Mark Detterman

Subject:Report of Remedial Investigation and
Workplan to Conduct Interim Remedial Measures
3800 San Pablo Avenue, Emeryville, California
ACDEH Fuel Leak Case: RO00002520; Global ID: T06019788682

Ladies and Gentlemen:

Attached please find a copy of the *Report of Remedial Investigation and Workplan to Conduct Interim Remedial Measures* 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. Bankup

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

RECEIVED

8:28 am, Jul 19, 2012 Alameda County Environmental Health

REPORT OF REMEDIAL INVESTIGATION AND WORKPLAN TO CONDUCT INTERIM REMEDIAL MEASURES

3800 San Pablo Avenue Emeryville, California ACDEH Fuel Leak Case: RO00002520

Prepared for:

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

July 13, 2012

GEOLOGIC & ENVIRONMENTAL CONSULTING SERVICES

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July 13, 2012

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

Subject:Report of Remedial Investigation and
Workplan to Conduct Interim Remedial Measures
3800 San Pablo Avenue, Emeryville, California
ACDEH Fuel Leak Case: RO00002520; Global ID: T06019788682

Dear Mrs. Kirk:

Gribi Associates is pleased to submit this *Report of Remedial Investigation and Workplan to Conduct Interim Remedial Measures* for the underground storage tank (UST) site located at 3800 San Pablo Avenue in Emeryville, California (Site). This report documents the drilling and sampling of nine investigative borings (B-15 through B-23) and the installation and sampling of four groundwater monitoring wells (MW-1 through MW-4) on the Site. The goal of these activities was to provide the additional site characterization necessary to develop a conceptual site model (CSM) and interim remedial measures for the Site.

Based on the results of this investigation, this report also includes a workplan to conduct an interim remedial measures, (IRMs) at the Site. The IRM workplan will involve conducting an ozone injection pilot test at the Site.

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,

James E. Gribi Registered Geologist California No. 5843

JEG/ct





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EXECUTIVE SUMMARY

Gribi Associates is pleased to submit this *Report of Remedial Investigation and Workplan to Conduct Interim Remedial Measures* for the underground storage tank (UST) site located at 3800 San Pablo Avenue in Emeryville, California (Site). This report documents the drilling and sampling of nine investigative borings (B-15 through B-23) and the installation and sampling of four groundwater monitoring wells (MW-1 through MW-4) on the Site. The goal of these activities was to provide the additional site characterization necessary to develop a conceptual site model (CSM) and interim remedial measures for the Site.

Investigative Activities and Results

Investigative borings and monitoring wells were drilled and installed by Gregg Drilling, Inc. (C-57 License No. 485165) on May 9 and 10, 2012. Soil samples from the nine investigative borings and four well borings showed relatively low levels of gasoline-range hydrocarbons, with TPH-G concentrations ranging from nondetect to 69 mg/kg, and Benzene concentrations ranging from nondetect to 0.36 mg/kg. Groundwater samples from the nine investigative borings showed low levels of gasoline-range hydrocarbons and VOCs, with TPH-G concentrations ranging from nondetect to 560 ug/l and no detectable concentrations of Benzene. Groundwater samples from the four groundwater monitoring wells showed TPH-G concentrations ranging from 10,000 to 17,000 ug/l and Benzene concentrations ranging from nondetect to 1,300 ug/l.

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. Soils beneath the site consist primarily of clays and silts, with little or no sands or gravels.

This groundwater hydrocarbon plume probably extends beneath San Pablo Avenue; however, it does not extend as far as borings B-20, B-21, and B-22 on the southwest side of San Pablo Avenue. Note that it is possible that the groundwater hydrocarbon plume swings southward after reaching San Pablo Avenue (perhaps due to dewatering of the MacArthue Boulevard underpass, located south of the Site). However, given the preponderance of low-permeability silts and clays beneath the Site, it would seem more likely that the groundwater hydrocarbon plume is simply short in length.

Given the limited lateral extent of soil and groundwater hydrocarbon impacts associated with this Site, the primarily potential environmental receptor that we foresee is potential human exposure to hydrocarbon vapors both outdoor and within the Site building. However, potential risks associated with the vapor exposure scenario are ameliorated somewhat by the lack of significant hydrocarbon impacts in soil and groundwater beneath the Site building itself and the relatively low Benzene concentrations in impacted soil and groundwater associated with this Site.



A sensitive receptors survey has not been conducted for this Site, and it may be necessary to conduct a confirmatory sensitive receptors survey in the future. However, based on the location of the Site and the identified soil and groundwater hydrocarbon impacts, we would not expect hydrocarbons associated with this site to pose a significant risk to any sensitive receptors in the Site area.

It is possible that the groundwater hydrocarbon plume extends due south from the Site, beneath San Pablo Avenue, towards the MacArthur Boulevard underpass. Thus, one to two borings should be drilled in the east San Pablo Avenue sidewalk, east from recent offsite borings B-20, B-21, and B-22.

A sensitive receptors survey should be conducted prior to closure to confirm a lack of sensitive receptors relative to the Site.

Workplan to Conduct Interim Remedial Measures

In order to move this site towards regulatory closure, we recommend conducting interim remedial measures (IRMs) in the Adeline Street parking lot to attempt to mitigate the elevated groundwater hydrocarbon impacts in the former UST source area. The reasons for this recommendation are twofold: (1) Mitigating groundwater hydrocarbon impacts beneath the Adeline Street parking lot provides the most feasible avenue of remediation and closure, given the impracticability of conducting groundwater remediation beneath Adeline Street/San Pablo Avenue further southwest from the source area; and (2) Remediating groundwater hydrocarbon impacts to onsite occupants.

As part of the IRM installation activities, two additional soil borings, B-24 and B-25, will be drilled in the Adeline Street and San Pablo Avenue sidewalks to assess southerly migration of groundwater hydrocarbon impacts. These borings will be drilled and sampled using the procedures described in this report and in previously-approved workplans; hence, a workplan for these two additional borings is not provided herein.

Given the nature of the hydrocarbon impacts in the Adeline Street parking lot (primarily groundwater-only impact in relatively moderate to low permeability silts and sandy silts), our judgement is that the following remedial alternatives are not feasible for the Site: (1) Soil excavation and groundwater pumping, followed by backfilling; (2) Air sparge/soil vapor extraction; (3) Groundwater pump and treat; and (4) Enhanced bioremediation via chemical injections (i.e. ORC injections). On the other hand, we believe that ozone injection has a reasonable chance of success at this site. Our experience with ozone injection is that it has a greater chance of overcoming low permeability soils than do other permeability-dependent remediation technologies, such as pump and treat or AS/SVE.

To test ozone injection as an IRM for the Site, we recommend conducting an ozone injection pilot test at the Site. Ozone injection has been shown to be effective in mitigating soil and groundwater hydrocarbon impacts in a relatively short time period, particularly where source removal efforts have already removed the worst hydrocarbon impacts.



1.0 INTRODUCTION

Gribi Associates is pleased to submit this *Report of Remedial Investigation and Workplan to Conduct Interim Remedial Measures* for the underground storage tank (UST) site located at 3800 San Pablo Avenue in Emeryville, California (Site) (see Figure 1 and Figure 2). This report documents the drilling and sampling of nine investigative borings (B-15 through B-23) and the installation and sampling of four groundwater monitoring wells (MW-1 through MW-4) on the Site. The goal of these activities was to provide the additional site characterization necessary to develop a conceptual site model (CSM) and interim remedial measures for the Site.

Based on the results of this investigation, this report also includes a workplan to conduct interim remedial measures, (IRMs) at the Site. The IRM workplan proposes conducting an ozone injection pilot test at the Site.

1.1 Scope of Work

Gribi Associates was contracted by San Pablo Avenue Venture to conduct the following scope of work.

- **Task 1 Conduct prefield activities.**
- **Task 2 Conduct drilling and sampling activities.**
- **Task 3 Conduct laboratory analyses.analyses.**
- **Task 4 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 protocol. 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

2.1 General Site Description

The Site is located in a mixed commercial, light industrial, and residential area of southeast Emeryville near the Oakland/Emeryville city border. The Site is bordered to the south by Apgar Street, followed by the West MacArther Boulevard underpass. East from the Site is an auto repair facility, followed by residential properties. The Site is bordered on the west by the Adeline Street and San Pablo Avenue intersection, which extends approximately 100 feet west from the Site. North from the Site are commercial and residential properties. The Site is currently used for storage.

2.2 General Site Topography and Geologic Setting

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.

2.3 Summary of Previous Environmental Investigation Activities

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

2.3.1 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.



2.3.2 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 Figure 2, Figure 3, and Figure 4). 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 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, 3899 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 gasoline-range 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 gasolinerange 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 workplan 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.

Based on telephone and email correspondences with Mr. Mark Detterman of Alameda County Department of Environmental Health (ACEH), Gribi Associates submitted an amended investigative workplan for the Site in March 2012 (*Amended Workplan to Conduct Additional Investigation Activities, 3899 San Pablo Avenue, Emeryville, California*, Gribi Associates, March 6, 2012). This amended workplan provides results of preliminary Phase I environmental site assessment (ESA) activities and proposes additional investigative activities for the Site. Preliminary Phase I ESA activities included a review of historical Sanborn Maps, a city



directories abstract, 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 39th Street, extended further east to include the current adjacent auto repair facility and was apparently used for storage and auto painting.
- A possible dry cleaners (National French Laundry, Industrial Coat & Apron Supply, and Red Star Industrial Service Laundry) was apparently present at 1033 39th Street, approximately 150 feet northeast from the Site, from the 1920s to the 1960s.

Historical features most relevant to the currently environmental conditions on the Site include the following.

(1) The former dispenser kiosk, located adjacent to the site building in the Adeline Street parking lot, was undoubtedly the main source for the groundwater hydrocarbon plume identified in the parking lot;

(2) The southeast yard in the back of the building, adjacent to Apgar Street, was used either for residential housing or for truck parking, and does not appear to have been a suspect area relative to hydrocarbon releases on the Site; and

(3) The northeast yard in the back of the building, adjacent to 39th Street, was used as part of the truck repair operation, and, based on review of historical aerial photos and Sanborn Maps and on recollections from the site owners, it is likely that the former 1,000-gallon gasoline USTs removed in 1981 were located in the northeast yard area.

In order to address investigative data gaps, the amended workplan proposed the installation and sampling of four groundwater monitoring wells and the drilling and sampling of approximately eight onsite and offsite soil borings. This amended workplan replaced the January 26, 2012 workplan. The goal of the investigation was to complete site investigative activities as necessary to develop a Site Conceptual Model and Corrective Action Plan for the Site.



On April 5, 2012, ACEH issued a letter approving the March 6, 2012 amended workplan, with the provision that an additional boring be drilled in the suspected former UST area on the northeastern Site parking lot.

3.0 DESCRIPTION OF FIELD ACTIVITIES

Investigative borings and monitoring wells were drilled and installed by Gregg Drilling, Inc. (C-57 License No. 485165) on May 9 and 10, 2012. All activities were conducted in accordance with applicable guidelines and statutes.

3.1 Prefield 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, all drilling locations were marked with white paint, and Underground Services Alert (USA) was notified at least 48 hours prior to drilling. Also, a private underground utility locator was retained to conducted an independent clearance of the proposed well locations.

Prior to initiating drilling activities, a Site Safety Plan was prepared, and a tailgate safety meeting was conducted with all site workers.

3.2 Location of Borings

Well locations, MW-1 through MW-4, and boring locations, B-15 through B-23, are shown on Figure 2. Groundwater monitoring wells MW-1 through MW-4 were sited in the previously-identified groundwater hydrocarbon plume area in the Adeline Street parking lot. These wells will provide representative groundwater quality and groundwater gradient data for the Site.

Soil borings B-15 through B-19 were drilled on the Site in previously un-investigated areas to assess possible hydrocarbon impacts from other known and unknown UST and other sources. Borings B-20, B-21, and B-22 were sited on the west side of San Pablo Avenue approximately 120 feet southwest, in an expected downgradient groundwater flow direction, from the Adeline Street parking lot. Boring B-23 was sited in the suspected former UST area in the northeast Site parking lot, as directed by ACEH.

3.3 Drilling and Sampling of Investigative Soil Borings

The nine soil borings, B-15 through B-23, were drilled to depths ranging from 12 feet to 31 feet in depth using direct-push coring equipment. For all borings, continuous soil cores were collected to total boring depth. The continuous soil cores were collected in a clear plastic acetate tube, nested inside a stainless steel core barrel. After each four-foot core barrel was brought, a portion of the soil core contained in the acetate liner was removed for preservation and laboratory analysis. Teflon tape was placed over both ends of the sample core and sealed with plastic end-caps. The samples were then labeled and placed in cold storage pending transport to



a laboratory. Following sample collection, 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 PID. Soil boring logs for the seven soil borings are included in Appendix B.

One grab groundwater sample was collected from each of the borings except B-23 (unable to collect water due to UST backfill sand sloughing into borehole). Open hole grab groundwater samples were collected by placing 3/4-inch diameter PVC well casing in the boring and allowing groundwater to enter the casing. Groundwater was then sampled using a clean small diameter bailer and poured directly into laboratory-supplied containers. Each sample container was then tightly sealed, labeled, and placed in cold storage for transport to the 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 liquinox solution, and finally with distilled water. Soil cuttings were contained onsite in sealed drums pending laboratory results. After completion, the nine soil borings were grouted to match existing surface grade using a cement\sand slurry.

3.4 Drilling, Installation, and Sampling of Monitoring Wells

Groundwater monitoring wells MW-1 through MW-4 were drilled to approximately 23 feet in depth using both direct-push coring tools (for lithologic logging and soil sampling) and hollow stem auger equipment (well installation activities). Soils were first cored, logged and sampled using direct-push coring equipment as described in the previous section of this report. The soil boring logs for these wells are included in Appendix B. During coring and sampling activities, all sampling equipment were thoroughly cleaned and decontaminated between each sample collection by triple rinsing as described previously in this report.

The four groundwater monitoring wells were constructed using 2-inch diameter Schedule 40 threaded PVC casing according to the following specifications: (1) 0.020-inch slotted well casing was placed from approximately 23 feet to 13 feet in depth; (2) No. 3 Lonestar (or equivalent) filter sand was placed around the casing to a depth of approximately 11 feet below grade; (3) A two foot bentonite seal was placed above the filter sand to approximately 9 feet below grade; and (4) The remaining annulus was grouted using a cement/sand slurry (bentonite less than five percent) to approximate grade. The top of the well was enclosed in a traffic-rated locking well box set in concrete slightly above surface grade. Well construction details are summarized on the boring logs in Appendix B. All downhole drilling equipment, including auger and drill bit, was steam cleaned before and after drilling the well boring. All soil cuttings and steam cleaning rinseate were contained in sealed drums pending laboratory results.

3.5 Well Development and Sampling

On May 15, 2012, the four newly-installed wells were developed by surging and pumping groundwater from the well until pumped groundwater was clear and free of fines. During well development, approximately 10 gallons of groundwater was purged from each well. Prior to well development, groundwater depth measurements were taken to 0.01 foot using an electronic probe. During well development, the groundwater was monitored periodically for water column height, color, visible clarity, and odor.



On May 18, 2012, the newly-installed wells were purged and sampled using a peristaltic pump with new disposable tubing for each well. Wells were purged of at least three well volumes before sampling. During well purging, groundwater was monitored periodically for drop in the water level, pH, specific conductance, temperature, odor, and visible clarity. After these parameters have stabilized, groundwater was sampled in the following manner: (1) Laboratory supplied containers were completely filled directly from the effluent tubing with a minimum of agitation; (2) After making sure that no air bubbles were present (when applicable), each container was tightly sealed; and (3) Each container was labeled and placed in cold storage for transport to the analytical laboratory under formal chain-of-custody.

All purged groundwater generated during well development and sampling were stored on site in a sealed container pending groundwater analytical results.

3.6 Surveying of Groundwater Monitoring Wells

On May 30, 2012, the wellhead elevations were surveyed by Virgil Chavez Land Surveying, a State-licensed land surveyor, in accordance with State Geotracker requirements. A copy of the survey report is included in Appendix C, and the well survey data have been uploaded to Geotracker. Wellhead top of casing mean sea level elevations for the four wells are also included in Table 2.

3.7 Laboratory Analysis of Soil and Water Samples

A total of 27 soil samples from the nine investigative borings and four well borings, three grab groundwater samples from downgradient offsite borings, and the four groundwater samples from newly-installed Site monitoring wells were analyzed for the following parameters:

USEPA 8015C Total Petroleum Hydrocarbons ad Gasoline (TPH-G) USEPA 8021B Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX)

In addition, the five grab groundwater samples from onsite investigative borings were analyzed for the following parameters:

USEPA 8260B Total Petroleum Hydrocarbons as Gasoline (TPH-G) USEPA 8260B Volatile Organic Compounds (VOCs)

All samples were analyzed by Sunstar Labs, a state-certified laboratory, with standard turn around on laboratory results.

4.0 **RESULTS OF INVESTIGATION**

4.1 General Subsurface Conditions

Soil boring logs for the nine investigative borings and four monitoring wells are contained in Appendix B. Soils encountered in the borings generally consisted of clays, with relatively thin discontinuous silts and occasional clayey gravels and sands present in some of the borings below 20 feet in depth. Boring B-23, located within an expected former UST excavation cavity,



encountered apparent clean backfill sand down to approximately 9.5 feet in depth, followed by clay to 12 feet (total depth investigated).

Water-saturated soils were generally encountered in silt- and clay-dominated soils below 20 feet in depth, and rose slowly in the borings to approximately 14 feet in depth. Groundwater depths were measured at about 8.5 feet in the four groundwater monitoring wells prior to sampling. Groundwater elevation gradient, which is shown in Figure 5, appears to be to the southsouthwest.

The only significant hydrocarbon odors encountered in the investigative borings or well borings were in the four monitoring well borings. Moderate hydrocarbon odors were noted from 20 to 24 feet in depth in MW-1, from 5 feet to 20 feet in MW-2, and from 7 feet to 23 feet in MW-3 and MW-4. Groundwater from the four wells exhibited moderate hydrocarbon odors with no apparent hydrocarbon sheens.

4.2 Results of Laboratory Analyses

Soil and groundwater laboratory analytical results are summarized in Table 1 and Table 2, and on Figure 6 and Figure 7. The laboratory data reports and chain of custody records are contained in Appendix D.

Soil samples from the nine investigative borings and four well borings showed relatively low levels of gasoline-range hydrocarbons, with TPH-G concentrations ranging from nondetect to 69 mg/kg, and Benzene concentrations ranging from nondetect to 0.36 mg/kg. Groundwater samples from the nine investigative borings showed low levels of gasoline-range hydrocarbons and VOCs, with TPH-G concentrations ranging from nondetect to 560 ug/l and no detectable concentrations of Benzene. Groundwater samples from the four groundwater monitoring wells showed TPH-G concentrations ranging from 10,000 to 17,000 ug/l and Benzene concentrations ranging from nondetect to 1,300 ug/l.

5.0 CONCEPTUAL SITE MODEL

The following Conceptual Site Model (CSM) has been developed to assist in risk-based decision making. In developing the CSM, we have evaluated actual and potential contaminant sources, migratory pathways, and environmental receptors. Note that this CSM is based on our understanding of currently-available data; where data are not available or are not representative, a data gap is noted.

5.1 Contaminant Sources

The contaminants of concern at the Site consist of gasoline constituents. Specific COCs include TPH-G; Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX).

The COCs identified on the Site appear to have originated from the former USTs in the Adeline Street sidewalk (removed in 2002) and/or the fuel dispensers associated with these former USTs, apparently located near the entrance to the Site building at the north end of the Adeline Street parking lot. The USTs and UST appurtenances were removed in, or prior to, 2002.



Both field and laboratory analytical results from this and previous investigations indicate a relatively small, concentrated, predominately groundwater only, gasoline-range hydrocarbon plume present beneath the Adeline Street parking lot. This groundwater hydrocarbon plume is localized and appears to have originated from the former USTs in the Adeline Street sidewalk (removed in 2002) and/or the fuel dispensers associated with these former USTs, apparently located near the entrance to the Site building at the north end of the Adeline Street parking lot.

Soil analytical data for the Site do not indicate a secondary soil hydrocarbon source present relative to this Site. Groundwater analytical data, on the other hand, do indicate a secondary high-concentration dissolved gasoline-range hydrocarbon source in the Adeline Street parking lot.

5.2 Nature and Extend of Impacts

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. Soils beneath the site consist primarily of clays and silts, with little or no sands or gravels (typically, we would prepare lithologic cross sections to evaluate sand and/or gravel layers; however, insufficient sand or gravel layers were identified beneath the Site to warrant cross sections).

This groundwater hydrocarbon plume probably extends beneath San Pablo Avenue; however, it does not extend as far as borings B-20, B-21, and B-22 on the southwest side of San Pablo Avenue. Note that it is possible that the groundwater hydrocarbon plume swings southward after reaching San Pablo Avenue (perhaps due to dewatering of the MacArthue Boulevard underpass, located south of the Site). However, given the preponderance of low-permeability silts and clays beneath the Site, it would seem more likely that the groundwater hydrocarbon plume is simply short in length.

5.3 Fate and Transport of Impacts

Based on the single round of groundwater elevations in newly-installed monitoring wells MW-1 through MW-4, it appears that the groundwater elevation gradient at the Site is relatively flat. The relatively flat hydraulic gradient beneath the Site has resulted in a localized soil and groundwater hydrocarbon plumes that have not migrated significantly in the more than 30 years since cessation of fuel use at the site prior to 1981. This is further evidenced by the relatively small but concentrated groundwater hydrocarbon plume, indicating significant migratory hindrance due to clay-dominated soils beneath the Site.

During recent drilling activities, utilities surveys were conducted to clear drilling locations. These surveys, together will USA utility markings, have indicated that: (1) There are no significant underground utilities in the former UST source area on the north side of the Adeline Street parking lot; (2) A shallow below ground storm drain runs east-to-west at shallow depth immediately south from the former UST source area; and (3) There are deeper storm drain and sewer pipes running north-south along the east side of San Pablo Avenue, west from the UST source area.



5.4 **Potential Environmental Receptors**

Given the limited lateral extent of soil and groundwater hydrocarbon impacts associated with this Site, the primarily potential environmental receptor that we foresee is potential human exposure to hydrocarbon vapors both outdoor and within the Site building. However, potential risks associated with the vapor exposure scenario are ameliorated somewhat by the lack of significant hydrocarbon impacts in soil and groundwater beneath the Site building itself and the relatively low Benzene concentrations in impacted soil and groundwater associated with this Site.

A sensitive receptors survey has not been conducted for this Site, and it may be necessary to conduct a confirmatory sensitive receptors survey in the future. However, based on the location of the Site and the identified soil and groundwater hydrocarbon impacts, we would not expect hydrocarbons associated with this site to pose a significant risk to any sensitive receptors in the Site area.

5.5 Investigative Data Gaps

It is possible that the groundwater hydrocarbon plume extends due south from the Site, beneath San Pablo Avenue, towards the MacArthur Boulevard underpass. Thus, one to two borings should be drilled in the east San Pablo Avenue sidewalk, east from recent offsite borings B-20, B-21, and B-22.

A sensitive receptors survey should be conducted prior to closure to confirm a lack of sensitive receptors relative to the Site.

6.0 WORKPLAN TO CONDUCT INTERIM REMEDIAL MEASURES

In order to move this site towards regulatory closure, we recommend conducting interim remedial measures (IRMs) in the Adeline Street parking lot to attempt to mitigate the elevated groundwater hydrocarbon impacts in the former UST source area. The reasons for this recommendation are twofold: (1) Mitigating groundwater hydrocarbon impacts beneath the Adeline Street parking lot provides the most feasible avenue of remediation, given the impracticability of conducting groundwater remediation beneath Adeline Street/San Pablo Avenue further southwest from the source area; and (2) Remediating groundwater hydrocarbon impacts to onsite occupants.

As part of the IRM installation activities, two additional soil borings, B-24 and B-25, will be drilled in the Adeline Street and San Pablo Avenue sidewalks to assess southerly migration of groundwater hydrocarbon impacts. The proposed locations for these borings are shown on Figure 5. These borings will be drilled and sampled using the procedures described in this report and in previously-approved workplans; hence, a workplan for these two additional borings is not provided herein.

Given the nature of the hydrocarbon impacts in the Adeline Street parking lot (primarily groundwater-only impact in relatively moderate to low permeability silts and sandy silts), our judgement is that the following remedial alternatives are not feasible for the Site: (1) Soil



excavation and groundwater pumping, followed by backfilling; (2) Air sparge/soil vapor extraction; (3) Groundwater pump and treat; and (4) Enhanced bioremediation via chemical injections (i.e. ORC injections). On the other hand, we believe that ozone injection has a reasonable chance of success at this site. Our experience with ozone injection is that it has a greater chance of overcoming low permeability soils than do other permeability-dependent remediation technologies, such as pump and treat or AS/SVE.

To test ozone injection as an IRM for the Site, we recommend conducting an ozone injection pilot test at the Site. Ozone injection has been shown to be effective in mitigating soil and groundwater hydrocarbon impacts in a relatively short time period, particularly where source removal efforts have already removed the worst hydrocarbon impacts.

The ozone injection pilot test will involve (1) The installation of approximately three smalldiameter injection wells to about 30 feet in depth; (2) The installation of below ground smalldiameter delivery tubing; (3) The operation of a mobile ozone generation unit on the site for approximately three months; and (4) Periodic monitoring of a wide range of parameters to measure remediation effectiveness and health and safety concerns.

Ozone (O_3) is a strong oxidant that can be used to destroy hydrocarbon contamination *in-situ*. Because it is a highly reactive gas and decomposes fairly rapidly, it is typically generated in close proximity to the treatment area and delivered to the subsurface through closely-spaced injection points/wells. Delivery concentrations and rates vary, however, because of the high reactivity of ozone and associated free radicals. In typical applications, air containing up to five percent ozone is injected into the groundwater where it dissolves in the water and reacts with subsurface organics, and ultimately decomposes to oxygen. Ozone can oxidize site contaminants directly or through formation of hydroxyl radicals (OH), strong nonspecific oxidants with an oxidation potential that is about 1.4 times that of ozone¹.

Once introduced into subsurface groundwater, ozone reacts with natural organic materials, natural inorganic materials (primarily oxidizable metals), and residual hydrocarbons. That portion of the ozone which reacts with natural organic and inorganic materials is unavailable for hydrocarbon oxidation.

Because ozone decomposes into oxygen, ozone is also effective in delivering dissolved oxygen to enhance subsurface bioremediation of petroleum-impacted areas. Ozone is ten times more soluble in water than is pure oxygen. Consequently groundwater becomes increasingly saturated with dissolved oxygen as the unstable ozone molecules decomposes into oxygen molecules. About one-half of dissolved ozone introduced into subsurface degrades to oxygen within approximately 20 minutes. The dissolved oxygen can then be used by indigenous aerobic hydrocarbon-degrading bacteria.

¹ United State Environmental Protection Agency. *How to Evaluate Alternative Cleanup Technologies for Underground Storage Tank Sites*", EPA 510-R-04-002, May 2004.



6.1 Ozone Injection Design Considerations

The ozone injection pilot test will be designed to assess not only remediation effectiveness, but also injection radius of influence, optimum ozone injection concentration and flow rate, and optimum system operation to minimize potential health and safety concerns.

The three ozone injection wells, OW-1, OW-2, and OW-3, will be sited at varying distances from existing groundwater monitoring wells in order to assess ozone radius of influence.

6.2 Ozone Injection Health and Safety Considerations

Ozone is one of the strongest known oxidants and is highly reactive in the subsurface environment (EPA, 2004). Possible undesired effects of ozone injection can include: (1) Degradation of underground metal objects (such as nearby metal utilities or tanks); (2) Oxidation of naturally occurring chromium (primarily chromate) to form hexavalent chromium, a known carcinogen; (3) Oxidation of naturally occurring bromide to form bromate, a known carcinogen; (4) Volatilization and upward migration of VOCs (i.e. air sparging); and (5) "Short circuiting" of ozone to the surface.

One of the reasons for conducting ozone injection on the Site itself, and not close to San Pablo Avenue is to limit any possible effect on deeper buried utility piping in San Pablo Avenue. Also, the depth of proposed injection will be at least 25 feet below ground surface, which is sufficiently deep enough to preclude VOC volatilization or ozone "short circuiting", provided that the injection wells are constructed properly.

Both hexavalent chromium and bromate can be oxidized in the presence of chromate and bromide, respectively. Bromate forms in a sequence of reactions whereby bromide ions react with dissolved ozone to form the intermediate product hypobromide, which then reacts with ozone to form bromate ². Limiting dissolved ozone by periodic injections (as is the case with the proposed injection pilot test), rather than continuous injections, can limit bromate formation by limiting the formation of hypobromide and subsequent oxidation. Groundwater samples will be analyzed for bromate and hexavalent chromium as part of the pilot test monitoring requirements.

Factors which would tend to minimize the possibility, or mitigate the effects, of VOC vapor generation include: (1) Injecting an ozone/air mixture with a relatively high ozone concentration (low air concentration); (2) Conducting ozone injection at relatively low flow rates (less than 2 scfm); (3) Conducting ozone injection intermittently for short durations, rather than continuously; (4) The ground surface overlying the pilot test area is completely concrete and asphalt paved, thus acting as a vapor barrier; and (5) There are no buildings overlying the injection area to trap possible relict VOCs. To monitor for possible VOC vapor generation, we will conduct field monitoring of well boxes and inside all nearby monitoring/extraction well casings immediately after uncapping for all nearby wells using a field organic vapor monitor (OVM).

²Bowman, Reid H., Ph.D., *HiPOx Ozone-Peroxide Advanced Oxidation System for Treatment of Trichloroethlene and Perchloroethylene Without Forming Bromate*, International Ozone Association Converence "2003 IOA World Conference", Las Vegas, Nevada, July 2003.



Factors which would tend to minimize the possibility, or mitigate the effects, of ozone "short circuiting" include: (1) Proper well installation to insure tight well seal; (2) Conducting ozone injection at relatively low flow rates (less than 2 scfm); (3) Conducting ozone injection intermittently for short durations, rather than continuously; (4) The ground surface overlying the pilot test area is completely concrete and asphalt paved, thus acting as a vapor barrier; (5) There are no buildings overlying the injection area to trap possible relict ozone vapors; and (6) Ozone is relatively unstable in air, and would tend to alter to oxygen in a relatively short time period. To monitor for ozone leakage or short circuiting, we will utilize a field ozone detector, and will check for ozone inside the ozone injection well boxes, at all above ground piping connections and at the ozone generator.

6.3 Installation of Ozone Injection Wells

6.3.1 Prefield Activities

Prior to beginning field activities, well permits for the three ozone injection wells will be obtained from the Alameda County Department of Public Works. In addition, proposed well locations will be marked with white paint, and Underground Services Alert (USA) will be notified at least 48 hours prior to drilling. Also, a private underground utility locator will clear proposed well locations. Prior to drilling, a Site Safety Plan will be prepared, and a tailgate safety meeting will be conducted with all site workers.

6.3.2 Location of Ozone Injection Wells

Proposed locations for the three injection wells (OW-1, OW-2, and OW-3) are shown on Figure 8. In order to assess ozone injection varying radii of influence and overall effectiveness, the three injection wells will be spaced in along the approximate median of the groundwater hydrocarbon plume in the Adeline Street parking lot.

6.3.3 Installation of Ozone Injection Wells

Injection wells will be installed using a combination direct-push and hollow stem auger equipment. For each well boring, direct-push equipment will be utilized to obtain continuos soil cores to total depth in each boring in a clear plastic acetate tube, nested inside a stainless steel core barrel. After each four-foot core barrel is brought to the surface and exposed, the core will be examined, logged, and field screened for hydrocarbons by a qualified geologist using sight, smell, and an organic vapor monitor (OVM). Soil cuttings generated during this investigation will be stored onsite in sealed DOT-approved containers.

Subsurface soils will be sampled at approximately five-foot intervals starting at five feet in depth, and including intervals with obvious hydrocarbon impacts. After the sample and core barrel are raised to the surface, each sample will be collected as follows: (1) The filled acetate tube will be exposed for visual examination; (2) The selected sample interval will be collected by cutting the sample and acetate plastic tubing to the desired length (typically about six inches); (3) The ends of the selected sample will be quickly wrapped with Teflon sheets or aluminum foil, capped with plastic end caps, labeled and wrapped tightly with tape; and (4) The sealed soil sample will be labeled and immediately placed in cold storage for transport to the analytical laboratory under formal chain-of-custody. All coring and sampling equipment will be



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. Cleaning rinseate will be contained onsite in a sealed drum pending laboratory results. At least three soil samples from each well boring will be analyzed for TPH-G and BTEX by a Statecertified analytical laboratory.

The three injection wells, OW-1, OW-2, and OW-3, will be installed using hollow stem auger equipment and will be constructed using 3/4-inch diameter Schedule 80 threaded PVC casing. The wells will be screened in high permeability soils, if present, based on results from the direct push borings. In general, the ozone injection wells will be installed according to the following specifications: (1) The well boring will be drilled to the desired depth (below 25 feet for in depth); (2) A one foot long microporous silica-bonded diffuser will be placed at the base of the well boring; (3) As the hollow stem augers are removed slowly, filter sand will be placed around the well casing to approximately two feet above the diffuser; (4) A three-foot bentonite seal will be placed above the filter sand using time release bentonite pellets; and (5) The remaining annulus will be grouted using a cement/sand slurry (bentonite less than 5 percent) to approximate surface grade. The top of the well will be enclosed in a traffic-rated locking box set in concrete slightly above grade. In order to attempt to assure a tight surface seal to discourage "short circuiting" of ozone to the surface during injection, the blank casing above the diffuser will be abraded slightly prior to placement using coarse sandpaper.

6.4 Installation of Ozone Injection System Components

The ozone generation trailer will be located within a fenced area adjacent to the northwest corner of the Site building. Delivery piping, consisting of 3/8-inch synthetic flexible tubing, will be run below ground from the Site wells to the ozone generation trailer.

The ozone generation equipment will consist of a 110-volt ozone injection unit that will include an oxygen concentrator, ozone generator, compressors, programmable logic controller (PLC), and valves. This unit will supply an ozone/air mixture under pressure to the three individual injection wells according to a set timed sequence. This unit will include an ozone detector with automatic shut down in the event of an ozone leak. Emergency phone numbers will be posted prominently in the remediation area.

6.5 **Operation of Remediation System**

The ozone injection remediation system will be operated continuously for approximately three months. During operation, the remediation system will be maintained and monitored regularly, beginning with bi-weekly visits for the first month, followed by weekly and semi-weekly visits as needed for the additional two-month duration. The remediation pilot test monitoring and maintenance schedule is summarized in the following table. During monitoring, possible VOC generation and ozone leakage will be monitored to maintain appropriate health and safety during the pilot test. Any surface ozone vapor or VOC vapor detections will result in problem assessment and careful "recalibration" to insure cessation of the particular detection.



OZONE REMEDIATION PILOT TEST MAINTENANCE AND MONITORING SCHEDULE Maz Glass Site									
Time Period Frequency Required Monitoring Required Maintenance									
Pre-Startup	• Once	 Groundwater TPH-G & BTEX monitoring in surrounding wells Field monitor for ozone, dissolved oxygen, and VOCs in surrounding groundwater/extraction wells 	 Check system operation Check for ozone leaks at injection well heads and manifold. 						
Initial System Startup	• Every 3-4 days for first 2-4 weeks	 Record system parameters Field monitor for ozone, dissolved oxygen, and VOCs in surrounding groundwater/extraction wells 	 Check system operation Check for ozone leaks at injection well heads and manifold. 						
Thereafter	• Weekly	 Field monitoring as above Monthly groundwater TPH-G & BTEX monitoring in surrounding wells 	• As above						

6.6 Remediation Effectiveness and Compliance Monitoring

In order to assess remediation effectiveness, existing site plume wells will be monitored monthly during and immediately following the three-month duration of the pilot test. Groundwater monitoring will be conducted in accordance with applicable sampling protocols, and will include recording groundwater depths, purging at least three well volumes, and sampling of groundwater for Dissolved Oxygen (field parameter) and TPH-G and BTEX analysis. In addition, groundwater samples from the first post-startup monthly monitoring will be analyzed for hexavalent chromium and bromate.

6.7 Report Preparation

Reports to be submitted to the ACEH will include: (1) A report documenting well installation activities and ozone injection system installation and startup, to be completed approximately one month after beginning of ozone injection remediation activities; and (2) A report summarizing results of the pilot test and, if warranted, recommending full-scale remediation.

6.8 **Project Schedule**

Subject to IRM workplan approval, the proposed ozone injection pilot test well and installation activities can be completed in approximately eight weeks.



TABLES



Table 1 SUMMARY OF SOIL AND GRAB GROUNDWATER ANALYTICAL RESULTS Former Maz Glass UST Site										
Sample	Sample	Sample	Soil1 concentrations in milligrams per kilogram (mg/kg) Groundwater concentrations in micrograms per liter (ug/l)							
Ъ	Matrix	Depth	TPH-G	В	Т	E	X	VOCs		
B-15-12.0	Soil	12.0 feet	< 0.50	< 0.005	< 0.005	< 0.005	< 0.010	NA		
B-15-W	Water	(21-24 ft)	<50	<0.50	<0.50	<0.50	<1.0	1,2-Dichloroethane: 1.4		
B-16-13.5	Soil	13.5 feet	< 0.50	< 0.005	< 0.005	< 0.005	< 0.010	NA		
B-16-W	Water	(24 ft)	<50	<0.50	<0.50	<0.50	<1.0	1,2-Dichloroethane: 1.0		
B-17-11.5	Soil	11.5	< 0.50	< 0.005	< 0.005	< 0.005	< 0.010	NA		
B-17-W	Water	(12 ft)	<50	<0.50	<0.50	<0.50	<1.0	All ND		
B-18-13.0	Soil	13.0	<0.5	< 0.005	< 0.005	< 0.005	< 0.010	NA		
B-18-19.0	Soil	19.0	1.4	< 0.005	0.013	< 0.005	< 0.010	NA		
B-18-23.0	Soil	23.0	0.630	< 0.005	< 0.005	< 0.005	< 0.010	NA		
B-18-W	Water	(13-24')	560	<0.50	<0.50	<0.50	<1.0	Sec-Butylbenzene: 1.6 Naphthalene: 2.5 1,2,4-Trimethylbenzene: 1.3		
B-19-17.5	Soil	17.5	< 0.50	< 0.005	< 0.005	< 0.005	< 0.010	NA		
B-19-W	Water	(13-24')	<50	<0.50	<0.50	<0.50	<1.0	All ND		
B-20-20.0	Soil	20.0	< 0.50	< 0.005	< 0.005	< 0.005	< 0.010	NA		
B-20-W	Water	(17-23')	<50	<0.50	<0.50	<0.50	<1.0	NA		
B-21-14.5	Soil	14.5	0.52	< 0.005	< 0.005	< 0.005	< 0.010	NA		
B-21-16.0	Soil	16.0	< 0.50	< 0.005	< 0.005	< 0.005	< 0.010	NA		
B-21-W	Water	(15-23')	<50	<0.50	<0.50	<0.50	<1.0	NA		
B-22-17.0	Soil	17.0	< 0.50	< 0.005	< 0.005	< 0.005	< 0.010	NA		
B-22-W	Water	(24-31')	<50	<0.50	<0.50	<0.50	<1.0	NA		
B-23-11.0	Soil	11.0	0.70	< 0.005	< 0.005	< 0.005	< 0.010	NA		
MW-1-10.5	Soil	10.5	< 0.50	< 0.005	< 0.005	< 0.005	< 0.010	NA		
MW-1-15.5	Soil	15.5	3.1	< 0.005	0.017	0.013	0.0291	NA		
MW-1-20.0	Soil	20.0	4.7	0.032	0.013	0.120	< 0.010	NA		
MW-1-23.0	Soil	23.0	2.8	0.025	0.0077	0.073	< 0.010	NA		
MW-2-4.5	Soil	4.5	< 0.50	< 0.005	< 0.005	< 0.005	< 0.010	NA		
MW-2-8.0	Soil	8.0	35	< 0.005	0.130	0.038	0.086	NA		
MW-2-17.5	Soil	17.5	69	0.140	0.140	0.220	0.148	NA		
MW-2-24.0	Soil	24.0	54	0.220	0.140	0.570	0.121	NA		
MW-3-8.0	Soil	8.0	25	< 0.005	0.100	< 0.005	0.101	NA		
MW-3-17.5	Soil	17.5	1.3	< 0.005	0.0076	0.011	< 0.010	NA		
MW-3-23.0	Soil	23.0	28	0.360	0.052	0.350	0.236	NA		

Table 1 SUMMARY OF SOIL AND GRAB GROUNDWATER ANALYTICAL RESULTS Former Maz Glass UST Site									
Sample	Sample	Sample	Soil1 concentrations in milligrams per kilogram (mg/kg) Groundwater concentrations in micrograms per liter (ug/l)						
ID ID	Matrix	Depth	TPH-G	В	Т	Е	X	VOCs	
MW-4-7.0	Soil	7.0	< 0.50	< 0.005	< 0.005	< 0.005	< 0.010	NA	
MW-4-12.0	Soil	12.0	1.3	< 0.005	0.0055	0.0081	< 0.010	NA	
MW-4-16.0	Soil	16.0	7.3	0.0069	0.028	0.034	0.0215	NA	
MW-4-23.0	Soil	23.0	22	0.026	0.064	0.062	0.085	NA	
Shallow Soil ESL 83 0.044 2.9 3.3 2.3 Various							Various		
Groundwater FSL 100 1.0 40 30 20 Various									

Table Notes:

TPH-G = Total petroleum hydrocarbons as gasoline 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) NA = Not analyzed for this analyte.

<0.5 = Not detected above the expressed detection level.

ND = Not detected above laboratory detection limits All ND = No detectable concentrations of full list of constituents 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, Interim Final, May 2008.

Table 2 SUMMARY OF GROUNDWATER ANALYTICAL RESULTS Former Maz Glass UST Site									
Sample	Sample	GW	GW		Concen	tration, micro	grams per lite	r (ug/l)	
ID	Date	Depth	Elev.	TPH-G	В	Т	E	X	MTBE
MW-1	05/18/12	8.42	30.54	17,000	1,300	29	770	260	<4.0
<38.96>									
MW-2	05/18/12	8.78	30.18	10,000	610	26	340	69	<4.0
<38.96>									
MW-3	05/18/12	8.61	30.23	13,000	1,400	36	350	378	<4.0
<38.84>									
MW-4	05/18/12	8.28	30.20	10,000	82	32	330	278	220
<38.48>									

TABLE NOTES

 $\begin{array}{l} GW \; Elev = Groundwater \; mean \; sea \; level \; elevation \\ TPH-G = Total \; Petroleum \; Hydrocarbons \; as \; gasoline \\ B = Benzene \end{array}$

T = Toluene

E = Ethylbenzene

X = Xylenes MTBE = Methyl Tertiary Butyl Ether <354.15> = Top of casing mean sea level elevation (Virgil Chavez Land Survey).

<0.50 = Not detected above the expressed value.

FIGURES



















APPENDIX A

DRILLING PERMITS


Alameda County Public Works Agency - Water Resources Well Permit

PUBLIC WORKS	399 Elmhurst Street Hayward, CA 94544-13 Telephone: (510)670-6633 Fax:(5	95 10)782-1939			
Application Approved	on: 04/25/2012 By jamesy	Permit Numbers: W2012-0274 to W2012-0277 Permits Valid from 05/01/2012 to 05/03/2012			
Application Id:	1334706620164 2800 San Babla Ava, Emanavilla, CA	City of Project Site: Emeryville			
Project Start Date: Assigned Inspector:	05/01/2012 Contact Vicky Hamlin at (510) 670-5443 or vicky	Completion Date: 05/03/2012 wh@acpwa.org			
Applicant:	Gribi - James Gribi	Phone: 707-748-7743			
Property Owner:	Ms. Elain Kirk, Marks Management Co.	Phone:			
Client:	** same as Property Owner **	94111			
	Receipt Number: WR2012-0118 Payer Name : Gribi	Total Due:\$1588.00Total Amount Paid:\$1588.00Paid By: CHECKPAID IN FULL			

Works Requesting Permits:

Well Construction-Monitoring-Monitoring - 4 Wells Driller: Gregg Drilling - Lic #: 485165 - Method: other

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2012- 0274	04/25/2012	07/30/2012	MW-1	8.00 in.	2.00 in.	21.00 ft	23.00 ft
W2012- 0275	04/25/2012	07/30/2012	MW-2	8.00 in.	2.00 in.	21.00 ft	23.00 ft
W2012- 0276	04/25/2012	07/30/2012	MW-3	8.00 in.	2.00 in.	21.00 ft	23.00 ft
W2012- 0277	04/25/2012	07/30/2012	MW-4	8.00 in.	2.00 in.	21.00 ft	23.00 ft

Specific Work Permit Conditions

1. 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.

2. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

3. 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.

Work Total: \$1588.00

Alameda County Public Works Agency - Water Resources Well Permit

4. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Include permit number and site map.

5. Applicant shall submit the copies of the approved encroachment permit to this office within 60 days.

6. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 or email to vickyh@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

7. Wells shall have a Christy box or similar structure with a locking cap or cover. Well(s) shall be kept locked at all times. Well(s) that become damaged by traffic or construction shall be repaired in a timely manner or destroyed immediately (through permit process). No well(s) shall be left in a manner to act as a conduit at any time.

8. Minimum surface seal thickness is two inches of cement grout placed by tremie.

9. Minimum seal (Neat Cement seal) depth for monitoring wells is 5 feet below ground surface(BGS) or the maximum depth practicable or 20 feet.

10. 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.

APPENDIX B

SOIL BORING LOGS



LOG OF SOIL BORING

BORING LOCATION: OUTSIDE, SOUTH OF SITE BUILDING

BORING TYPE: SOIL BORING

PROJECT NAME: FORMER MAZ GLASS SITE EMERYVILLE, CALIFORNIA

FIELD SCIENTIST: J. GRIB R. BET-YONAN



START DATE: 05/09/2012 COMPLETION DATE: 05/09/2012

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING BLOW COUNTS ⊊ - INITIAL Ţ - FINAL	USCS	LOG OF MATERIAL
						0.0 - 1.0 ft. Concrete & base gravel.
5.0 - - -						1.0 - 7.0 ft. Clay (CL) Dark brown, firm, dense, moist, no hydrocarbon odors or staining.
	B-15-12.0	12.0 FT.				7.0 - 10.5 ft. Clay (CL) Dark yellowish brown, gravelly clay, firm, dense, slightly moist, no hydrocarbon odors or staining.
- 15 - -						10.5 - 17.0 ft. Clay (CL) Dark yellowish brown, firm, dense, moist, no hydrocarbon odors or staining.
_ 20 _	B-15-21.0	21.0 FT.				17.0 - 24.0 ft. Clay (CL) Dark yellowish brown, soft to hard, dense, moist, no hydrocarbon odors or staining.
_						COLLECTED GRAB GROUNDWATER SAMPLE B-15-W AT 24 FT BGS, OPEN HOLE WITH SCREEN FROM 14 TO 24 BGS. FT & BLANK CASING TO SURFACE. TOTAL DEPTH: 24.0 FEET
25 -						

BORING LOCATION:

BORING TYPE: SOIL BORING

PROJECT NAME: FORMER MAZ GLASS SITE EMERYVILLE, CALIFORNIA

FIELD SCIENTIST: J. GRIB 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: 24.0 FEET GROUNDWATER DEPTH: NOT MEASURED

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING BLOW COUNTS ⊊ - INITIAL ₹ - FINAL	USCS		LOG OF MATERIAL	
_						0.0 - 1.0 ft.	Asphalt & base gravel.	
- - 5.0 - - -						1.0 - 8.0 ft.	Clay (CL) Very dark brown, firm, dense, moist, no hydrocarbon odors or staining.	
- 15 - - -	D 46 48 5	10.5 57				8.0 - 22.0 ft.	Clay (CL) Olive brown, firm, dense, moist, no hydrocarbon odors or staining.	
- 20 - -		10.3 F I.				22.0 - 24.0 ft.	Sandy Silt (ML)	
-					ML	0011 50755	no hydrocarbon odors or staining.	
25 -						OPEN HOLE TO SURFAC	O GRAB GROUNDWALER SAMPLE B-16-W AT 24 FT BGS, WITH SCREEN FROM 14 TO 24 BGS. FT & BLANK CASING E. TOTAL DEPTH: 24.0 FEET	

START DATE: 05/09/2012 COMPLETION DATE: 05/09/2012

BORING LOCATION:

BORING TYPE: SOIL BORING

PROJECT NAME: FORMER MAZ GLASS SITE EMERYVILLE, CALIFORNIA

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



START DATE: 05/09/2012

COMPLETION DATE: 05/09/2012

DRILLING METHOD: DIRECT PUSH BOREHOLE DIAMETER: 2.5 INCHES COMPLETION METHOD: BORING BORING TOTAL DEPTH: 12.0 FEET GROUNDWATER DEPTH: NOT MEASURED

DRILLING CONTRACTOR: GREGG DRILLING, INC.

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING BLOW COUNTS ⊊ - INITIAL Ţ - FINAL	USCS	LOG OF MATERIAL	
-						0.0 - 1.0 ft. Concrete & base gravel.	
5.0-						1.0 - 7.0 ft. Gravelly Clay (CL) Dark yellowish brown, firm, dry to some moisture, no hydrocarbon odors or staining.	
-						 7.0 - 8.0 ft. Silty Clay (CL) Dark yellowish brown, firm, dense, slightly moist, no hydrocarbon odors or staining. 8.0 - 9.5 ft. Sandy Clay (CL) Dark yellowish brown, firm, dense, wet, 	
10 -	B-17-11.5	11.5 FT.				no hydrocarbon odors or staining. 9.5 - 12.0 ft. Clay (CL) Dark yellowish brown, firm, dense, moist, no hydrocarbon odors or staining.	
						COLLECTED GRAB GROUNDWATER SAMPLE B-17-W AT 12 FT BGS, OPEN HOLE WITH SCREEN FROM 7 TO 12 BGS. FT & BLANK CASING TO SURFACE.	
-							
20 -							
-							
25 -							

BORING LOCATION:

BORING TYPE: SOIL BORING

PROJECT NAME: FORMER MAZ GLASS SITE EMERYVILLE, CALIFORNIA

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



START DATE: 05/09/2012

COMPLETION DATE: 05/09/2012

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING BLOW COUNTS ⊊ - INITIAL Ţ - FINAL	USCS	LOG OF MATERIAL
-						0.0 - 1.0 ft. Concrete & base gravel.
-					SC	1.0 - 4.0 ft. Backfill and loose sand.
 5.0- 						4.0 - 7.0 ft. Gravelly Clay (CL) Brown, firm, some moisture, no hydrocarbon odors or staining.
- - 10 -						7.0 - 11.0 ft. Sandy Clay (CL) Brown, firm, dry, no hydrocarbon odors or staining.
- - 15 - -	B-18-13.0	13.0 FT.				11.0 - 18.5 ft. Clay (CL) Yellowish brown, firm, dense, dry to moist, slight hydrocarbon odors or staining.
 20	B-18-19.0	19.0 FT.				 18.5 - 20.0 ft. Sandy Clay (CL) Yellowish brown, soft, moist, some gravel, no hydrocarbon odors or staining. 20.0 - 24.0 ft. Sandy Clay (CL) Yellowish brown, firm, dense, moist to wet, some gravel no hydrocarbon odors or staining.
 25 _ _	B-18-23.0	23.0 FT.		3.4		COLLECTED GRAB GROUNDWATER SAMPLE B-18-W AT 24 FT BGS, OPEN HOLE WITH SCREEN FROM 14 TO 24 BGS. FT & BLANK CASING TO SURFACE. TOTAL DEPTH: 24.0 FEET

BORING LOCATION:

BORING TYPE: SOIL BORING

PROJECT NAME: FORMER MAZ GLASS SITE EMERYVILLE, CALIFORNIA

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

GRIBI ASSOCIATES

START DATE: 05/10/2012

COMPLETION DATE: 05/10/2012

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING BLOW COUNTS ⊊ - INITIAL Ţ - FINAL	USCS	LOG OF MATERIAL	
						 0.0 - 1.0 ft. Concrete & base gravel. 1.0 - 8.0 ft. Clay (CL) Yellowish brown, firm, dense, low moisture, no hydrocarbon odors or staining 	
5.0 - - - -						8.0 - 13.5 ft. Sandy Clay (CL) Light yellowish brown, firm, dense, dry to low moisture, no hydrocarbon odors or staining.	
10 - - -						13.5 - 17.0 ft. Clay (CL)	
_ 15 = _						Light yellowish brown, firm, dense, moist, no hydrocarbon odors or staining.	
- - 20 - - -	B-18-17.5 B-19-19.0	17.5 FT. 19.0 FT.				17.0 - 24.0 ft. Clay (CL) Yellowish brown, soft w/some gravel, moist, no hydrocarbon odors or staining.	
_ 25 -						COLLECTED GRAB GROUNDWATER SAMPLE B-19-W AT 24 FT BGS, OPEN HOLE WITH SCREEN FROM 14 TO 24 BGS. FT & BLANK CASING TO SURFACE. TOTAL DEPTH: 24.0 FEET	

BORING LOCATION:

BORING TYPE: SOIL BORING

PROJECT NAME: FORMER MAZ GLASS SITE EMERYVILLE, CALIFORNIA

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

GRIBI ASSOCIATES 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: 17.55 FEET

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING BLOW COUNTS ⊊ - INITIAL Ţ - FINAL	USCS	LOG OF MATERIAL	
-						 0.0 - 1.0 ft. Asphalt & concrete. 1.0 - 7.0 ft. Sandy Clay (CL) Dark brown, firm, some gravel, moist, no hydrocarbon odors or staining 	
5.0 - - - -						7.0 - 12.0 ft. Clay (CL) Dark yellowish brown, firm, moist, no hydrocarbon odors or staining.	
10 - - - -						12.0 - 20.0 ft. Clay (CL) Dark yellowish brown, firm, some gravel, moist, no hydrocarbon odors or staining.	
15 - - - -							
20 - -	B-20-20.0	20.0 FT.				20.0 - 23.0 ft. Clayey Silt (CL) Dark brown, soft to hard, dense, moist to wet, no hydrocarbon odors or staining.	
_ 25 -						COLLECTED GRAB GROUNDWATER SAMPLE B-20-W AT 23 FT BGS, OPEN HOLE WITH SCREEN FROM 13 TO 23 BGS. FT & BLANK CASING TO SURFACE. TOTAL DEPTH: 23.0 FEET	

START DATE: 05/09/2012 COMPLETION DATE: 05/09/2012

BORING LOCATION:

BORING TYPE: SOIL BORING

PROJECT NAME: FORMER MAZ GLASS SITE EMERYVILLE, CALIFORNIA

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

GRIBI ASSOCIATES

START DATE: 05/09/2012

COMPLETION DATE: 05/09/2012

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING & COUNTS ♀ - INITIAL ♀ - FINAL	USCS	LOG OF MATERIAL	
-						0.0 - 1.0 ft. Asphalt & concrete.	
- 5.0 - - -					SC	1.0 - 10.5 ft. Clayey Sand (SC) Dark grayish brown, firm, dense, gravelly, some moisture, no hydrocarbon odors or staining (possible backfill)	
- 10 - - -						10.5 - 15.0 ft. Clay (CL) Grayish brown, firm, dense, moist, slight hydrocarbon odors	
15 - - - 20 -	B-21-14.5 B-21-16.0	14.5 FT.				15.0 - 22.0 ft. Gravelly Clay (CL) Yellowish brown, firm, moist, slight hydrocarbon odors.	
-					SC	22.0 - 23.0 ft. Clayey Sand (SC) Dark yellowish brown, silt, soft, moist, no hydrocarbon odors	
_ 25 -						COLLECTED GRAB GROUNDWATER SAMPLE B-21-W AT 23 FT BGS, OPEN HOLE WITH SCREEN FROM 13 TO 23 BGS. FT & BLANK CASING TO SURFACE. TOTAL DEPTH: 23.0 FEET	

BORING LOCATION:

BORING TYPE: SOIL BORING

PROJECT NAME: FORMER MAZ GLASS SITE EMERYVILLE, CALIFORNIA

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



START DATE: 05/09/2012

COMPLETION DATE: 05/09/2012

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING BLOW COUNTS ♀ - INITIAL ♀ - FINAL	USCS	LOG OF MATERIAL	
-						0.0 - 1.0 ft. Asphalt & concrete.	
_ 5.0 - _					SM	1.0 - 7.5 ft. Gravelly Silt (ML) Dark yellowish brown, firm, some moisture, no hydrocarbon odors or staining	
- - - - - - -						7.5 - 17.0 ft. Clay (CL) Grayish brown, firm, dense, moist, no hydrocarbon odors or staining	
15 - - - 20 -	B-22-17.0	17.0 FT.				 17.0 - 18.0 ft. Gravelly Clay (CL) Dark grayish brown, firm, no hydrocarbon odors or staining. 18.0 - 20.5 ft. Silty Clay (CL) Dark yellowish brown, soft to firm, moist, no hydrocarbon odors or staining. 	
- - - 25 -						20.5 - 26.0 ft. Silty Clay (CL) Dark yellowish brown, some gravel, soft, moist to wet, no hydrocarbon odors or staining.	

BORING LOCATION:

BORING TYPE: SOIL BORING

PROJECT NAME: FORMER MAZ GLASS SITE EMERYVILLE, CALIFORNIA

FIELD SCIENTIST: J. GRIB 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: 31.0 FEET GROUNDWATER DEPTH: 24.55 FEET

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING BLOW COUNTS ⊊ - INITIAL Ţ - FINAL	USCS	LOG OF MATERIAL	
 5.0 _						26.0 - 31.0 ft. Silty Clay (CL) Dark yellowish brown, some gravel, soft, moist, no hydrocarbon odors or staining.	
- - 10 -						COLLECTED GRAB GROUNDWATER SAMPLE B-22-W AT 31 FT BGS, OPEN HOLE WITH SCREEN FROM 11 TO 23 BGS. FT & BLANK CASING TO SURFACE. TOTAL DEPTH: 31.0 FEET	
-							
15 - - -							
- 20 - -							
25 -							



START DATE: 05/09/2012

COMPLETION DATE: 05/09/2012

BORING LOCATION:

BORING TYPE: SOIL BORING

PROJECT NAME: FORMER MAZ GLASS SITE EMERYVILLE, CALIFORNIA

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



START DATE: 05/09/2012

COMPLETION DATE: 05/09/2012

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING BLOW COUNTS ♀ - INITIAL ♀ - FINAL	USCS	LOG OF MATERIAL	
-						0.0 - 1.0 ft. Concrete & base gravel.	
- 5.0- - -					SP	1.0 - 9.5 ft. Sand (SP) Backfill sand, loose, wet, no hydrocarbon odor or staining.	
	B-23-11.0	11.0 FT.		8.3 PPM		9.5 - 12.0 ft. Clay (CL) Grayish brown, firm, moist, slight to moderate hydrocarbon odor.	
						12.0 - 20.0 ft. Unable to collect soil sample (No Recovery)	
20 -							
-						TOTAL DEPTH: 20.0 FEET	
25 -							

BORING LOCATION:

BORING TYPE: SOIL BORING

PROJECT NAME: FORMER MAZ GLASS SITE EMERYVILLE, CALIFORNIA

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

GRIBI ASSOCIATES

START DATE: 05/10/2012

COMPLETION DATE: 05/10/2012

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING BLOW COUNTS ♀ - INITIAL ♀ - FINAL	USCS	LOG OF MATERIAL				
-						 0.0 - 1.0 ft. Concrete & base gravel. 1.0 - 4.0 ft. Clay (CL) Brown, soft, moist, no hydrocarbon odors or staining 				
- 5.0 -						4.0 - 7.0 ft. Sandy Clay (CL) Yellowish brown, low moisture to dry, no hydrocarbon odors or staining.	A		D	C
-						7.0 - 10.0 ft. Clay (CL) Dark yellowish brown, firm, dense, low moisture, no hydrocarbon odors or staining.				
-	MW-1-10.5	10.5 FT.				 10.0 - 11.0 ft. Clay (CL) Reddish gray, firm, dense, low moisture, slight odor 11.0 - 12.0 ft. Clay (CL) Brown, very hard, some gravel, slightly moist, no odor. 12.0 - 14.0 ft. Clay (CL) Dark Yellowish brown, hard to soft, low moisture, no hydrocarbon odors. 	X	,		•
- 15 - -	MW-1-15.5	15.5 FT.		8.7 PPM		 14.0 - 16.0 ft. Clay (CL) Same as above except slight hydrocarbon odors. 16.0 - 20.0 ft. Clay (CL) Yellowish brown w/olive-gray streaks, hard to soft, dense, low moisture, moderate hydrocarbon odors. 	B			
_ 20 _	MW-1-20.0	20.0 FT.		10.5 PPM		20.0 - 23.0 ft. Clay (CL) Grayish brown w/olive-gray streaks, moist, moderate hydrocarbon odors.				
_ _ 25 -	MW-1-23.0	23.0 FT.		18.2 PPM		WELL SPECIFICATIONS A - WELL SCREEN DEPTH: 13.07 FT CASING TYPE: SCH 40 PVC B - WELL SCREEN LENGTH: 10.0 FT CASING SIZE: 2-INCH C - DEPTH TO TOP OF SAND: 11.0 FT SLOT SIZE: 0.020-INCH D - DEPTH BENTONITE SEAL: 9.0 FT SLOT SIZE: 0.020-INCH		,		

BORING LOCATION:

BORING TYPE: SOIL BORING

PROJECT NAME: FORMER MAZ GLASS SITE EMERYVILLE, CALIFORNIA

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



START DATE: 05/10/2012 COMPLETION DATE: 05/10/2012

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING BLOW COUNTS ⊊ - INITIAL Ţ - FINAL	USCS	LOG OF MATERIAL				
-						 0.0 - 1.0 ft. Concrete & base gravel. 1.0 - 5.0 ft. Clay (CL) Greenish gray, slightly firm, moist, moderate hydrocarbon odors. 				
- 5.0- -	MW-2-4.5	4.5 FT.				5.0 - 7.0 ft. Sandy Clay (CL) Greenish gray, moist to dry, moderate hydrocarbon odors.	A		DC	
_ _ 10 -	MW-2-8.0	8.0 FT.		211 PPM		7.0 - 8.0 ft. Clay (CL) Greenish gray, moist, firm, dense, moderate hydrocarbon odors.				
- - - 15 -						8.0 - 16.5 ft. Sandy Clay (CL) Greenish gray, moist to dry, firm, dense, moderate hydrocarbon odors.	X	,		
-	MW-2-17.5	17.5 FT.				16.5 - 20.0 ft. Clay (CL) Brown w/olive-gray streaks, moist, firm, dense, moderate hydrocarbon odors.	B			
20 - -						20.0 - 24.0 ft. Clay (CL) Brown, moist, soft to hard, slight hydrocarbon odors.				
25 -	MW-2-24.0	24.0 FT.				A - WELL SCREEN DEPTH: 13.16 FT CASING TYPE: SCH 40 PVC B - WELL SCREEN LENGTH: 10.0 FT CASING SIZE: 2-INCH C - DEPTH TO TOP OF SAND: 11.0 FT SLOT SIZE: 0.020-INCH D - DEPTH BENTONITE SEAL: 9.0 FT				-

BORING LOCATION:

BORING TYPE: SOIL BORING

PROJECT NAME: FORMER MAZ GLASS SITE EMERYVILLE, CALIFORNIA

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

GRIBI ASSOCIATES

START DATE: 05/10/2012 COMPLETION DATE: 05/10/2012

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING BLOW COUNTS ⊊ - INITIAL Ţ - FINAL	USCS	LOG OF MATERIAL			
- - 5.0 -						 0.0 - 1.0 ft. Concrete & base gravel. 1.0 - 7.0 ft. Sandy Clay (CL) Dark brown, moist, no hydrocarbon odors or staining. 			
-	MW-3-8.0	8.0 FT.		53 PPM		7.0 - 8.0 ft. Sandy Clay(CL) Grayish brown, moist, firm, moderate hydrocarbon odors.			
10 - - - -	MW-3-11.5	11.5 FT.				 12.0 ft. Clay (CL) Yellowish brown, moist, firm, dense, moderate hydrocarbon odors. 12.0 - 16.0 ft. Clay (CL) Yellowish brown w/olive-gray streak, moist to dry, firm, dense, moderate hydrocarbon odors. 	×		•
15 - - - -	MW-3-17.5	17.5 FT.				16.0 - 18.0 ft. No Recovery 18.0 - 20.0 ft. Sandy Clay (CL) Yellowish brown, moist, firm, moderate hydrocarbon odors.	В		
20 - - - 25 -	MW-3-24.0	23.0 FT.				20.0 - 23.0 ft. Sandy Clay (CL) Yellowish brown, moist, soft to hard, moderate hydrocarbon odors. <u>WELL SPECIFICATIONS</u> A - WELL SCREEN DEPTH: 13.15 FT CASING TYPE: SCH 40 PVC B - WELL SCREEN LENGTH: 10.0 FT CASING SIZE: 2-INCH C - DEPTH TO TOP OF SAND: 11.0 FT D - DEPTH BENTONITE SEAL: 9.0 FT			

BORING LOCATION:

BORING TYPE: SOIL BORING

PROJECT NAME: FORMER MAZ GLASS SITE EMERYVILLE, CALIFORNIA

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



START DATE: 05/10/2012

COMPLETION DATE: 05/10/2012

DEPTH SCALE (FEET)	SAMPLE NO.	SAMPLE DEPTH	INTERVAL	PID READING BLOW COUNTS ⊊ - INITIAL ⊊ - FINAL	USCS	LOG OF MATERIAL			
-						 0.0 - 1.0 ft. Concrete & base gravel. 1.0 - 5.0 ft. Sandy Clay (CL) Grayish brown, moist to dry, soft to hard, moderate hydrocarbon odors 			
	MW-4-7.0	7.0 FT.				5.0 - 7.0 ft. Sandy Clay(CL) Brown w/olive-gray streaks, moist, firm, moderate hydrocarbon odors.	A	D	- c
_ _ 10 _						7.0 - 12.0 ft. Clay(CL) Brown w/olive-grey streaks, moist, firm, moderate hydrocarbon odors.			-
- - 15 -	MW-4-12.0	12.0 FT.				12.0 - 16.0 ft. Clay (CL) Brown w/olive-gray streak, some gravel, firm, dense, moderate hydrocarbon odors.	X		
-	MW-4-16.0	16.0 FT.				16.0 - 20.0 ft. Clay (CL) Brown w/olive-gray streaks, moist, firm, dense, moderate hydrocarbon odors.	B		
20 – –	MM 2 24	23 0 ET				20.0 - 23.0 ft. Clay (CL) Dark yellowish brown w/olive-gray streaks, moist, soft to hard, moderate hydrocarbon odors.			
25 -	MVV-3-24.U	23.U F I.				A - WELL SCREEN DEPTH: 13.15 FT CASING TYPE: SCH 40 PVC B - WELL SCREEN LENGTH: 10.0 FT CASING SIZE: 2-INCH C - DEPTH TO TOP OF SAND: 11.0 FT SLOT SIZE: 0.020-INCH D - DEPTH BENTONITE SEAL: 9.0 FT			

APPENDIX C

SURVEYOR'S REPORT



Virgil Chavez Land Surveying

721 Tuolumne Street Vallejo, California 94590 (707) 553-2476 • Fax (707) 553-8698

June 5, 2012 Project No.: 2362-27

Jim Gribi Gribi Associates 1090 Adams Street, Suite K Benicia, CA 94510

Subject: Monitoring Well Survey 3800 San Pablo Ave. Emeryville, CA

Dear Jim:

This is to confirm that we have proceeded at your request to survey the monitoring wells at the above referenced location. The survey was completed on. May 30, 2012. The benchmark for this survey was a well monument on Powell St. approximately 80 feet west of the southbound direction of I-80. The latitude, longitude and coordinates are for top of casings and are based on the Ca. State Coord. Sys., Zone III (NAD83), Epoch 2006. Benchmark Elevation =13.88 feet (NAVD 88).

Latitude	Longitude	Northing	Easting	Elev.	Desc.
37.8291993	-122.2788355	2129274.57	6047951.15	39.47 38.96	RIM MW-1 TOC MW-1
37.8291503	-122.2788368	2129256.75	6047950.45	39.33 38.96 39.26	RIM MW-2 TOC MW-2 RIM MW-3
37.8291396	-122.2788992	2129253.18	6047932.34	38.84 38.96	TOC MW-3 RIM MW-4
37.8290612	-122.2789300	2129224.82	6047922.91	38.48	TOC MW-4



Sincerely,

Virgil D. Chavez, PLS 6323

APPENDIX D

LABORATORY DATA REPORTS AND CHAIN OF CUSTODY RECORDS



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

PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

24 May 2012

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 05/12/12 09:38. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Saniel & Chivy

Daniel Chavez Project Manager



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	05/24/12 15:27
	ANALYTICAL REPORT FOR SAMPLES	

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B-15-12.0	T120811-01	Soil	05/09/12 12:39	05/12/12 09:38
B-15-W	T120811-03	Water	05/09/12 15:48	05/12/12 09:38
B-16-13.5	T120811-04	Soil	05/09/12 13:51	05/12/12 09:38
B-16-W	T120811-05	Water	05/09/12 15:42	05/12/12 09:38
B-17-11.5	T120811-06	Soil	05/09/12 14:58	05/12/12 09:38
B-17-W	T120811-07	Water	05/09/12 15:08	05/12/12 09:38
B-18-13.0	T120811-08	Soil	05/09/12 15:58	05/12/12 09:38
B-18-19.0	T120811-09	Soil	05/09/12 16:02	05/12/12 09:38
B-18-23.0	T120811-10	Soil	05/09/12 16:05	05/12/12 09:38
B-18-W	T120811-11	Water	05/10/12 15:22	05/12/12 09:38
B-19-17.5	T120811-12	Soil	05/10/12 16:30	05/12/12 09:38
B-19-W	T120811-14	Water	05/11/12 08:32	05/12/12 09:38
B-20-20.0	T120811-15	Soil	05/09/12 10:10	05/12/12 09:38
B-20-W	T120811-16	Water	05/09/12 16:53	05/12/12 09:38
B-21-14.5	T120811-17	Soil	05/09/12 09:07	05/12/12 09:38
B-21-16.0	T120811-18	Soil	05/09/12 09:15	05/12/12 09:38
B-21-W	T120811-19	Water	05/09/12 17:02	05/12/12 09:38
B-22-17.0	T120811-20	Soil	05/09/12 07:44	05/12/12 09:38
B-22-W	T120811-21	Water	05/11/12 07:20	05/12/12 09:38
B-23-11.0	T120811-22	Soil	05/09/12 11:55	05/12/12 09:38
MW-1-10.5	T120811-23	Soil	05/10/12 08:37	05/12/12 09:38
MW-1-15.5	T120811-24	Soil	05/10/12 08:45	05/12/12 09:38
MW-1-20.0	T120811-25	Soil	05/10/12 08:50	05/12/12 09:38
MW-1-23.0	T120811-26	Soil	05/10/12 08:54	05/12/12 09:38
MW-2-4.5	T120811-27	Soil	05/10/12 08:18	05/12/12 09:38
MW-2-8.0	T120811-28	Soil	05/10/12 08:25	05/12/12 09:38

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.

Saniel & Chivy

Daniel Chavez, Project Manager

SunStar Laboratories PROVIDENCE QUALITY ANALYTICAL SERVICES	, Inc. Nationwide		2571 Lake F	2 Commercentre Dri orest, California 926. 949.297.5020 Pho 949.297.5027 Fr
Gribi Associates		Project: Maz Glass		
1090 Adam Street, Suite K	Project	Number: [none]		Reported:
Benicia CA, 94510	Project	Manager: Jim Gribi		05/24/12 15:27
	ANALYTICAL	REPORT FOR SAMPLES		
Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-2-17.5	T120811-29	Soil	05/10/12 10:40	05/12/12 09:38
MW-2-24.0	T120811-30	Soil	05/10/12 10:49	05/12/12 09:38
MW-3-8.0	T120811-31	Soil	05/10/12 10:54	05/12/12 09:38
MW-3-17.5	T120811-33	Soil	05/10/12 13:12	05/12/12 09:38
MW-3-23.0	T120811-34	Soil	05/10/12 13:15	05/12/12 09:38
MW-4-7.0	T120811-35	Soil	05/10/12 14:08	05/12/12 09:38
MW-4-12.0	T120811-36	Soil	05/10/12 14:20	05/12/12 09:38
MW-4-16.0	T120811-37	Soil	05/10/12 14:25	05/12/12 09:38
MW-4-23.0	T120811-38	Soil	05/10/12 14:35	05/12/12 09:38

SunStar Laboratories, PROVIDENCI QUALITY ANALYTICAL SERVICES	Inc.						257 Lake	712 Commercer Forest, Califor 949.297.50 949.297	ntre Driv nia 9263)20 Phor 7.5027 Fa
Gribi Associates		Proje	ect: Maz	Glass					
1090 Adam Street, Suite K		Project Numb	er: [none]				Reported	:
Benicia CA, 94510	1	Project Manag	ger: Jim C	ribi				05/24/12 15	:27
		B- T1208	15-12.0 811-01 (8	oil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		SunStar L	aborato	ries, Inc.					
C6-C12 (GRO)	ND	500	ug/kg	1	2051407	05/14/12	05/16/12	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		74.3 %	72.6	-146	"	"	"	"	
Volatile Organic Compounds by 1	EPA Method 802	1B							
Benzene	ND	5.0	ug/kg	1	2051409	05/14/12	05/16/12	EPA 8021B	
Foluene	ND	5.0							
Ethylbenzene	ND	5.0							
n,p-Xylene	ND	10							
-Xvlene	ND	5.0							

73.5-148

"

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S-GC

70.9 %

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Surrogate: 4-Bromofluorobenzene

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Daniel Chavez, Project Manager

SunStar Laboratories, PROVIDEND QUALITY ANALYTICAL SERVICES N	Inc.						257 Lake	712 Commerce Forest, Califor 949.297.5 949.297	ntre Drive rnia 92630 020 Phone 7.5027 Fax
Gribi Associates		Proje Project Numb	ct: Maz	Glass				Papartad	
Benicia CA, 94510	P	roject Manag	er: Jim C	Jiribi				05/24/12 15	5:27
		B	-15-W	(atom)					
		112081	1-03 (W	ater)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
-		SunStar La	aborato	ries, Inc.					
Volatile Organic Compounds by I	EPA Method 8260	В		,					
Bromobenzene	ND	1.0	ug/l	1	2051512	05/15/12	05/18/12	EPA 8260B	
Bromochloromethane	ND	1.0							
Bromodichloromethane	ND	1.0							
Bromoform	ND	1.0							
Bromomethane	ND	1.0							
n-Butylbenzene	ND	1.0							
sec-Butylbenzene	ND	1.0							
tert-Butylbenzene	ND	1.0							
Carbon tetrachloride	ND	0.50							
Chlorobenzene	ND	1.0							
Chloroethane	ND	1.0							
Chloroform	ND	1.0							
Chloromethane	ND	1.0							
2-Chlorotoluene	ND	1.0							
4-Chlorotoluene	ND	1.0							
Dibromochloromethane	ND	1.0							
1,2-Dibromo-3-chloropropane	ND	1.0							
1,2-Dibromoethane (EDB)	ND	1.0							
Dibromomethane	ND	1.0							
1,2-Dichlorobenzene	ND	1.0							
1,3-Dichlorobenzene	ND	1.0							
1,4-Dichlorobenzene	ND	1.0							
Dichlorodifluoromethane	ND	0.50							
1,1-Dichloroethane	ND	1.0							
1,2-Dichloroethane	1.4	0.50							
1,1-Dichloroethene	ND	1.0							
cis-1,2-Dichloroethene	ND	1.0							
trans-1,2-Dichloroethene	ND	1.0							
1,2-Dichloropropane	ND	1.0							
1,3-Dichloropropane	ND	1.0							
2,2-Dichloropropane	ND	1.0							
1,1-Dichloropropene	ND	1.0							

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Gribi Associates		Proje	ct: Maz	Glass					
1090 Adam Street, Suite K		Project Numb	er: [none]				Reported	:
Benicia CA, 94510		Project Manag	er: Jim C	ribi				05/24/12 15	:27
		B T12081	-15-W 1-03 (W	ater)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
•		SunStar La	aborato	ies, Inc.					
Volatile Organic Compounds by E	EPA Method 826	0B		,					
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	2051512	05/15/12	05/18/12	EPA 8260B	
rans-1,3-Dichloropropene	ND	0.50							
Hexachlorobutadiene	ND	1.0							
sopropylbenzene	ND	1.0							
o-Isopropyltoluene	ND	1.0							
Methylene chloride	ND	1.0							
Naphthalene	ND	1.0							
n-Propylbenzene	ND	1.0							
Styrene	ND	1.0							
,1,2,2-Tetrachloroethane	ND	1.0							
1,1,1,2-Tetrachloroethane	ND	1.0							
Fetrachloroethene	ND	1.0							
,2,3-Trichlorobenzene	ND	1.0							
.2.4-Trichlorobenzene	ND	1.0							
1,2-Trichloroethane	ND	1.0							
1,1.1-Trichloroethane	ND	1.0							
Trichloroethene	ND	1.0							
Frichlorofluoromethane	ND	1.0							
.2.3-Trichloropropane	ND	1.0							
.3.5-Trimethylbenzene	ND	1.0							
.2.4-Trimethylbenzene	ND	1.0							
Vinyl chloride	ND	1.0							
Benzene	ND	0.50							
Foluene	ND	0.50							
Ethylbenzene	ND	0.50							
n,p-Xylene	ND	1.0							
-Xylene	ND	0.50							
C6-C12 (GRO)	ND	50	"						
Surrogate: 4-Bromofluorobenzene		101 %	83.5	-119	"	"	"	"	
Surrogate: Dibromofluoromethane		130 %	81-	136	"	"	"	"	
Surrogate: Toluene-d8		89.2 %	88.8	-117	"	"		"	

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SunStar Laboratories, PROVIDENCI QUALITY ANALYTICAL STRVICTS N	Inc.						257 Lake	12 Commercer Forest, Califor 949.297.50 949.297	ntre Drive nia 92630 020 Phone 0.5027 Fax
Gribi Associates		Proje	ect: Maz	Glass					
1090 Adam Street, Suite K	I	Project Numb	er: [none]				Reported:	:
Benicia CA, 94510	Р	roject Manag	er: Jim C	ribi				05/24/12 15	:27
		B- T1208	16-13.5 311-04 (8	loil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbo C6-C12 (GRO)	ns by EPA 8015C ND	SunStar L	ug/kg	ries, Inc.	2051407	05/14/12	05/16/12	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		72.8 %	72.6	-146	"	"	"	"	
Volatile Organic Compounds by E	PA Method 8021	в							
Benzene	ND	5.0	ug/kg	1	2051409	05/14/12	05/16/12	EPA 8021B	
Foluene	ND	5.0							
	ND	5.0							
Ethylbenzene		10							
Ethylbenzene m,p-Xylene	ND	10							
Ethylbenzene m,p-Xylene o-Xylene	ND ND	10 5.0							

PROVIDENCI QUALITY ANALYTICAL SERVICES NAT	Inc.						257 Lake	12 Commercer Forest, Califor 949.297.50 949.297	ntre Drive rnia 92630 020 Phone 7.5027 Fax
Gribi Associates		Proje	ct: Maz	Glass					
1090 Adam Street, Suite K		Project Numb	er: Inone	1				Reported	:
Benicia CA, 94510	Benicia CA, 94510 Project Manager: Jim Gribi								5:27
		В	-16-W						
		T12081	1-05 (W	ater)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborato	ries, Inc.					
Volatile Organic Compounds by El	PA Method 826	60B							
Bromobenzene	ND	1.0	ug/l	1	2051512	05/15/12	05/18/12	EPA 8260B	
Bromochloromethane	ND	1.0							
Bromodichloromethane	ND	1.0							
Bromoform	ND	1.0							
Bromomethane	ND	1.0							
n-Butylbenzene	ND	1.0							
ec-Butylbenzene	ND	1.0							
ert-Butylbenzene	ND	1.0							
Carbon tetrachloride	ND	0.50							
Chlorobenzene	ND	1.0							
Chloroethane	ND	1.0							
Chloroform	ND	1.0							
Chloromethane	ND	1.0							
2-Chlorotoluene	ND	1.0							
4-Chlorotoluene	ND	1.0							
Dibromochloromethane	ND	1.0							
,2-Dibromo-3-chloropropane	ND	1.0							
,2-Dibromoethane (EDB)	ND	1.0							
Dibromomethane	ND	1.0							
,2-Dichlorobenzene	ND	1.0							
,3-Dichlorobenzene	ND	1.0							
,4-Dichlorobenzene	ND	1.0							
Dichlorodifluoromethane	ND	0.50							
1,1-Dichloroethane	ND	1.0							
1,2-Dichloroethane	1.0	0.50							
1,1-Dichloroethene	ND	1.0							
cis-1,2-Dichloroethene	ND	1.0							
ans-1,2-Dichloroethene	ND	1.0							
1,2-Dichloropropane	ND	1.0							
2 Di-hlanarana	ND	1.0							
2,2-Dichloropropane	ND	1.0		-			**		

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Daniel Chavez, Project Manager

SunStar Laboratories PROVIDENCE QUALITY ANALYTICAL SERVICES	, Inc.						257 Lake	712 Commercer Forest, Califor 949.297.50 949.297	ntre Drive mia 92630 020 Phone 7.5027 Fax
Gribi Associates		Proie	ct: Maz (Glass					
1090 Adam Street Suite K	F	Project Numb	er: Inone	1				Reported	
Benicia CA 94510	P	roject Manag	er: Iim G	ribi				05/24/12 15	.27
		B T12081	-16-W 1-05 (W	ater)					
		Banantina	1-05 (11						
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborato	ries, Inc.					
Volatile Organic Compounds by	EPA Method 8260	В							
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	2051512	05/15/12	05/18/12	EPA 8260B	
trans-1,3-Dichloropropene	ND	0.50		"					
Hexachlorobutadiene	ND	1.0	"						
Isopropylbenzene	ND	1.0	"						
p-Isopropyltoluene	ND	1.0							
Methylene chloride	ND	1.0							
Naphthalene	ND	1.0							
n-Propylbenzene	ND	1.0							
Styrene	ND	1.0							
1.1.2.2-Tetrachloroethane	ND	1.0							
1.1.1.2-Tetrachloroethane	ND	1.0							
Tetrachloroethene	ND	1.0							
1.2.3-Trichlorobenzene	ND	1.0							
1.2.4-Trichlorobenzene	ND	1.0							
1 1 2-Trichloroethane	ND	1.0							
1 1 1-Trichloroethane	ND	1.0							
Trichloroethene	ND	1.0							
Trichlorofluoromethane	ND	1.0							
1.2.3-Trichloropropane	ND	1.0							
1.3.5-Trimethylbenzene	ND	1.0							
1.2.4-Trimethylbenzene	ND	1.0							
Vinyl chloride	ND	1.0							
Benzene	ND	0.50							
Toluene	ND	0.50							
Ethylbenzene	ND	0.50							
m n-Xvlene	ND	1.0							
o-Xvlene	ND	0.50							
C6-C12 (GRO)	ND	50							
	nD	102.04	0.2 5	110	"	"	"		
Surrogue: 4-Bromojiuorobenzene		102 %	03.3	-119	"	"			
Surrogate: Dibromofluoromethane		134 %	81-	130					
Surrogate: Toluene-d8		88.2 %	88.8	-117			"	"	S-GC

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Laboratories, PROVIDENC QUALITY ANALYTICAL SERVICES N	Inc.						257 Lake	12 Commerce Forest, Califo 949.297.5 949.297	ntre D rnia 92 020 Pl 7.5027
Gribi Associates		Proje	ect: Maz	Glass					
1090 Adam Street, Suite K		Project Numb	er: [none]				Reported	l:
Benicia CA, 94510	1	Project Manag	ger: Jim C	iribi				05/24/12 15	5:27
		B- T1208	17-11.5 311-06 (S	ioil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	N
		SunStar L	aborato	ries, Inc.					
Purgeable Petroleum Hydrocarbo C6-C12 (GRO)	ns by EPA 80150 ND	500	ug/kg	1	2051407	05/14/12	05/16/12	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		75.2 %	72.6	-146	"	"	"	"	
Volatile Organic Compounds by I	PA Method 802	1B							
Benzene	ND	5.0	ug/kg	1	2051409	05/14/12	05/16/12	EPA 8021B	
Toluene	ND	5.0							
Ethylbenzene	ND	5.0						"	
Eurytoeneene									
m,p-Xylene	ND	10							
Edity is children									

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SunStar Laboratories, PROVIDEND QUALITY ANALYTICAL SERVICES N	Inc.						257 Lake	712 Commerce Forest, Califor 949.297.5 949.297	ntre Drive rnia 92630 020 Phone 7.5027 Fax
Gribi Associates 1090 Adam Street, Suite K		Proje Project Numb	ect: Maz	Glass				Reported	:
Benicia CA, 94510	Р	roject Manag	er: Jim C	Gribi				05/24/12 15	5:27
		n	17 33						
		Б T12081	-17-w 1-07 (W	ater)					
		Reporting							
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborato	ries, Inc.					
Volatile Organic Compounds by I	EPA Method 8260	в							
Bromobenzene	ND	1.0	ug/l	1	2051512	05/15/12	05/18/12	EPA 8260B	
Bromochloromethane	ND	1.0							
Bromodichloromethane	ND	1.0							
Bromoform	ND	1.0							
Bromomethane	ND	1.0							
n-Butylbenzene	ND	1.0							
sec-Butylbenzene	ND	1.0							
tert-Butylbenzene	ND	1.0							
Carbon tetrachloride	ND	0.50							
Chlorobenzene	ND	1.0							
Chloroethane	ND	1.0							
Chloroform	ND	1.0							
Chloromethane	ND	1.0							
2-Chlorotoluene	ND	1.0							
4-Chlorotoluene	ND	1.0							
Dibromochloromethane	ND	1.0							
1,2-Dibromo-3-chloropropane	ND	1.0							
1,2-Dibromoethane (EDB)	ND	1.0							
Dibromomethane	ND	1.0							
1,2-Dichlorobenzene	ND	1.0							
1,3-Dichlorobenzene	ND	1.0							
1,4-Dichlorobenzene	ND	1.0							
Dichlorodifluoromethane	ND	0.50							
1,1-Dichloroethane	ND	1.0							
1,2-Dichloroethane	ND	0.50							
1,1-Dichloroethene	ND	1.0							
cis-1,2-Dichloroethene	ND	1.0							
trans-1,2-Dichloroethene	ND	1.0							
1,2-Dichloropropane	ND	1.0							
1,3-Dichloropropane	ND	1.0							
2,2-Dichloropropane	ND	1.0							
1,1-Dichloropropene	ND	1.0		"					

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PROVIDENCI QUALITY ANALYTICAL STRAIGER N	Inc.						Lake Forest, California 926 949.297.5020 Pho 949.297.5027 F			
Gribi Associates		Proje	ect: Maz Gl	ass						
1090 Adam Street, Suite K		Project Numb	er: [none]					Reported	:	
Benicia CA, 94510	1	Project Manag	er: Jim Gri	bi				05/24/12 15	:27	
		B T12081	-17-W 1-07 (Wat	er)						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
		SunStar La	aboratorie	es, Inc.						
Volatile Organic Compounds by E	PA Method 826	0B								
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	2051512	05/15/12	05/18/12	EPA 8260B		
rans-1,3-Dichloropropene	ND	0.50								
Hexachlorobutadiene	ND	1.0								
Isopropylbenzene	ND	1.0					"			
p-Isopropyltoluene	ND	1.0					"			
Methylene chloride	ND	1.0								
Naphthalene	ND	1.0					"			
n-Propylbenzene	ND	1.0								
Styrene	ND	1.0					"			
1,1,2,2-Tetrachloroethane	ND	1.0					"			
1,1,1,2-Tetrachloroethane	ND	1.0								
Tetrachloroethene	ND	1.0					"			
1,2,3-Trichlorobenzene	ND	1.0					"			
1,2,4-Trichlorobenzene	ND	1.0					"			
1,1,2-Trichloroethane	ND	1.0								
1,1,1-Trichloroethane	ND	1.0					"			
Trichloroethene	ND	1.0					"			
Frichlorofluoromethane	ND	1.0					"			
1,2,3-Trichloropropane	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0					"			
Vinyl chloride	ND	1.0								
Benzene	ND	0.50								
Foluene	ND	0.50								
Ethylbenzene	ND	0.50								
n,p-Xylene	ND	1.0								
o-Xylene	ND	0.50					"			
C6-C12 (GRO)	ND	50					"			
Surrogate: 4-Bromofluorobenzene		106 %	83.5-1	19	"	"	"	"		
Surrogate: Dibromofluoromethane		137 %	81-13	16	"	"	"	"	S-GC	
Surrogate: Toluene-d8		91.2 %	88 8-1	17	"	"		"		

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SunStar Laboratories, PROVIDENC QUALITY ANALYTICAL SUBJECTS NOT	Inc.						257 Lake	12 Commerce Forest, Califo 949.297.5 949.29	entre Drive rnia 92630 6020 Phone 7.5027 Fax
Gribi Associates		Proje	ct: Maz	Glass					
1090 Adam Street, Suite K	F	Project Numb	er: [none]				Reported	1:
Benicia CA, 94510	P	roject Manag	er: Jim C	fribi				05/24/12 1	5:27
		B- T1208	18-13.0 11-08 (S	Soil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbon	s by EPA 8015C	SunStar La	aborato	ries, Inc.					
C6-C12 (GRO)	ND	500	ug/kg	1	2051407	05/14/12	05/16/12	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		72.8 %	72.6	-146	"	"		"	
Volatile Organic Compounds by El	PA Method 8021	В							
Benzene	ND	5.0	ug/kg	1	2051409	05/14/12	05/16/12	EPA 8021B	
Toluene	ND	5.0							
Ethylbenzene	ND	5.0		"					
m,p-Xylene	ND	10		"					
o-Xylene	ND	5.0							
Surrogate: 4-Bromofluorobenzene		69.4 %	73.5	-148	"	"	"	"	S-13

SunStar Laboratories, PROVIDENC QUALITY ANALYTICAL SURVICES N	Inc.						257 Lake	712 Commerce Forest, Califo 949.297.5 949.29	ntre Drive rnia 92630 020 Phone 7.5027 Fax
Gribi Associates		Proje	ect: Maz	Glass					
1090 Adam Street, Suite K		Project Numb	er: [none	:]				Reported	1:
Benicia CA, 94510	1	Project Manag	er: Jim C			05/24/12 1	5:27		
		B- T1208	18-19.0 11-09 (S	Soil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Denneshie Deterlation Herdenesch		SunStar L	aborato	ries, Inc.					
C6-C12 (GRO)	<u>1400 DIS DY EPA 80150</u>	500	ug/kg	1	2051407	05/14/12	05/16/12	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		81.7 %	72.6	6-146	"	"	"	"	
Volatile Organic Compounds by l	EPA Method 802	1B							
Benzene	ND	5.0	ug/kg	1	2051409	05/14/12	05/16/12	EPA 8021B	
Toluene	13	5.0	"						
Ethylbenzene	ND	5.0						"	
m,p-Xylene	ND	10							
o-Xylene	ND	5.0						"	
Surrogate: 4-Bromofluorobenzene		76.3 %	73.5	-148	"	"	"	"	

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SunStar Laboratories, PROVIDENCI QUALITY ANALYTICAL SERVICES N	Inc.						257 Lake	712 Commercer Forest, Califor 949.297.5(949.297	ntre Drive nia 92630)20 Phone .5027 Fax
Gribi Associates		Proje	ct: Maz (Glass					
1090 Adam Street, Suite K	P	roject Numb	er: [none]			Reported:		
Benicia CA, 94510		05/24/12 15	:27						
		B-	18-23.0						
		T1208	11-10 (S	oil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar L	aborator	ies, Inc.					
Purgeable Petroleum Hydrocarbo C6-C12 (GRO)	ons by EPA 8015C 630	500	ug/kg	1	2051407	05/14/12	05/16/12	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		78.5 %	72.6	-146	"	"	"	"	
Volatile Organic Compounds by I	EPA Method 8021	В							
Benzene	ND	5.0	ug/kg	1	2051409	05/14/12	05/16/12	EPA 8021B	
	ND	5.0	"						
Toluene		5.0							
Ethylbenzene	ND	5.0							
Toluene Ethylbenzene m,p-Xylene	ND ND	5.0 10							
Toluene Ethylbenzene m.p-Xylene o-Xylene	ND ND ND	5.0 10 5.0							

PROVIDENCI QUALITY ANALYTICAL SURVICES 1	, Inc.						257 Lake	712 Commerce: Forest, Califor 949.297.5 949.297	ntre Drive rnia 92630 020 Phone 7.5027 Fax
Gribi Associates		Proje	ct: Maz	Glass					
1090 Adam Street, Suite K		Project Numb	er: [none]				Reported	:
Benicia CA, 94510		Project Manag	er: Jim C	iribi				05/24/12 15	5:27
		В	-18-W						
[T12081	1-11 (W	ater)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborato	ries, Inc.					
Volatile Organic Compounds by	EPA Method 826	60B							
Bromobenzene	ND	1.0	ug/l	1	2051512	05/15/12	05/22/12	EPA 8260B	
Bromochloromethane	ND	1.0							
Bromodichloromethane	ND	1.0							
Bromoform	ND	1.0							
Bromomethane	ND	1.0							
n-Butylbenzene	ND	1.0							
sec-Butylbenzene	1.6	1.0							
tert-Butylbenzene	ND	1.0							
Carbon tetrachloride	ND	0.50							
Chlorobenzene	ND	1.0							
Chloroethane	ND	1.0							
Chloroform	ND	1.0							
Chloromethane	ND	1.0							
2-Chlorotoluene	ND	1.0							
4-Chlorotoluene	ND	1.0							
Dibromochloromethane	ND	1.0							
1,2-Dibromo-3-chloropropane	ND	1.0							
1,2-Dibromoethane (EDB)	ND	1.0							
Dibromomethane	ND	1.0							
1,2-Dichlorobenzene	ND	1.0							
1,3-Dichlorobenzene	ND	1.0							
1,4-Dichlorobenzene	ND	1.0							
Dichlorodifluoromethane	ND	0.50							
1,1-Dichloroethane	ND	1.0							
1,2-Dichloroethane	ND	0.50							
1,1-Dichloroethene	ND	1.0							
cis-1,2-Dichloroethene	ND	1.0							
trans-1,2-Dichloroethene	ND	1.0							
1,2-Dichloropropane	ND	1.0							
1,3-Dichloropropane	ND	1.0							
2,2-Dichloropropane	ND	1.0							
1,1-Dichloropropene	ND	1.0	"					"	

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Daniel Chavez, Project Manager

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SunStar Laboratories, PROVIDEND QUALITY ANALYTICAL SERVICES N	Inc.						257 Lake	12 Commerce Forest, Califor 949.297.5 949.297	ntre Drive rnia 92630 020 Phone 7.5027 Fax
Gribi Associates		Proie	ct: Maz	Glass					
1090 Adam Street Suite K	I	Project Numb	er: Inone	1				Reported	
Benicia CA, 94510	Р	roject Manag	er: Jim C	Gribi				05/24/12 15	5:27
		-							
	B-18-W T120811-11 (Water)								
		Paparting	(
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborato	ries, Inc.					
Volatile Organic Compounds by 1	EPA Method 8260	В							
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	2051512	05/15/12	05/22/12	EPA 8260B	
trans-1,3-Dichloropropene	ND	0.50							
Hexachlorobutadiene	ND	1.0							
Isopropylbenzene	ND	1.0							
p-Isopropyltoluene	ND	1.0							
Methylene chloride	ND	1.0							
Naphthalene	2.5	1.0							
n-Propylbenzene	ND	1.0							
Styrene	ND	1.0							
1,1,2,2-Tetrachloroethane	ND	1.0							
1,1,1,2-Tetrachloroethane	ND	1.0							
Tetrachloroethene	ND	1.0							
1,2,3-Trichlorobenzene	ND	1.0							
1,2,4-Trichlorobenzene	ND	1.0							
1,1,2-Trichloroethane	ND	1.0							
1,1,1-Trichloroethane	ND	1.0							
Trichloroethene	ND	1.0							
Trichlorofluoromethane	ND	1.0							
1,2,3-Trichloropropane	ND	1.0							
1,3,5-Trimethylbenzene	ND	1.0							
1,2,4-Trimethylbenzene	1.3	1.0							
Vinyl chloride	ND	1.0							
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)	560	50							
Surrogate: 4-Bromofluorobenzene		104 %	83.5	5-119	"	"	"	"	
Surrogate: Dibromofluoromethane		102 %	81-	-136	"	"	"	"	
Surrogate: Toluene-d8		97.9 %	88.8	8-117	"	"	"	"	

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SunStar Laboratories, PROVIDENCI QUALITY ANALYTICAL SERVICES N	Inc.						257 Lake	712 Commercer Forest, Califor 949.297.5(949.297	ntre Dri nia 926 020 Pho .5027 F
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 O	ribi				05/24/12 15	:27
		B- T1208	19-17.5 11-12 (S	oil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
		SunStar La	aborato	ries, Inc.					
C6-C12 (GRO)	ns by EPA 8015C ND	500	ug/kg	1	2051407	05/14/12	05/16/12	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		72.1 %	72.6	-146	"	"	"	"	S-1
Volatile Organic Compounds by l	EPA Method 8021	B							
Benzene	ND	5.0	ug/kg	1	2051409	05/14/12	05/16/12	EPA 8021B	
Toluene	ND	5.0							
Ethylbenzene	ND	5.0							
m,p-Xylene	ND	10							
o-Xylene	ND	5.0							

Surrogate: 4-Bromofluorobenzene 67.7 % 73.5-148 "

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SunStar Laboratories, PROVIDEND QUALITY ANALYTICAL SERVICES N	Inc.						257 Lake	712 Commerce Forest, Califor 949.297.5 949.297	ntre Drive rnia 92630 020 Phone 7.5027 Fax	
Gribi Associates		Proie	ct: Maz	Glass						
1090 Adam Street, Suite K	F	Project Numb	er: Inone	el			Reported:			
Benicia CA, 94510	Project Manager: Jim Gribi									
		B T12081	-19-W 1-14 (W	ater)						
		Depending	(
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
		SunStar La	aborato	ries, Inc.						
Volatile Organic Compounds by I	EPA Method 8260	В								
Bromobenzene	ND	1.0	ug/l	1	2051512	05/15/12	05/19/12	EPA 8260B		
Bromochloromethane	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	1.0								
n-Butylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
tert-Butylbenzene	ND	1.0								
Carbon tetrachloride	ND	0.50								
Chlorobenzene	ND	1.0								
Chloroethane	ND	1.0								
Chloroform	ND	1.0								
Chloromethane	ND	1.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
Dibromochloromethane	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	1.0								
1.2-Dibromoethane (EDB)	ND	1.0								
Dibromomethane	ND	1.0								
1.2-Dichlorobenzene	ND	1.0								
1.3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	0.50								
1,1-Dichloroethane	ND	1.0								
1,2-Dichloroethane	ND	0.50								
1,1-Dichloroethene	ND	1.0								
cis-1,2-Dichloroethene	ND	1.0								
trans-1,2-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	1.0								
1,1-Dichloropropene	ND	1.0								

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PROVIDENCI QUALITY ANALYTICAL STREVICES N	Inc.						Lake	Forest, Califor 949.297.5(949.297	nia 9263 020 Phon 7.5027 Fa
Gribi Associates		Proje	ct: Maz C	Blass					
1090 Adam Street, Suite K		Project Numb	er: [none]]				Reported	:
Benicia CA, 94510	1	Project Manag	er: Jim G	ribi				05/24/12 15	:27
		B T12081	-19-W 1-14 (Wa	ater)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborator	ies, Inc.					
Volatile Organic Compounds by E	PA Method 826)B							
cis-1,3-Dichloropropene	ND	0.50	ug/l	1	2051512	05/15/12	05/19/12	EPA 8260B	
rans-1,3-Dichloropropene	ND	0.50							
Hexachlorobutadiene	ND	1.0							
sopropylbenzene	ND	1.0							
-Isopropyltoluene	ND	1.0							
Methylene chloride	ND	1.0							
Naphthalene	ND	1.0							
n-Propylbenzene	ND	1.0							
Styrene	ND	1.0							
1,1,2,2-Tetrachloroethane	ND	1.0							
1,1,1,2-Tetrachloroethane	ND	1.0							
Tetrachloroethene	ND	1.0							
1,2,3-Trichlorobenzene	ND	1.0							
1,2,4-Trichlorobenzene	ND	1.0							
1,1,2-Trichloroethane	ND	1.0							
1,1,1-Trichloroethane	ND	1.0							
Frichloroethene	ND	1.0							
Frichlorofluoromethane	ND	1.0							
1,2,3-Trichloropropane	ND	1.0							
1,3,5-Trimethylbenzene	ND	1.0							
,2,4-Trimethylbenzene	ND	1.0							
Vinyl chloride	ND	1.0							
Benzene	ND	0.50							
Foluene	ND	0.50							
Ethylbenzene	ND	0.50							
n,p-Xylene	ND	1.0					"		
o-Xylene	ND	0.50					"		
C6-C12 (GRO)	ND	50						"	
Surrogate: 4-Bromofluorobenzene		105 %	83.5	-119	"	"	"	"	
Surrogate: Dibromofluoromethane		113 %	81-	136	"	"	"	"	
Surrogate: Toluene-d8		94.4 %	88.8	-117	"	"	"	"	

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Daniel Chavez, Project Manager

SunStar Laboratories, PROVIDEND QUALITY ANALYTICAL SERVICES NAT	Inc.						257 Lake	12 Commerce Forest, Califo 949.297.5 949.29	entre Drive rnia 92630 020 Phone 7.5027 Fax	
Gribi Associates		Proje	ct: Maz	Glass						
1090 Adam Street, Suite K	F	roject Numb	er: [none]				Reported	1:	
Benicia CA, 94510	enicia CA, 94510 Project Manager: Jim Gribi									
		B- T1208	20-20.0 11-15 (S	soil)						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
Purgeable Petroleum Hydrocarbon	s by EPA 8015C	SunStar La	aborato	ries, Inc.						
C6-C12 (GRO)	ND	500	ug/kg	1	2051407	05/14/12	05/16/12	EPA 8015C		
Surrogate: 4-Bromofluorobenzene		73.6 %	72.6	-146	"	"	"	"		
Volatile Organic Compounds by El	PA Method 8021	в								
Benzene	ND	5.0	ug/kg	1	2051409	05/14/12	05/16/12	EPA 8021B		
Toluene	ND	5.0								
Ethylbenzene	ND	5.0								
m,p-Xylene	ND	10								
o-Xylene	ND	5.0								
Surrogate: 4-Bromofluorobenzene		69.2 %	73.5	-148	"	"	"	"	S-13	

SunStar Laboratories, PROVIDENC QUALITY ANALYTICAL SURVICES N	ATTONWIDE						257 Lake	12 Commercer Forest, Califor 949.297.50 949.297	ntre Drive rnia 92630 020 Phone 7.5027 Fax
Gribi Associates		Proje	ct: Maz	Glass					
1090 Adam Street, Suite K	I	Project Numb	er: [none	:]				Reported	:
Benicia CA, 94510	P	roject Manag			05/24/12 15	5:27			
		B T12081	-20-W 1-16 (W	ater)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
urgaalla Patroloum Hydrogarha	one by FDA 2015C	SunStar La	aborato	ries, Inc.					
C6-C12 (GRO)	ND	50	ug/l	1	2051413	05/14/12	05/15/12	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		124 %	72.6	5-146	"	"	"	"	
Volatile Organic Compounds by l	EPA Method 8021	в							
Benzene	ND	1.0	ug/l	1	2051414	05/14/12	05/15/12	EPA 8021B	
Foluene	ND	1.0							
Sthylbenzene	ND	1.0							
n,p-Xylene	ND	2.0							
-Xylene	ND	1.0							

119 %

73.5-148

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Surrogate: 4-Bromofluorobenzene

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Daniel Chavez, Project Manager

SunStar Laboratories, PROVIDENT QUALITY ANALYTICAL SUBJECTS NO	Inc.						257 Lake	712 Commerce Forest, Califo 949.297.5 949.297	entre Drive rnia 92630 020 Phone 7.5027 Fax
Gribi Associates		Proje	ct: Maz	Glass					
1090 Adam Street, Suite K	1	Project Numb	er: [none]				Reported	l:
Benicia CA, 94510	F	roject Manag	er: Jim C	iribi				05/24/12 13	5:27
		B- T1208	21-14.5 11-17 (S	Soil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborato	ries, Inc.					
Purgeable Petroleum Hydrocarbo	ns by EPA 80150	2							
C6-C12 (GRO)	520	500	ug/kg	1	2051407	05/14/12	05/16/12	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		78.5 %	72.6	-146	"	"	"	"	
Volatile Organic Compounds by E	PA Method 8021	B							
Benzene	ND	5.0	ug/kg	1	2051409	05/14/12	05/16/12	EPA 8021B	
Toluene	ND	5.0							
Ethylbenzene	ND	5.0							
m,p-Xylene	ND	10							
o-Xylene	ND	5.0							
Surrogate: 4-Bromofluorobenzene		72.4 %	73.5	-148	"	"	"	"	S-GC

SunStar Laboratories, PROVIDENC QUALITY ANALYTICAL SURVICES N	Inc.						257 Lake	12 Commercer Forest, Califor 949.297.50 949.297	ntre Driv mia 9263 020 Phon 0.5027 Fa:
Gribi Associates		Proje	ect: Maz	Glass					
1090 Adam Street, Suite K		Project Numb	er: [none	:]				Reported	:
Benicia CA, 94510		05/24/12 15	:27						
		B- T1208	21-16.0 11-18 (S	Soil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
	L ED4 0015	SunStar L	aborato	ries, Inc.					
Coll College C	ns by EPA 80150 ND	500	ug/kg	1	2051407	05/14/12	05/16/12	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		73.5 %	72.6	6-146	"	"	"	"	
Volatile Organic Compounds by I	EPA Method 802	1B							
Benzene	ND	5.0	ug/kg	1	2051409	05/14/12	05/16/12	EPA 8021B	
Foluene	ND	5.0							
Ethylbenzene	ND	5.0							
n,p-Xylene	ND	10							
o-Xylene	ND	5.0							
Surrogate: 4-Bromofluorobenzene		70.5 %	73.5	-148	"	"	"	"	S-GC

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SunStar Laboratories, PROVIDENC QUALITY ANALYTICAL SURVICES N	Inc.						257 Lake	12 Commerce Forest, Califo 949.297.5 949.29	entre Drive rnia 92630 020 Phone 7.5027 Fax
Gribi Associates		Proje	ct: Maz	Glass					
1090 Adam Street, Suite K		Project Numb	er: [none	e]				Reported	1:
Benicia CA, 94510	I	Project Manag	er: Jim C	Gribi				05/24/12 1	5:27
		B T12081	-21-W 1-19 (W	/ater)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborato	ries, Inc.					
Purgeable Petroleum Hydrocarbo	ns by EPA 80150	2							
C6-C12 (GRO)	ND	50	ug/l	1	2051413	05/14/12	05/15/12	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		122 %	72.0	5-146	"	"	"	"	
Volatile Organic Compounds by E	PA Method 802	IB							
Benzene	ND	1.0	ug/l	1	2051414	05/14/12	05/15/12	EPA 8021B	
Toluene	ND	1.0							
Ethylbenzene	ND	1.0							
m,p-Xylene	ND	2.0							
o-Xylene	ND	1.0		"				"	
Surrogate: 4-Bromofluorobenzene		116 %	73.5	5-148	"	"	"	"	

PROVIDENC QUALITY ANALYTICAL SERVICES N	Inc.						257 Lake	12 Commercer Forest, Califor 949.297.50 949.297	ntre Driv nia 9263 020 Phon .5027 Fa
Gribi Associates		Proje	ect: Maz	Glass					
1090 Adam Street, Suite K		Project Numb	er: [none	:]			Reported:		
Benicia CA, 94510	1		05/24/12 15	:27					
		B- T1208	22-17.0 311-20 (S	Soil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		SunStar L	aborato	ries, Inc.					
<u>Purgeable Petroleum Hydrocarbo</u> 26-C12 (GRO)	ons by EPA 80150 ND	500	ug/kg	1	2051407	05/14/12	05/16/12	EPA 8015C	
urrogate: 4-Bromofluorobenzene		75.8 %	72.6	6-146	"	"	"	"	
Volatile Organic Compounds by l	EPA Method 802	1B							
Benzene	ND	5.0	ug/kg	1	2051409	05/14/12	05/16/12	EPA 8021B	
oluene	ND	5.0							
Ethylbenzene	ND	5.0							
n,p-Xylene	ND	10							
o-Xylene	ND	5.0							
Jurrogate: 4-Bromofluorobenzene		72.7 %	73.5	-148	"	"	"	"	S-G

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SunStar Laboratories, PROVIDENC QUALITY ANALYTICAL SERVICES NO	Inc.						257 Lake	12 Commerce Forest, Califo 949.297.5 949.29	entre Drive rnia 92630 5020 Phone 7.5027 Fax	
Gribi Associates		Proje	ct: Maz	Glass						
1090 Adam Street, Suite K	I	Project Numb	er: [none	-]				Reporte	1:	
Benicia CA, 94510	Р	roject Manag	er: Jim C	Gribi				05/24/12 15:27		
		B T12081	-22-W 1-21 (W	'ater)						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
		SunStar La	borato	ries, Inc.						
Purgeable Petroleum Hydrocarbon	s by EPA 8015C	:								
C6-C12 (GRO)	ND	50	ug/l	1	2051413	05/14/12	05/15/12	EPA 8015C		
Surrogate: 4-Bromofluorobenzene		122 %	72.0	<i>5-146</i>	"	"	"	"		
Volatile Organic Compounds by E	PA Method 8021	в								
Benzene	ND	1.0	ug/l	1	2051414	05/14/12	05/15/12	EPA 8021B		
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
o-Xylene	ND	1.0								
Surrogate: 4-Bromofluorobenzene		117 %	73.5	-148	"	"	"	"		

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SunStar Laboratories, PROVIDENC QUALITY ANALYTICAL SURVICES N	Inc.						257 Lake	12 Commercer Forest, Califor 949.297.50 949.297	ntre Driv mia 9263 020 Phon 7.5027 Fa	
Gribi Associates		Proje	ct: Maz	Glass						
1090 Adam Street, Suite K		Project Numb	er: [none	e]				Reported:		
Benicia CA, 94510	icia CA, 94510 Project Manager: Jim Gribi									
		B-	23-11.0)						
		11208	11-22 (3	5011)						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note	
		SunStar L	aborato	ries, Inc.						
Purgeable Petroleum Hydrocarbo	ns by EPA 8015	с								
C6-C12 (GRO)	700	500	ug/kg	1	2051407	05/14/12	05/16/12	EPA 8015C		
urrogate: 4-Bromofluorobenzene		86.4 %	72.6	5-146	"	"	"	"		
Volatile Organic Compounds by I	EPA Method 802	21B								
Benzene	ND	5.0	ug/kg	1	2051409	05/14/12	05/16/12	EPA 8021B		
Toluene	ND	5.0								
Sthylbenzene	ND	5.0								
n,p-Xylene	ND	10								
o-Xylene	ND	5.0					"			
Surrogate: 4-Bromofluorobenzene		82.0 %	73.5	5-148	"	"	"	"		

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Daniel Chavez, Project Manager

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Daniel Chavez, Project Manager

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SunStar Laboratories, PROVIDENC QUALITY ANALYTICAL SERVICES NA	Inc.						257 Lake	12 Commerce Forest, Califo 949.297.5 949.29	entre Drive rnia 92630 5020 Phone 7.5027 Fax
Gribi Associates		Proje	ct: Maz	Glass					
1090 Adam Street, Suite K	1	Project Numb	er: [none	:]				Reported	1:
Benicia CA, 94510	P	roject Manag	er: Jim C	Gribi				05/24/12 1	5:27
		MV T1208	V-1-10. 11-23 (S	5 Soil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborato	ries, Inc.					
Purgeable Petroleum Hydrocarbor	ns by EPA 8015C	:							
C6-C12 (GRO)	ND	500	ug/kg	1	2051407	05/14/12	05/16/12	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		76.0 %	72.6	5-146	"	"	"	"	
Volatile Organic Compounds by E	PA Method 8021	в							
Benzene	ND	5.0	ug/kg	1	2051409	05/14/12	05/16/12	EPA 8021B	
Toluene	ND	5.0							
Ethylbenzene	ND	5.0							
m,p-Xylene	ND	10							
o-Xylene	ND	5.0							
Surrogate: 4-Bromofluorobenzene		72.8 %	73.5	-148	"	"	"	"	S-GC

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SunStar Laboratories, Providenci Quality Analytical Services N	Inc.						257 Lake	12 Commerce Forest, Califo 949.297.5 949.29'	ntre Driv rnia 9263 020 Phon 7.5027 Fa
Gribi Associates		Proje	ect: Maz	Glass					
1090 Adam Street, Suite K		Project Numb	er: [none]				Reported	l:
Benicia CA, 94510	I	Project Manag	er: Jim C	iribi				05/24/12 13	5:27
		MV T1208	W-1-15. 311-24 (S	5 Soil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
Purgooblo Potroloum Hydrocorbo	ong by EDA 20150	SunStar L	aborato	ries, Inc.					
C6-C12 (GRO)	3100	500	ug/kg	1	2051407	05/14/12	05/16/12	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		101 %	72.6	-146	"	"	"	"	
Volatile Organic Compounds by l	EPA Method 802	B							
Benzene	ND	5.0	ug/kg	1	2051409	05/14/12	05/16/12	EPA 8021B	
Foluene	17	5.0	"	-					
Ethylbenzene	13	5.0							
m,p-Xylene	22	10							
o-Xylene	7.1	5.0					"	"	
Surrogate: 4-Bromofluorobenzene		80.8 %	73.5	-148	"	"	"	"	

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SunStar Laboratories, PROVIDENCE QUALITY ANALYTICAL STRUCTS N	Inc.						257 Lake	12 Commerce Forest, Califo 949.297.5 949.29	entre Drive rnia 92630 5020 Phone 7.5027 Fax
Gribi Associates		Proje	ct: Maz	Glass					
1090 Adam Street, Suite K		Project Numb	er: [none	-]				Reporte	1:
Benicia CA, 94510	I	Project Manag	er: Jim C	Gribi				05/24/12 1	5:27
		MV T1208	V-1-20. 11-25 (S	0 Soil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Develop Defections II advector to	FDA 90150	SunStar L	aborato	ries, Inc.					
<u>Furgeable Petroleum Hydrocarbo</u> C6-C12 (GRO)	<u>ns by EPA 80150</u> 4700	500	110/ko	1	2051407	05/14/12	05/16/12	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		85.3 %	72.6	5-146	"	"	"	"	
Volatile Organic Compounds by H	PA Method 802	IB							
Benzene	32	5.0	ug/kg	1	2051409	05/14/12	05/16/12	EPA 8021B	
Toluene	13	5.0							
Ethylbenzene	120	5.0							
m,p-Xylene	ND	10							
o-Xylene	ND	5.0						"	
Surrogate: 4-Bromofluorobenzene		81.4 %	73.5	5-148	"	"	"	"	

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SunStar Laboratories, PROVIDENC QUALITY ANALYTICAL SURVICES N	Inc.						257 Lake	712 Commerce Forest, Califo 949.297.5 949.29	entre Drive rnia 92630 020 Phone 7.5027 Fax	
Gribi Associates	Project: Maz Glass									
1090 Adam Street, Suite K	Project Number: [none]							Reported:		
Benicia CA, 94510	Project Manager: Jim Gribi							05/24/12 15:27		
		MV T1208	W-1-23. 811-26 (S	0 Soil)						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes	
Purgeable Petroleum Hydrocarbo	ons by EPA 80150	SunStar La	aborato	ries, Inc.						
C6-C12 (GRO)	2800	500	ug/kg	1	2051407	05/14/12	05/16/12	EPA 8015C		
Surrogate: 4-Bromofluorobenzene		82.9 %	72.6	-146	"	"	"	п		
Volatile Organic Compounds by l	EPA Method 802	IB								
Benzene	25	5.0	ug/kg	1	2051409	05/14/12	05/16/12	EPA 8021B		
Toluene	7.7	5.0								
Ethylbenzene	73	5.0								
m,p-Xylene	ND	10								
o-Xylene	ND	5.0						"		
Surrogate: 4-Bromofluorobenzene		79.3 %	73.5-148		"	"	"	"		

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Gribi Associates		Proje	ct: Maz	Glass					
1090 Adam Street, Suite K	I	Project Numb	er: [none]				Reported	1:
Benicia CA, 94510	Р	roject Manag	er: Jim C	dribi				05/24/12 1	5:27
		M T1208	W-2-4.5 11-27 (S	; Soil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborato	ries, Inc.					
Purgeable Petroleum Hydrocarbon	s by EPA 8015C ND	500	ug/kg	1	2051407	05/14/12	05/16/12	EPA 8015C	
Surrogate: 4-Bromofluorobenzene	nD	73.0 %	72.6	-146	"	"	"	"	
Volatile Organic Compounds by El	PA Method 8021	в							
Benzene	ND	5.0	ug/kg	1	2051409	05/14/12	05/16/12	EPA 8021B	
Toluene	ND	5.0							
Ethylbenzene	ND	5.0		"					
m,p-Xylene	ND	10							
o-Xylene	ND	5.0		"					
Surrogate: 4-Bromofluorobenzene		68.9 %	73.5	-148	"	"	"	"	S-13

SunStar Laboratories, PROVIDENCI QUALITY ANALYTICAL SURVICES N	Inc.						257 Lake	12 Commercer Forest, Califor 949.297.5(949.297	ntre Driv nia 9263 020 Phon .5027 Fa
Gribi Associates		Proje	ect: Maz	Glass					
1090 Adam Street, Suite K		Project Numb	er: [none]				Reported	
Benicia CA, 94510		Project Manag	er: Jim C	ribi				05/24/12 15	:27
		M T1208	W-2-8.0 311-28 (S) Soil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
Purgeable Petroleum Hydrocarbo	ons by EPA 8015	SunStar L	aborato	ries, Inc.					
C6-C12 (GRO)	35000	500	ug/kg	1	2051407	05/14/12	05/16/12	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		119 %	72.6	-146	"	"	"	"	
Volatile Organic Compounds by I	EPA Method 802	21B							
Benzene	ND	5.0	ug/kg	1	2051409	05/14/12	05/16/12	EPA 8021B	
Foluene	130	5.0		-					
Ethylbenzene	38	5.0							
n,p-Xylene	34	10							
o-Xylene	52	5.0							
Surrogate: 4-Bromofluorobenzene		93.3 %	73.5	-148	"	"	"	"	

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Gribi Associates		Proje	ct: Maz	Glass					
1090 Adam Street, Suite K		Project Numb	er: [none	:]				Reported	l:
Benicia CA, 94510	I	Project Manag	er: Jim C	Gribi				05/24/12 1	5:27
		MV T1208	V-2-17. 11-29 (S	5 Soil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborato	ries, Inc.					
Purgeable Petroleum Hydrocarbo	ns by EPA 80150	2							
C6-C12 (GRO)	69000	500	ug/kg	1	2051407	05/14/12	05/16/12	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		89.4 %	72.6	5-146	"	"	"	"	
Volatile Organic Compounds by I	EPA Method 802	1B							
Benzene	140	5.0	ug/kg	1	2051409	05/14/12	05/16/12	EPA 8021B	
Toluene	140	5.0							
Ethylbenzene	220	5.0							
m,p-Xylene	75	10							
o-Xylene	73	5.0							
Surrogate: 4-Bromofluorobenzene		83.7 %	73.5	-148	"	"	"	"	

SunStar Laboratories, PROVIDENC QUALITY ANALYTICAL STRUCTS N	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: Maz	Glass					
1090 Adam Street, Suite K	1	Project Numb	er: [none]				Reported	:
Benicia CA, 94510	F	roject Manag	ger: Jim C	iribi				05/24/12 15	5:27
		MV T1208	W-2-24. 811-30 (S	0 Soil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbo	ons by EPA 80150	SunStar L	aborato	ries, Inc.					
C6-C12 (GRO)	54000	500	ug/kg	1	2051407	05/14/12	05/16/12	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		89.1 %	72.6	-146	"	"	"	"	
Volatile Organic Compounds by l	EPA Method 8021	в							
Benzene	220	5.0	ug/kg	1	2051409	05/14/12	05/16/12	EPA 8021B	
Toluene	140	5.0							
Ethylbenzene	570	5.0							
m,p-Xylene	66	10							
o-Xylene	55	5.0							
Surrogate: 4-Bromofluorobenzene		79.9 %	73.5	-148	"	"	"	"	

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SunStar Laboratories, PROVIDENC QUALITY ANALYTICAL SURVICES NOT	Inc.						257 Lake	12 Commerce Forest, Califo 949.297.5 949.29	entre Drive ornia 92630 5020 Phone 7.5027 Fax
Gribi Associates		Proje	ct: Maz	Glass					
1090 Adam Street, Suite K		Project Numb	er: [none	-]				Reporte	d:
Benicia CA, 94510	I	Project Manag	er: Jim C	Gribi				05/24/12 1	5:27
		M T1208	W-3-8.0 11-31 (S) Soil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborato	ries, Inc.					
Purgeable Petroleum Hydrocarbon	s by EPA 80150	2							
C6-C12 (GRO)	25000	500	ug/kg	1	2051408	05/14/12	05/17/12	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		110 %	72.6	-146	"	"	"	"	
Volatile Organic Compounds by El	PA Method 8021	1B							
Benzene	ND	5.0	ug/kg	1	2051410	05/14/12	05/16/12	EPA 8021B	
Toluene	100	5.0							
Ethylbenzene	ND	5.0							
m,p-Xylene	22	10							
o-Xylene	79	5.0		"					
Surrogate: 4-Bromofluorobenzene		86.9 %	73.5	-148	"	"	"	"	

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SunStar Laboratories, PROVIDENC QUALITY ANALYTICAL SURVICES N	Inc.						257 Lake	12 Commerce Forest, Califor 949.297.5 949.297	ntre Driv mia 9263 020 Phon 7.5027 Fa
Gribi Associates		Proje	ect: Maz	Glass					
1090 Adam Street, Suite K		Project Numb	er: [none	:]				Reported	:
Benicia CA, 94510	I	Project Manag	er: Jim C	Gribi				05/24/12 15	:27
		MV T1208	W-3-17. 811-33 (8	5 Soil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not
Purgeable Petroleum Hydrocarbo	ons by EPA 80150	SunStar L	aborato	ries, Inc.					
C6-C12 (GRO)	1300	500	ug/kg	1	2051408	05/14/12	05/17/12	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		76.6 %	72.6	6-146	"	"	"	"	
Volatile Organic Compounds by I	EPA Method 802	IB							
Benzene	ND	5.0	ug/kg	1	2051410	05/14/12	05/16/12	EPA 8021B	
Foluene	7.6	5.0							
Ethylbenzene	11	5.0							
n,p-Xylene	ND	10							
o-Xylene	ND	5.0						"	
Surrogate: 4-Bromofluorobenzene		71.9 %	73.5	-148	"	"	"	"	S-G

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SunStar Laboratories, PROVIDENCE QUALITY ANALYTICAL SHERICES N	Inc.						257 Lake	12 Commerce Forest, Califor 949.297.5 949.297	ntre Drive rnia 92630 020 Phone 7.5027 Fax
Gribi Associates		Proje	ct: Maz	Glass					
1090 Adam Street, Suite K		Project Numb	er: [none	:]				Reported	:
Benicia CA, 94510	I	Project Manag	er: Jim C	Gribi				05/24/12 15	5:27
		MV T1208	V-3-23. 311-34 (S	0 Soil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar L	aborato	ries, Inc.					
Purgeable Petroleum Hydrocarbo	ons by EPA 80150	2							
C6-C12 (GRO)	28000	500	ug/kg	1	2051408	05/14/12	05/17/12	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		87.0 %	72.6	5-146	"	"	"	"	
Volatile Organic Compounds by I	EPA Method 802	IB							
Benzene	360	5.0	ug/kg	1	2051410	05/14/12	05/16/12	EPA 8021B	
Toluene	52	5.0							
Ethylbenzene	350	5.0							
m,p-Xylene	210	10							
o-Xylene	26	5.0							
Surrogate: 4-Bromofluorobenzene		82.2 %	73.5	-148	"	"	"	"	

SunStar Laboratories, Providenci Quality Analytical Structures	Inc.						257 Lake	12 Commerce Forest, Califor 949.297.5 949.297	ntre Driv rnia 9263 020 Phon 7.5027 Fa
Gribi Associates		Proje	ct: Maz (Glass					
1090 Adam Street, Suite K	I	Project Numb	er: [none]				Reported	l:
Benicia CA, 94510			05/24/12 15	5:27					
		M T1208	W-4-7.0 311-35 (S	oil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
D		SunStar L	aborator	ries, Inc.					
C6-C12 (GRO)	ND	500	ug/kg	1	2051408	05/14/12	05/17/12	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		71.1 %	72.6	-146	"	"	"	"	S-GC
Volatile Organic Compounds by 1	EPA Method 8021	в							
Benzene	ND	5.0	ug/kg	1	2051410	05/14/12	05/16/12	EPA 8021B	
Foluene	ND	5.0							
Ethylbenzene	ND	5.0							
n,p-Xylene	ND	10							
o-Xylene	ND	5.0							

Surrogate: 4-Bromofluorobenzene 66.3 % 73.5-148

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Gribi Associates		Proje	ct: Maz	Glass					
1090 Adam Street, Suite K		Project Numb	er: [none	:]				Reported	l:
Benicia CA, 94510		Project Manag	er: Jim C	Gribi				05/24/12 15	5:27
		M	V-4-12.	0					
		T1208	11-36 (8	Soil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar La	aborato	ries, Inc.					
Purgeable Petroleum Hydrocarbo	ons by EPA 8015	с							
C6-C12 (GRO)	1300	500	ug/kg	1	2051408	05/14/12	05/17/12	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		81.0 %	72.6	5-146	"	"	"	"	
Volatile Organic Compounds by I	EPA Method 802	1B							
Benzene	ND	5.0	ug/kg	1	2051410	05/14/12	05/16/12	EPA 8021B	
Toluene	5.5	5.0							
Ethylbenzene	8.1	5.0							
m,p-Xylene	ND	10							
o-Xylene	ND	5.0							
Surrogate: 4-Bromofluorohenzene		76.7%	73 5	-148	"	"	"	"	

SunStar Laboratories, Providenci Quality Assalvitical Services N	Inc.						257 Lake	712 Commerce: Forest, Califor 949.297.5 949.297	ntre Driv rnia 92630 020 Phon 7.5027 Faz
Gribi Associates		Proje	ect: Maz	Glass					
1090 Adam Street, Suite K		Project Numb	er: [none]				Reported	:
Benicia CA, 94510		Project Manag	er: Jim C	iribi				05/24/12 15	5:27
		MV T1208	W-4-16. 311-37 (S	0 Soil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbo	ons by EPA 8015	SunStar L C	aborato	ries, Inc.					
C6-C12 (GRO)	7300	500	ug/kg	1	2051408	05/14/12	05/17/12	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		84.1 %	72.6	-146	"	"	"	"	
Volatile Organic Compounds by I	EPA Method 802	1B							
Benzene	6.9	5.0	ug/kg	1	2051410	05/14/12	05/16/12	EPA 8021B	
Foluene	28	5.0							
Ethylbenzene	34	5.0							
n,p-Xylene	13	10							
o-Xylene	8.5	5.0						"	
Surrogate: 4-Bromofluorobenzene		77.9 %	73.5	-148	"	"	"	"	

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Gribi Associates 1090 Adam Street, Suite K Benicia CA, 94510		Proje Project Numb Project Manag	ect: Maz (er: [none er: Jim G	Glass :] iribi				Reported : 05/24/12 15	:27
		MV T1208	V-4-23. 11-38 (S	0 Soil)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		SunStar L	aborator	ries, Inc.					
Purgeable Petroleum Hydrocarbo C6-C12 (GRO)	ns by EPA 8015 22000	C	ug/kg	1	2051408	05/14/12	05/17/12	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		97.4 %	72.6	-146	"	"	"	"	
Volatile Organic Compounds by H	EPA Method 802	1B							
Benzene	26	5.0	ug/kg	1	2051410	05/14/12	05/16/12	EPA 8021B	
Toluene	64	5.0	"						
Ethylbenzene	62	5.0							
n,p-Xylene	43	10							
o-Xylene	42	5.0							
		05 5 0/	725	140	"	"	"	"	



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: 05/24/12 15:27

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

Project Number: [none]

Project Manager: Jim Gribi

Project: Maz Glass

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2051407 - EPA 5030 GC										
Blank (2051407-BLK1)				Prepared:	05/14/12	Analyze	d: 05/16/12			
C6-C12 (GRO)	ND	500	ug/kg							
Surrogate: 4-Bromofluorobenzene	185		"	250		73.8	72.6-146			
LCS (2051407-BS1)				Prepared:	05/14/12	Analyze	d: 05/16/12			
C6-C12 (GRO)	13300	500	ug/kg	13800		96.5	75-125			
Surrogate: 4-Bromofluorobenzene	207		"	250		82.9	72.6-146			
Matrix Spike (2051407-MS1)	Sou	ırce: T12081	11-01	Prepared:	05/14/12	Analyze	d: 05/16/12			
C6-C12 (GRO)	10800	500	ug/kg	13800	ND	78.4	65-135			
Surrogate: 4-Bromofluorobenzene	218		"	250		87.0	72.6-146			
Matrix Spike Dup (2051407-MSD1)	Sou	ırce: T12081	11-01	Prepared:	05/14/12	Analyze	d: 05/16/12			
C6-C12 (GRO)	9920	500	ug/kg	13800	ND	72.1	65-135	8.27	20	
Surrogate: 4-Bromofluorobenzene	216		"	250		86.6	72.6-146			
Batch 2051408 - EPA 5030 GC										
Blank (2051408-BLK1)				Prepared:	05/14/12	Analyze	d: 05/17/12			
C6-C12 (GRO)	ND	500	ug/kg	-						
Surrogate: 4-Bromofluorobenzene	189		"	250		75.6	72.6-146			
LCS (2051408-BS1)				Prepared:	05/14/12	Analyze	d: 05/17/12			
C6-C12 (GRO)	12100	500	ug/kg	13800		88.2	75-125			
Surrogate: 4-Bromofluorobenzene	210		"	250		84.2	72.6-146			
Matrix Spike (2051408-MS1)	Sou	ırce: T12081	11-31	Prepared:	05/14/12	Analyze	d: 05/17/12			
C6-C12 (GRO)	25400	500	ug/kg	13800	25100	2.07	65-135			QM-0
Surrogate: 4-Bromofluorobenzene	237		"	250		94.8	72 6-146			

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Daniel Chavez, Project Manager

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PROVIDENCI QUALITY ANALYTICAL SERVICES NATIO	NC.							25712 Lake Fo	Commerco orest, Calif 949.297 949.2	entre Driv ornia 9263 5020 Phon 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	ager: Ji	m Gribi					05/24/12	15:27
Purgeab	le Petroleu	m Hydroca	rbons	by EPA 8	8015C -	Quality	Control			
		SunStar 1	Labor	atories, l	lnc.					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2051408 - EPA 5030 GC										
Matrix Spike Dup (2051408-MSD1)	So	urce: T12081	1-31	Prepared:	05/14/12	Analyzed	1: 05/17/12			
C6-C12 (GRO)	26600	500	ug/kg	13800	25100	11.1	65-135	4.79	20	QM-0
Surrogate: 4-Bromofluorobenzene	225		"	250		89.9	72.6-146			
Batch 2051413 - EPA 5030 GC										
Blank (2051413-BLK1)				Prepared:	05/14/12	Analyzed	1: 05/15/12			
C6-C12 (GRO)	ND	50	ug/l							
Surrogate: 4-Bromofluorobenzene	127		"	100		127	72.6-146			
LCS (2051413-BS1)				Prepared:	05/14/12	Analyzed	1: 05/15/12			
C6-C12 (GRO)	4890	50	ug/l	5500		89.0	75-125			
Surrogate: 4-Bromofluorobenzene	146		"	100		146	72.6-146			
Matrix Spike (2051413-MS1)	So	urce: T12080	6-01	Prepared:	05/14/12	Analyzed	1: 05/15/12			
C6-C12 (GRO)	5080	50	ug/l	5500	1830	59.1	65-135			QM-0
Surrogate: 4-Bromofluorobenzene	139		"	100		139	72.6-146			
Matrix Spike Dup (2051413-MSD1)	So	urce: T12080	6-01	Prepared:	05/14/12	Analyzed	1: 05/15/12			
C6-C12 (GRO)	4880	50	ug/l	5500	1830	55.4	65-135	4.05	20	QM-0
Surrogate: 4-Bromofluorobenzene	142		"	100		142	72.6-146			

1090 Adam Street, Suite K Project Number: [none] Benicia CA, 94510 Project Manager: Jim Gribi Volatile Organic Compounds by EPA Method 8021B - Quality Control SunStar Laboratories, Inc. Reporting Spike Source Analyte Result Limit Units Level Result Batch 2051409 - EPA 5030 GC Blank (2051409-BLK1) Prepared: 05/14/12 Analyzed: 05/16/12 Benzene ND 5.0 ug/kg Toluene ND 5.0 Ethylbenzene ND 5.0 m,p-Xylene ND 10

o-Xylene	ND	5.0							
Surrogate: 4-Bromofluorobenzene	181		"	250	72.4	73.5-148			S-GC
LCS (2051409-BS1)				Prepared: 05/	14/12 Analyze	1: 05/22/12			
Benzene	251	5.0	ug/kg	250	100	70-130			
Foluene	252	5.0		250	101	70-130			
Ethylbenzene	237	5.0		250	95.0	70-130			
n,p-Xylene	463	10		500	92.6	70-130			
o-Xylene	232	5.0		250	92.9	70-130			
Surrogate: 4-Bromofluorobenzene	337		"	250	135	73.5-148			
LCS Dup (2051409-BSD1)				Prepared: 05/	14/12 Analyze	1: 05/22/12			
Benzene	250	5.0	ug/kg	250	99.8	70-130	0.439	20	
Foluene	250	5.0		250	99.9	70-130	0.971	20	
Ethylbenzene	233	5.0		250	93.0	70-130	2.07	20	
n,p-Xylene	453	10		500	90.6	70-130	2.21	20	
o-Xvlene	228	5.0		250	91.4	70-130	1.64	20	

Project: Maz Glass

332 Surrogate: 4-Bromofluorobenzene Batch 2051410 - EPA 5030 GC

Blank (2051410-BLK1)	Prepared: 05/14/12 Analyzed: 05/16/12						
Benzene	ND	5.0	ug/kg				
Toluene	ND	5.0					
Ethylbenzene	ND	5.0					
m,p-Xylene	ND	10					
o-Xylene	ND	5.0					
Surrogate: 4-Bromofluorobenzene	137		"	250	54.9	73.5-148	S-GC

250

SunStar Laboratories, Inc.

SunStar

Gribi Associates

Laboratories, Inc.

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133 73.5-148

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25712 Commercentre Drive

Reported:

05/24/12 15:27

RPD

Limit

RPD

%REC

%REC Limits

949.297.5020 Phone

949.297.5027 Fax

Notes

Lake Forest, California 92630

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Daniel Chavez, Project Manager

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PROVIDENCI QUALITY ANALYTICAL SURVICES NAT	Inc.							25712 Lake Fo	Commero rest, Calif 949.297 949.2	centre Dri cornia 926. .5020 Phot 97.5027 Fa
Gribi Associates		Pr	oject: Ma	az Glass						
1090 Adam Street Suite K		Project Nu	mber Inc	onel					Report	ed.
Benicia CA 94510		Project Mar	nager In	n Gribi					05/24/12	15.27
V-1-41-	0	Tiojeet Mai	EDA	M-4h-1	00310	0	Gartes		05/24/12	15.27
volatile	Organic Cor	SunStar 1	by EFA Labora	ntories, I	о021Б - [nc.	Quanty	y Contro	1		
		Reporting		Snike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2051410 - EPA 5030 GC										
LCS (2051410-BS1)				Prepared:	05/14/12	Analyzed	1: 05/22/12			
Benzene	250	5.0	ug/kg	250		99.8	70-130			
oluene	252	5.0		250		101	70-130			
thylbenzene	241	5.0		250		96.4	70-130			
n,p-Xylene	472	10		500		94.4	70-130			
-Xylene	237	5.0		250		94.9	70-130			
urrogate: 4-Bromofluorobenzene	347		"	250		139	73.5-148			
LCS Dup (2051410-BSD1)				Prepared:	05/14/12	Analyzed	1: 05/22/12			
Benzene	255	5.0	ug/kg	250		102	70-130	2.20	20	
oluene	260	5.0		250		104	70-130	2.88	20	
Ethylbenzene	243	5.0		250		97.1	70-130	0.654	20	
n,p-Xylene	474	10		500		94.8	70-130	0.507	20	
-Xylene	237	5.0		250		95.0	70-130	0.0769	20	
Surrogate: 4-Bromofluorobenzene	341		"	250		136	73.5-148			
Batch 2051414 - EPA 5030 GC										
Blank (2051414-BLK1)				Prepared:	05/14/12	Analyzed	1: 05/15/12			
Benzene	ND	1.0	ug/l							
oluene	ND	1.0								
Ethylbenzene	ND	1.0								
n,p-Xylene	ND	2.0								
-Xylene	ND	1.0								
Surrogate: 4-Bromofluorobenzene	120		"	100		120	73.5-148			
LCS (2051414-BS1)				Prepared:	05/14/12	Analyzed	1: 05/15/12			
Benzene	92.3	1.0	ug/l	100		92.3	70-130			
Toluene	95.6	1.0		100		95.6	70-130			
Sthylbenzene	85.4	1.0		100		85.4	70-130			
n,p-Xylene	170	2.0		200		85.1	70-130			
-Xylene	86.4	1.0		100		86.4	70-130			
Surrogate: 4-Bromofluorobenzene	134		"	100		134	73.5-148			

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

Project: Maz Glass Project Number: [none] Reported: Project Manager: Jim Gribi 05/24/12 15:27

Volatile Organic Compounds by EPA Method 8021B - Quality Control

SunStar Laboratories, Inc.

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

Batch 2051414 - EPA 5030 GC

Gribi Associates

Benicia CA, 94510

1090 Adam Street, Suite K

Matrix Spike (2051414-MS1)	Sourc	e: T12081	1-16	Prepared:	05/14/12	Analyze	d: 05/15/12			
Benzene	91.3	1.0	ug/l	100	ND	91.3	70-130			
Toluene	91.5	1.0		100	ND	91.5	70-130			
Ethylbenzene	84.1	1.0		100	ND	84.1	70-130			
m,p-Xylene	163	2.0		200	ND	81.4	70-130			
o-Xylene	87.1	1.0		100	ND	87.1	70-130			
Surrogate: 4-Bromofluorobenzene	139		"	100		139	73.5-148			
Matrix Spike Dup (2051414-MSD1)	Sourc	e: T12081	1-16	Prepared:	05/14/12	Analyze	d: 05/15/12			
Benzene	89.8	1.0	ug/l	100	ND	89.8	70-130	1.68	20	
Toluene	87.3	1.0		100	ND	87.3	70-130	4.80	20	
Ethylbenzene	81.0	1.0		100	ND	81.0	70-130	3.78	20	
m,p-Xylene	160	2.0		200	ND	80.2	70-130	1.52	20	
o-Xylene	83.1	1.0		100	ND	83.1	70-130	4.71	20	
Surrogate: 4-Bromofluorobenzene	133		"	100		133	73.5-148			

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Daniel Chavez, Project Manager

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PROVIDENCI QUALITY ANALYTICAL SERVICES NATIO	nc.							25712 Lake Fe	2 Commerc orest, Calif 949.297. 949.29	entre Driv ornia 9263 5020 Phon 97.5027 Fa
Gribi Associates		Pre	oject: M	az Glass						
1090 Adam Street, Suite K		Project Nur	mber: [n	one]					Report	ed:
Benicia CA, 94510		Project Man	ager: Jii	n Gribi					05/24/12	15:27
Volatile	Organic Com	pounds b	y EPA	Method	8260B -	Qualit	y Contro	1		
	2	Dunistan		atories, i			N DEC		DDD	
Analyte	Result	Limit	Units	Level	Result	%REC	%REC Limits	RPD	Limit	Notes
Batch 2051512 - EPA 5030 GCMS										
Blank (2051512-BLK1)				Prepared:	05/15/12	Analyze	d: 05/17/12			
Benzene	ND	0.50	ug/l							
Foluene	ND	0.50								
Ethylbenzene	ND	0.50								
n,p-Xylene	ND	1.0								
p-Xylene	ND	0.50								
C6-C12 (GRO)	ND	50								
Surrogate: 4-Bromofluorobenzene	8.69		"	8.00		109	83.5-119			
Surrogate: Dibromofluoromethane	10.2		"	8.00		128	81-136			
Surrogate: Toluene-d8	8.14		"	8.00		102	88.8-117			
LCS (2051512-BS1)				Prepared:	05/15/12	Analyze	d: 05/18/12			
Benzene	20.8	0.50	ug/l	20.0		104	75-125			
Toluene	17.1	0.50		20.0		85.4	75-125			
Surrogate: 4-Bromofluorobenzene	7.24		"	8.00		90.5	83.5-119			
Surrogate: Dibromofluoromethane	9.96		"	8.00		124	81-136			
Surrogate: Toluene-d8	7.29		"	8.00		91.1	88.8-117			
Matrix Spike (2051512-MS1)	Sour	ce: T12081	7-01	Prepared:	05/15/12	Analyze	d: 05/18/12			
Benzene	371	0.50	ug/l	20.0	454	NR	75-125			QM-05
Foluene	357	0.50		20.0	246	554	75-125			QM-05
Surrogate: 4-Bromofluorobenzene	7.38		"	8.00		92.2	83.5-119			
Surrogate: Dibromofluoromethane	9.09		"	8.00		114	81-136			
Surrogate: Toluene-d8	7.07		"	8.00		88.4	88.8-117			S-GC
Matrix Spike Dup (2051512-MSD1)	Sour	ce: T12081	7-01	Prepared:	05/15/12	Analyze	d: 05/18/12			
Benzene	333	0.50	ug/l	20.0	454	NR	75-125	10.8	20	QM-05
Foluene	334	0.50		20.0	246	438	75-125	6.69	20	QM-05
Surrogate: 4-Bromofluorobenzene	7.55		"	8.00		94.4	83.5-119			
Surrogate: Dibromofluoromethane	9.08		"	8.00		114	81-136			
Surrogate: Toluene-d8	7.21		"	8.00		90.1	88.8-117			

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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	05/24/12 15:27

Notes and Definitions

- S-GC Surrogate recovery outside of established control limits. The data was accepted based on valid recovery of the remaining surrogate(s).
- S-13 Low internal standard and surrogate recovery confirmed as a matrix effect by a second analysis.
- The spike recovery was outside acceptance limits for the MS and/or MSD due to possible matrix interference. The LCS was within QM-05 acceptance criteria. The data is acceptable as no negative impact on data is expected.
- DET Analyte DETECTED
- Analyte NOT DETECTED at or above the reporting limit ND
- NR Not Reported
- Sample results reported on a dry weight basis dry
- RPD Relative Percent Difference

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Daniel Chavez, Project Manager

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25712 Commercentre Di _ake Forest, CA 92630 949-297-5020 Client:Gribi As: Address: 1690 Adam Phone:707748 Project Manager:Gr	so ciates 15 St. Suite K. Be 7743 Fax: ist	nicia, <u>CA 94510</u>	Date: 5 11 12 Project Name: Maz Glass Collector:	Page: 2	Of
Client: Gribi As Address: 1090 Adam Phone: 707-748- Project Manager: J. Gr	so ciates <u>s st. Suite K. B.</u> 773_Fax:	enicla, CA 94510	Date: 5 11 12 Project Name: Maz Glas Collector:	Page:2	
Client: Gribi As: Address: 1090 Adam Phone: 707-748- Project Manager: J. Gr	so ciates <u>s St. Suite K. B.</u> 7743 Fax: <u>ist</u>	<u>enicla, CA 94510</u>	Date: 5 111 12 Project Name: Maz Glass Glas Glass Glass G	Page:	<u>U</u>
Address: <u>1690</u> A.Jam Phone: <u>707-748-</u> Project Manager: <u>J. Gr</u>	<u>s st., Suite K, B</u> 7743 _{Fax:} bi		Collector: Batch #:	Client Project #	
Phone:707745 Project Manager:J. Gr			Batch #:		
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		Comple Container 9 9	0 BT 15M (15M (15M E	porat 0	otal #
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B-21-16-0	11 0915	3 W		19	<u> </u>
B-22-17.0	11 0744	5		21	ч
B-22-W B-23-11.D	5912 1155	3		22	
B-23-62-	510120899	5		23	1
Ma-1-15.5	5 10 12 0945	3		25	
MW-1-23.0	11 0854	5		27	
MW-2-4.5 MW-2-8.0	11 0818	3 00		28	1
MW 2/17-5		Received by (signature)	Date / Time Total # of c	containers 23	Notes
(James Sof	~1 5/11/12 / 12:15	Pacified by: (Signature)	Date / Time Chain of Custody seal		TD. TAT
Relinquished by: (signature)	Date/lime	Received by: Isignature)	2112 938 Received good cond	dition/cold	m 34°
Relinquished by: (signature) Date / Time	Received by: (signature)	Date / Time		Stich
		Chain of Custo	dv Record		1000
unStar Laboratories, Inc.		Chain of Custo	ay noocha		
ake Forest, CA 92630					
)49-297-5020			-11/17	D 1	
Client: Gribi	Associat	25	Date: 5 Miles GLA	<u></u> Page:	
Address: 1090 Add	<u>ms Sk; Suite K, E</u> 7743 Far	Senicia, A 14310	Collector:	Client Project #:	
Phone: 707-740.	Gribi		Batch #: <u>T12 0 %11</u>	EDF #:	
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			on y Metals		ners
		Scau + T	OAT Only Dire) el) tite 22 Metals		containers
1		uil Scout + T	LEX, UXY 0119 (gasoline) (diesel) Ext./Carbon Chein 000 Title 22 Metals	oLD atory ID #	# of containers
		Sample Container 0 8	200 BLEX, UX1 9/19/ 201 BTEX, UX1 9/19/ 015M (diesel) 015M (diesel) 010/7000 Ttite 22 Metals	HOLD #boratory ID #	ments/Preservative
Sample ID	Date Sampled Time	Sample Container Type Type Type	8220 BLEX, UAT 0119 8270 8015M (gasoline) 8015M (diesel) 8015M (diesel) 8015M (diesel) 8015M (diesel) 8015M (diesel)	# C L D t C L D Com Com	ments/Preservative
Sample ID B-15- (2-0 B-15-21-0	Date Sampled Time 5 9 1 2 12.39 11 240	Sample Container Res 200 Container C	8200 b LEX, UXY 0my 8270 8021 BTEX 8005M (glasoline) 8015M (glasoline) 8015M (glasol) 8015M Ext./Carbon Chain 8010/7000 Title 22 Metals	# CI Atotecode 1 Q 10 H Com Com Com Com	ments/Preservative
Sample ID B-15-12-0 B-15-21-0 B-15-60 8-15-60 8-15-5	Date Sampled Time 5 9 1 12 12.39 11 1249 11 1548 11 1351	Sample Container 82888	8200 B LEA, OVY 0119 8270 8270 8015M (gasoline) 8015M (dasoline) 8015M Ed./Carbon Chain 8015M Ed./Carbon Chain	# (1) Kioteloger Q 700+ O X O2 00 O3 00 O3 00 O3	ments/Preservative
Sample ID B-15-12.0 B-15-21.0 B-15-44 B-16-13:5 B-16-44 B-16-44	Date Sampled Time 5 9 1 2 1239 1 1249 1 1548 1 1548 1 1542 1 1542 1 1542	Sample Container Type Type 88 88 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	8280 BLEX, UX 1 only 8270 X X 8021 BTEX 8015M (gasoline) 8015M (desel) 8015M Ext./Carbon Chain 8015M Ext./Carbon Chain	Q 70 + (01 KoppLogPT) Com Com Com Com Com Com Com Com	ments/Preservative
Sample ID B-15-2.0 B-15-2.0 B-15-3.5 B-16-3.5 B-16-4 B-17-1.5 B-17-61	Date Sampled Time 5 9 112 1239 11 1542 11 1542 11 1542 11 1542 11 1502 11 1502 11 1502 11 1508	Sample Container Type Type 28 20 11 W X X S X X S X X S X	82/30 bit EX, UXY 0iny 82/70 82/70 82/70 82/70 82/70 80/16 80/16 80/16 80/16 80/16 80/16 80/16 80/16 80/16 80/16 80/16 80/16 80/16 80/16 80/16 80/16 80/16 80/16 80/17 80/16 80/17 80/17 80/17 80/17 80/17 80/17 80/17 80/16 80/17 80/17 80/17 80/17 80/16 80/17 80/16 80/17 80/16 80/17 80/16 80/17 80/16 80/16	Q 1 0	ments/Preservative
Sample ID B - 15 - (2.0) B - 15 - 21.0 B - 15 - 63 B - 15 - 63 B - 15 - 63 B - 17 - 145 B - 17 - 145 B - 17 - 145 B - 18 - [3.0] B - 18 - [3.0] B - 18 - [3.0]	Date Sampled Time 5 9 12 12.39 11 1249 11 1347 11 1347 11 1547 11 1548 11 1558 11 1558 11 1602	Sample Container Root Root Root Root Root Root Root Roo	8260 b1 b1, 0, 07 0ily 82700 b1 b1, 0, 07 0ily 82700 b1 b1, 0, 07 0ily 8270 b1 b1, 0, 07 0ily 8270 b1 b1, 0, 07 0ily 8270 b1, 0, 07 0ily 8270 b1, 0, 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	# (1) Atotecore - 1 Color Common - 1 Color Color	ments/Preservative
Sample ID B - 15 - 12.0 B - 15 - 21.0 B - 15 - 21.0 B - 15 - 21.0 B - 15 - 21.0 B - 16 - 13.5 B - 17 - 4.1 B - 18 - 13.0 B - 18 - 13.0	Date Sampled Time 5 9 1 12 12.39 11 1249 11 1548 11 1548 11 1548 11 1548 11 1558 11 1558 11 1558 11 1605 5 10[12 522	Sample Container Type Type 7 5 11 W X X V V V V V V V V V V V V V V V V V V	8200 BIEA, UX 0119 820150 82021 BIEA, UX 0119 820150 (gasolire) 80150 (gasolire) 80150 (gasolire) 80150 (gasolire) 80150 (gasolire) 80150 (gasolire)	# CI Active contraction Q I Contraction I O Contraction I I I I I I	sa sa term term ments/Preservative 1 1 1
Sample ID $B - 15 - 12 \cdot 0$ $B - 15 - 21 \cdot 0$ $B - 15 - 21 \cdot 0$ $B - 15 - 21 \cdot 0$ $B - 17 - 11 \cdot 5$ $B - 17 - 11 \cdot 5$ $B - 18 - 13 \cdot 0$ $B - 18 - 13 \cdot 0$ $B - 18 - 23 \cdot 0$	Date Sampled Time 5 9 1 2 12.39 1 1249 1 1548 1 1548 1 1548 1 1548 1 1548 1 1568 1 1588 1 1588 1 1602 1 1602 1 1602 1 1647	Sample Container Type Type 8888 Container Type X X Container Type X X X X X X X X X X X X X X X X X X X	8280 BLEX, UX 1019 X X	# (1) A (1) Q (1) Q (1) Q (1) <td>sequences sequences rments/Preservative 1 1 1</td>	sequences sequences rments/Preservative 1 1 1
Sample ID B-15-(2.0) B-15-(2) B-15-(2) B-16-(3.5) B-17-(1) B-17-(1) B-18-(3.0) B-18-(3.0) B-18-(3.0) B-18-(3.0) B-18-(2.0) B-18-(2.0) B-19-(2.0) B-(9-(7.0)) B-19-(2.0) B	Date Sampled Time 5 9 1 2 12.39 1 249 1 548 1 1548 1 1548 1 1548 1 1548 1 1558 1 1602 1 1605 5 1612 528 1 1625 5 1612 528 1 1647 5 1112 632 5 112 10.16	Sample Container Type Type Co S 11 W S S S S S S S S S S S S S	8280 B1EA, UX 1019 8270 B1EA, UX 1019 8270 B1EA, UX 1019 8271 B1EA	Q 1 0 +* (1) Company	sequences sequences rments/Preservative 1 1 1 4 1
Sample ID B - 15 - 2.0 B - 15 - 2.1 B - 17 - 1.25 B - 18 - 13 - 0 B - 19 - 17 - 5 B - 19 - 20 - 0 B - 19 - 20 - 0	Date Sampled Time 5 9 112 1239 11 1249 11 1357 11 1542 11 1558 11 1558 11 1558 11 1602 11 160	Sample Container 00 000 Type 79 20 S 11 S S S S S S S S S S S S S	B200 B1EX, 0X7 0ity 8200 B1EX, 0X7 0ity 8201 B1EX, 0X7 0ity 8201 B1EX, 0X7 0ity 9015M (gasofire) 8015M (gasofire) 8015M (gasofire) 8015M (gasofire) 9015M (gasofire) 9015M (gasofire) 9015M (gasofire) 9017000 T1te 22 Metals	# (1) Atomstrong O1 Common C	ments/Preservative
Sample ID B - 15 - (2.0) B - 15 - 21.0 B - 15 - 63 B - 15 - 63 B - 15 - 63 B - 17 - 13.5 B - 17 - 13.5 B - 18 - 13.0 B - 19 - 17.5 B - 19 - 17.5 B - 19 - 20.0 B - 19 - 10.0 B - 19 - 20.0 B - 19 - 10.0 B - 19 - 10.0 B - 19 - 10.0 B - 19 - 10.0 B - 10 - 10.0	Date Sampled Time 5 9 12 1239 11 1249 11 1342 11 1342 11 1357 11 1548 11 1558 11 156 11 156 11 156 11 156 11 1602 11 1602 12 162 11 1602 11 1602 11 1602 11 1602 11 1602 12 162 11 1602 11 1602 12 162 12 162 11 1602 11 1602 12 162 11 1602 11 1602 11 1602 11 1602 11 1602 11 1602 11 1602 11 1602 11 1602 11 1602 12 162 11 1602 11 1602 11 1602 11 1602 11 1602 11 1602 11 1602 11 1602 11 1602 11 1602 12 162 11 1602 11 1602 11 1602 11 1602 11 1602 12 162 10 12 162 10 164 10 164 1	Sample Container Received by container,	bate / Time Date / Time Date / Time	# [] Arotecode O1 Com O2 O3 O4 O5 O6 O7 O6 O7 O6 O7 O7 O6 O7 O6 O7 O7 O6 O7 O7 O7 O8 O7 I1 I2 I2 VNNA Y Y	ments/Preservative
		-H-			

COC112732

Relinquia	SunStar Laboratories, Inc. Provement Quality Ashurtical Stateves Notcomment
aboratories, I mmercentre 020 020 071-748- 071-7	SAMPLE RECEIVING REVIEW SHEET
Inc. Chain of Custody Record project Name: Inc. Shr Suite Singler Shr Suite Singler Singler Fax: Inc. Container Date: Inc. Shr Suite Singler Singler Fax: Inc. Shr Suite Singler Singler Fax: Inc. Singler Container Inc. Singler Singler	BATCH # T \20 \geta_11 Client Name: Gr:L: Project: Maz Glass Received by: Date Date/Time Received: $5(12 \ 12$ q35 Delivered by: Client SunStar Courier GS0 FedEx Other Total number of coolers received 1 Temp criteria = 6°C > 0°C (no frozen containers) Temperature: cooler #1 3.6 °C +/- the CF (-0.2°C) = 2.4 °C corrected temperature cooler #2 °C +/- the CF (-0.2°C) = °C corrected temperature N/A Samples outside temp. but received on ice, w/in 6 hours of final sampling. Myes N/A Sample Containers Intact Myes No* N/A Sample labels match COC ID's Myes Mo* Mit
around time.	Total number of containers received match COC XYes No* Proper containers received for analyses requested on COC XYes No* Proper preservative indicated on COC/containers for analyses requested XYes No* Complete shipment received in good condition with correct temperatures, containers, labels, volumes preservatives and within method specified holding times. Yes No* * Complete Non-Conformance Receiving Sheet if checked Cooler/Sample Review - Initials and date MM 511 Comments:

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

PROVIDING QUALITY ANALYTICAL SERVICES NATIONWIDE

29 May 2012

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 05/19/12 08:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Samil & Chivy

Daniel Chavez Project Manager



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	05/29/12 17:44

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	T120866-01	Water	05/18/12 07:41	05/19/12 08:45
MW-2	T120866-02	Water	05/18/12 08:35	05/19/12 08:45
MW-3	T120866-03	Water	05/18/12 09:24	05/19/12 08:45
MW-4	T120866-04	Water	05/18/12 10:34	05/19/12 08:45

SunStar Laboratories, Inc.

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Daniel Chavez, Project Manager

Page 1 of 8

SunStar Laboratories	, Inc.						257 Lake	12 Commercen Forest, Californ 949.297.50 949.297.	tre Drive nia 92630 20 Phone 5027 Fax
Gribi Associates		Proje	ct: Maz	Glass					
1090 Adam Street, Suite K	F	roject Numb	er: [none]				Reported:	
Benicia CA, 94510	P	roject Manag	er: Jim C	fribi				05/29/12 17:	44
		N T12086	4W-1 6-01 (W	ater)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarb	ons by EPA 8015C	SunStar La	aborato	ries, Inc.					
C6-C12 (GRO)	17000	50	ug/l	1	2052128	05/21/12	05/24/12	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		126 %	72.6	-146	"	"	"	"	
Volatile Organic Compounds by	EPA Method 8021	В							
Methyl tert-butyl ether	ND	4.0	ug/l	1	2052129	05/21/12	05/24/12	EPA 8021B	
Benzene	1300	1.0							
Toluene	29	1.0							
	770	1.0							
Ethylbenzene									
Ethylbenzene m,p-Xylene	260	2.0							
Ethylbenzene m,p-Xylene o-Xylene	260 ND	2.0 1.0							

Laboratories, PROVIDENC QUALITY ANALYTICAL SERVICES N	Inc.						257 Lake	12 Commercer Forest, Califor 949.297.5(949.297	ntre Driv nia 9263 020 Phon .5027 Fa		
Gribi Associates		Proje	ct: Maz	Glass							
1090 Adam Street, Suite K		Project Numb	er: [none	e]				Reported	:		
Benicia CA, 94510	1	Project Manag	er: Jim C	Gribi				05/29/12 17	29/12 17:44		
		N T12086	4W-2 6-02 (W	ater)							
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note		
Purgeable Petroleum Hydrocarbo	ns by EPA 80150	SunStar La	aborato	ries, Inc.							
26-C12 (GRO)	10000	50	ug/l	1	2052128	05/21/12	05/24/12	EPA 8015C			
urrogate: 4-Bromofluorobenzene Volatile Organic Compounds by E	PA Method 802	114 % 1B	/2.0	5-140	"	,,	"	"			
Aethyl tert-butyl ether	ND	4.0	ug/l	1	2052129	05/21/12	05/24/12	EPA 8021B			
Benzene	610	1.0									
Toluene	26	1.0					"				
Sthylbenzene	340	1.0									
n,p-Ayiene	69 ND	2.0									
э-лутепе	ND	1.0									

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Daniel Chavez, Project Manager

SunStar Laboratories, Inc.

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Daniel Chavez, Project Manager

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SunStar Laboratories, PROVIDENC QUALITY ANALYTICAL SURVICES N	Inc.						257 Lake	12 Commercen Forest, Californ 949.297.50 949.297.	tre 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	P	roject Manag	er: Jim C	Gribi				05/29/12 17:	44
		N T12086	4W-3 6-03 (W	ater)					
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Purgeable Petroleum Hydrocarbo	ons by EPA 80150	SunStar La	aborato	ries, Inc.					
C6-C12 (GRO)	13000	50	ug/l	1	2052128	05/21/12	05/24/12	EPA 8015C	
Surrogate: 4-Bromofluorobenzene		112 %	72.6	<i>5-146</i>	"			"	
Volatile Organic Compounds by I	EPA Method 8021	в							
Methyl tert-butyl ether	ND	4.0	ug/l	1	2052129	05/21/12	05/24/12	EPA 8021B	
Benzene	1400	1.0							
Toluene	36	1.0							
Ethylbenzene	350	1.0							
m,p-Xylene	360	2.0							
o-Xylene	18	1.0							

Inc.						257 Lake	12 Commercer Forest, Califor 949.297.5(949.297	ntre Driv nia 9263)20 Phor 7.5027 Fa		
	Proje	ct: Maz	Glass							
	Project Numb	er: [none	:]				Reported	:		
	Project Manag	er: Jim C	Gribi				05/29/12 17	:44		
	Ν	4W-4								
	T12086	6-04 (W	ater)							
Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Not		
s by EDA 2015	SunStar La	borato	ries, Inc.							
10000	50	ug/l	1	2052128	05/21/12	05/24/12	EPA 8015C			
	115 %	72.6	5-146	"	"	"	"			
PA Method 802	1B									
220	4.0	ug/l	1	2052129	05/21/12	05/24/12	EPA 8021B			
82	1.0	"	-							
32	1.0									
330	1.0									
260	2.0									
	Result Result 10000 PA Method 802 220 82 32 330 260	Inc. Project Numb Project Numb Project Numb Project Numb Project Numb Project Numb N T12086 Result Result Result SunStar La ts by EPA 8015C 10000 50 115 % PA Method 8021B 220 4.0 32 1.0 330 1.0 260 2.0	Inc. Project Number: Project Number: Project Number: Project Number: Project Number: Project Manager: Jim O SunStar Laborator Is by EPA 8015C 10000 50 115 % 72.6 PA Method 8021B 220 4.0 32 1.0 330 1.0 260 2.0	Result Reporting Limit Units Dilution SunStar Laboratories, Inc. 115 % 72.6-146 PA Method 8021B 220 4.0 ug/l 1 32 1.0 " " 330 1.0 " " 330 1.0 " " 330 1.0 " " " 330 1.0 " <t< td=""><td>Result Reporting Limit Dilution Batch SunStar Laboratories, Inc. 1 2052129 10000 50 ug/l 1 2052129 115 % 72.6-146 " " 220 4.0 ug/l 1 2052129 82 1.0 " " " 32 1.0 " " " 330 1.0 " " "</td><td>Result Reporting Limit Dilution Batch Prepared SunStar Laboratories, Inc. SunStar Laboratories, Inc. 1 2052128 05/21/12 10000 50 ug/l 1 2052128 05/21/12 115 % 72.6-146 " " " 220 4.0 ug/l 1 2052129 05/21/12 32 1.0 " " " " 330 1.0 " " " " 300 1.0 " " " " "</td><td>Result Reporting Limit Dilution Batch Prepared Analyzed SumStar Laboratories, Inc. Im Gribi SumStar Laboratories, Inc. Im Gribi Im Gribi Colspan="4">Georing Limit Units Dilution Batch Prepared Analyzed SumStar Laboratories, Inc. ISS PEPA 8015C IO000 50 ug/l 1 2052128 05/21/12 05/24/12 PA Method 8021B 220 4.0 ug/l 1 20521/20 05/21/12 05/24/12 32 1.0 " " " " " 330 1.0 "</td><td>Z5712 Commerce Lake Forest, Califor 949.297,50 Project: Maz Glass Project Number: [none] Reported Project Number: [none] Reported Project Number: [none] Reported MW-4 T120866-04 (Water) MW-4 T120866-04 (Water) MW-4 SunStar Laboratories, Inc. susStar Laboratories, Inc. sus PEPA 8015C 10000 50 ug/l 1 20/5/24/12 EPA 8015C 220 4.0 ug/l 20/5/21/12 05/24/12 EPA 8015C 220 4.0 ug/l 1 20/5/24/12 EPA 8021B 32 1.0 u u u 32 u u u 32 <th <="" colspan="2" td=""></th></td></t<>	Result Reporting Limit Dilution Batch SunStar Laboratories, Inc. 1 2052129 10000 50 ug/l 1 2052129 115 % 72.6-146 " " 220 4.0 ug/l 1 2052129 82 1.0 " " " 32 1.0 " " " 330 1.0 " " "	Result Reporting Limit Dilution Batch Prepared SunStar Laboratories, Inc. SunStar Laboratories, Inc. 1 2052128 05/21/12 10000 50 ug/l 1 2052128 05/21/12 115 % 72.6-146 " " " 220 4.0 ug/l 1 2052129 05/21/12 32 1.0 " " " " 330 1.0 " " " " 300 1.0 " " " " "	Result Reporting Limit Dilution Batch Prepared Analyzed SumStar Laboratories, Inc. Im Gribi SumStar Laboratories, Inc. Im Gribi Im Gribi Colspan="4">Georing Limit Units Dilution Batch Prepared Analyzed SumStar Laboratories, Inc. ISS PEPA 8015C IO000 50 ug/l 1 2052128 05/21/12 05/24/12 PA Method 8021B 220 4.0 ug/l 1 20521/20 05/21/12 05/24/12 32 1.0 " " " " " 330 1.0 "	Z5712 Commerce Lake Forest, Califor 949.297,50 Project: Maz Glass Project Number: [none] Reported Project Number: [none] Reported Project Number: [none] Reported MW-4 T120866-04 (Water) MW-4 T120866-04 (Water) MW-4 SunStar Laboratories, Inc. susStar Laboratories, Inc. sus PEPA 8015C 10000 50 ug/l 1 20/5/24/12 EPA 8015C 220 4.0 ug/l 20/5/21/12 05/24/12 EPA 8015C 220 4.0 ug/l 1 20/5/24/12 EPA 8021B 32 1.0 u u u 32 u u u 32 <th <="" colspan="2" td=""></th>		

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Samil & Chivy

Daniel Chavez, Project Manager

SunStar Laboratories, Inc.

Saniel & Chivy

Daniel Chavez, Project Manager

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SunStar Laboratories, PROVIDENCI QUALITY ANALYTICAL SERVICES N	Inc.							25712 Lake Fo	Commerco orest, Calif 949.297 949.2	centre Drive ornia 92630 .5020 Phone 97.5027 Fax
Gribi Associates		Pr	oject: M	az Glass						
1090 Adam Street, Suite K		Project Nu	mber: [n	one]					Report	ed:
Benicia CA, 94510		Project Mar	ager: Jii	m Gribi					05/29/12	17:44
Purge	able Petroleum	Hydroca	rbons	by EPA 8	8015C -	Quality	Control			
	8	SunStar 1	Labor	atories, l	lnc.					
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2052128 - EPA 5030 GC										
Blank (2052128-BLK1)				Prepared:	05/21/12	Analyzed	1: 05/24/12			
C6-C12 (GRO)	ND	50	ug/l							
Surrogate: 4-Bromofluorobenzene	88.2		"	100		88.2	72.6-146			
LCS (2052128-BS1)				Prepared:	05/21/12	Analyzed	1: 05/24/12			
C6-C12 (GRO)	5740	50	ug/l	5500		104	75-125			
Surrogate: 4-Bromofluorobenzene	124		"	100		124	72.6-146			
Matrix Spike (2052128-MS1)	Sou	rce: T12086	6-01	Prepared:	05/21/12	Analyzed	1: 05/24/12			
C6-C12 (GRO)	21000	50	ug/l	5500	17400	66.3	65-135			
Surrogate: 4-Bromofluorobenzene	127		"	100		127	72.6-146			
Matrix Spike Dup (2052128-MSD1)	Sou	rce: T12086	6-01	Prepared:	05/21/12	Analyzed	1: 05/24/12			
C6-C12 (GRO)	20600	50	ug/l	5500	17400	59.0	65-135	1.92	20	QM-05
Surrogate: 4-Bromofluorobenzene	118		"	100		118	72.6-146			



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:

Project: Maz Glass Project Number: [none] Project Manager: Jim Gribi 05/29/12 17:44 Volatile Organic Compounds by EPA Method 8021B - Quality Control

SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2052129 - EPA 5030 GC										
Blank (2052129-BLK1)				Prepared:	05/21/12	Analyzed	1: 05/24/12			
Methyl tert-butyl ether	ND	4.0	ug/l							
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
o-Xylene	ND	1.0								
Surrogate: 4-Bromofluorobenzene	90.2		"	100		90.2	73.5-148			
LCS (2052129-BS1)				Prepared:	05/21/12	Analyzed	1: 05/24/12			
Benzene	101	1.0	ug/l	100		101	70-130			
Toluene	102	1.0		100		102	70-130			
Ethylbenzene	93.7	1.0		100		93.7	70-130			
m,p-Xylene	186	2.0		200		92.9	70-130			
o-Xylene	92.3	1.0		100		92.3	70-130			
Surrogate: 4-Bromofluorobenzene	108		"	100		108	73.5-148			
LCS Dup (2052129-BSD1)				Prepared:	05/21/12	Analyzed	1: 05/24/12			
Benzene	103	1.0	ug/l	100		103	70-130	2.10	20	
Toluene	105	1.0		100		105	70-130	3.45	20	
Ethylbenzene	97.6	1.0		100		97.6	70-130	4.05	20	
m,p-Xylene	195	2.0		200		97.3	70-130	4.57	20	
o-Xylene	96.8	1.0		100		96.8	70-130	4.74	20	
Surrogate: 4-Bromofluorobenzene	108		"	100		108	73.5-148			

SunStar Laboratories, Inc.

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Saniel & Chivy

Daniel Chavez, Project Manager

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Daniel Chavez, Project Manager

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SunStar 25712 Commercentre Drive Laboratories, Inc. Lake Forest, California 92630 949.297.5020 Phone TENG 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 05/29/12 17:44 Notes and Definitions

- S-GC Surrogate recovery outside of established control limits. The data was accepted based on valid recovery of the remaining surrogate(s).
- OM-05 The spike recovery was outside acceptance limits for the MS and/or MSD due to possible matrix interference. The LCS was within acceptance criteria. The data is acceptable as no negative impact on data is expected.
- Analyte DETECTED DET
- Analyte NOT DETECTED at or above the reporting limit ND
- NR Not Reported
- Sample results reported on a dry weight basis dry
- RPD Relative Percent Difference



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Daniel Chavez, Project Manager

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Chain of Custody Record

Putring Qau an Anamed. Stevers Netdownes	Page 1 of
SAMDLE DECEIVING DEVI	177 WW/ CHITTER TO 27
SAWITLE RECEIVING REVI	LEW SHEET
BATCH #7720 866	
Client Name: Genal Project:	MAZ GLASS
Received by: Date/Time	Received: 5.19.12 8:45
Delivered by : 🗌 Client 🗌 SunStar Courier 📓 GSO 🗌 FedE	x Dther
Total number of coolers received Temp criteria = 6	°C > 0°C (no <u>frozen</u> containers)
Temperature: cooler #1 <u>5.0</u> °C +/- the CF (-0.2°C) = <u>5.6</u> °C co	prected temperature
cooler #2°C +/- the CF (- 0.2°C) =°C α	prrected temperature
cooler #3°C +/- the CF (- 0.2° C) =°C cc	prrected temperature
Samples outside temp. but received on ice, w/in 6 hours of final sampling	g. Yes No* N/A
Custody Seals Intact on Cooler/Sample	Yes No* N/A
Sample Containers Intact	Yes No*
Sample labels match COC ID's	Yes No*
Total number of containers received match COC	Yes No*
Proper containers received for analyses requested on COC	Yes No*
Proper preservative indicated on COC/containers for analyses requested	Yes No* N/A
Complete shipment received in good condition with correct temperatures preservatives and within method specified holding times. X Yes	, containers, labels, volumes No*
* Complete Non-Conformance Receiving Sheet if checked Cooler/Sample	Review - Initials and date 5/1/2.
Comments:	
	· · · · · · · · · · · · · · · · · · ·