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November 11, 2015

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

Attention: Mark Detterman

Subject: Low-Threat UST Case Closure Policy Evaluation

3800 San Pablo Avenue, Emeryville, California

ACDEH Fuel Leak Case: RO00002520; Global ID: T06019788682

## Ladies and Gentlemen:

Attached please find a copy of the *Low-Threat UST Case Closure Policy Evaluation* 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. Banker, Jr.

San Pablo Avenue Venture

William H Bankep

c/o Banker, Marks & Kirk

1720 Broadway, Suite 202

Oakland, CA 94612



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## Ladies and Gentlemen:

Gribi Associates is pleased to submit this *Low-Threat UST Case Closure Policy (LTCP) Evaluation* on behalf of the site owners for the property located at 3800 San Pablo Avenue in Emeryville, California (Site) (see Figure 1 and Figure 2). The *Low-Threat Underground Storage Tank Case Closure Policy* (LTCP) is intended to allow for regulatory closure of sites which meet general and media-specific criteria. The following is a brief evaluation of the Site as it relates to LTCP general and media-specific criteria.

## 2.0 SITE BACKGROUND

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

Subsurface soils at the site and in the site area generally consist of clays, with occasional thin, discontinuous silts, sands, and gravels. Groundwater at the site is generally encountered at depths below 15 feet below surface grade, held under confining pressure.

## 2.1 Brief Site History

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

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

## 2.2 Summary of Previous Environmental Investigation Activities

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

## 2.2.1 UST Removal Activities

According to previous reports and records, there were previously two separate UST fueling systems on the Site. One system included two 1,000-gallon gasoline USTs and, while the exact location of these USTs is not known, these USTs were most likely located in the parking lot on the northeast side of the Site (subsequent investigative borings did not indicate either the specific location or any significant soil or groundwater hydrocarbon impacts associated with these former USTs). 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 over-excavated, and subsequent soil samples collected at approximately ten feet in depth showed relatively low levels of hydrocarbons.

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

## 2.2.2 Site Investigation Activities

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

In December 2011, Gribi Associates drilled and sampled seven investigative borings, B-8 through B-14, on the site (*Report of Soil and Groundwater Investigation and Workplan to Conduct Additional Investigation Activities, 3800 San Pablo Avenue, Emeryville, California*, Gribi Associates, January 26, 2012). Soils encountered in the borings generally consisted of clays, with relatively thin discontinuous silty and clayey gravels and sands present in some of the borings. Soil and grab groundwater samples from the seven borings were analyzed for both gasoline- and diesel-range hydrocarbons. Very low concentrations (below 50 milligrams per kilogram, mg/kg) of diesel-range hydrocarbons were encountered in soil samples below ten feet in depth in borings B-8 and B-11. Very low concentrations (below 5 mg/kg) of 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 gasoline-range hydrocarbons were encountered in grab groundwater samples from borings B-12 and B-13. Results of this investigation indicated that the previously-identified groundwater hydrocarbon plume beneath the Adeline Street parking lot is localized and did not originate from elsewhere on the Site. Further, it appeared that the source, or sources, of the groundwater hydrocarbon impacts in the Adeline Street parking lot are either the former USTs in the Adeline Street sidewalk (removed in 2002) or perhaps fuel dispensers associated with these former USTs. The report for this investigation included a workplan proposing: (1) The installation and monitoring of four groundwater monitoring wells in the Adeline Street parking lot; (2) The drilling and sampling of three soil borings on the west side of San Pablo Avenue, approximately 120 feet southwest from the Adeline Street parking lot.

In May 2012, nine investigative borings (B-15 through B-23) were drilled and four groundwater monitoring wells (MW-1 through MW-4) were installed at the Site (*Report of Remedial Investigation and Workplan to Conduct Interim Remedial Measures, 3800 San Pablo Avenue, Emeryville, California,* Gribi Associates, July 13, 2012). Both field and laboratory analytical results from this investigation indicate a relatively small, concentrated, predominately groundwater only, gasoline-range hydrocarbon plume present beneath the Adeline Street parking lot (see Table 3). The report for this investigation included a Conceptual Site Model and a work plan to conduct interim remedial measures (IRMs) for the Site. The IRM work plan proposed the drilling and sampling of additional borings and the implementation of an ozone injection pilot test on the Site. This work plan was conditionally approved on November 16, 2012.

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

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



On August 28, 2014, two soil borings, B-29 and B-30, were drilled and sampled on the west side of San Pablo Avenue and five temporary soil gas wells, SG-1 through SG-5, were installed and sampled. Soil gas well SG-2 was re-sampled on September 15, 2014, and soil gas wells SG-2 and SG-5 were re-sampled on September 25, 2014. Also, shallow soil samples SS-1 through SS-4 were collected in the east Site yard area on September 15, 2014. Results of these investigative activities were reported in *Report of Data Gaps Investigation, 3800 San Pablo Avenue, Emeryville, California* (Gribi Associates, November 7, 2014).

Soil gas samples from SG-1, SG-3, and SG-4 showed no detectable concentrations of hydrocarbon constituents (see Table 4). Soil gas samples collected at SG-2 on September 15, 2014 and September 25, 2014 showed relatively low concentrations of TPH-G, with no detectable BTEX constituents and low concentrations of Cyclohexane, Hexane, Heptane, and 1,3,4-Trimethylbenzene. The vapor sample collected from SG-5 on August 28, 2014 showed 1,700 micrograms per cubic meter (ug/m³) OF Benzene, 5,600 ug/m³ of Toluene, 1,200 ug/m³ of Ethylbenzene, and 4,570 ug/m³ of Xylenes. The two duplicate vapor samples from SG-5 collected on September 25, 2014 showed no detectable concentrations of hydrocarbon constituents. All of the soil gas samples showed no detectable Helium (leak detection compound) and generally high levels (greater than 10 percent) of Oxygen.

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

On February 26, 2015, Gribi Associates submitted the *Report of Additional Site Investigation Activities* documenting: (1) The monitoring and sampling of four Site wells on December 7, 2014 and on January 29, 2015; (2) The attempted collection of vapor samples from five temporary soil gas wells on December 7, 2014 and on January 29, 2015; (3) Conducting a preferential pathways/sensitive receptors survey; and (4) Preparation of groundwater plume delineation maps for the Site. During soil gas and groundwater sampling on December 7, 2014, it was noted that groundwater was abnormally shallow (5-6 feet bgs), presumably due to a perched water zone which resulted from significant rain events during late November/early December 2014. Thus, sampling of vapor wells yielded water, and not vapor, during the December 7, 2014 sampling. For this reason, soil gas wells and groundwater monitoring wells were sampled again on January 29, 2015. This investigation also included a preferential pathways survey. Results of this and previous investigations indicated that:



- Groundwater TPH-G concentrations in the four wells generally increased during the two
  recent monitoring events; however, benzene concentrations generally remained similar
  to previous post-remediation sampling events. The increases in TPH-G in groundwater
  correspond to shallowing of groundwater that resulted from surface water infiltration
  during significant rain events in late November/early December 2014
- 2. The significant rainfall in late November/early December 2014 resulted in a temporary perched groundwater zone, or zones, that precluded soil gas sampling in Site soil gas wells, screened at about 5.5 feet in depth. Based on groundwater depth history, this groundwater shallowing appears to be anomalous
- 3. The temporary perched groundwater zone caused by November/December 2014 rains resulted in the anomalous soil gas VOC and fixed gases results in the three soil gas wells sampled on January 29, 2015. Vapor samples from SG-3 and SG-5 showed elevated levels of methane and low levels of oxygen, and the SG-4 vapor sample showed an elevated level of TPH-G, but no BTEX constituents.
- 4. The continued lack of elevated concentrations of BTEX constituents in sub-slab vapor samples clearly indicates that indoor air exposure to BTEX, and particularly benzene, is not a significant concern relative to the planned Site redevelopment.
- 5. There appear to be no preferential pathways or sensitive receptors relative to Site hydrocarbon impacts. Below-ground utilities identified on and adjacent to the Site are too shallow to have acted as preferential migratory pathways, and well survey results for the former Ambassador Laundry site clearly indicate no water supply wells in the site vicinity.
- 6. The TPH-G groundwater hydrocarbon plume definition relative to the former Apgar Street UST has not been fully defined. However, we would not expect this plume length to exceed 200 feet, given: (1) The groundwater hydrocarbon plume associated with the former Adeline Street USTs (which is a larger hydrocarbon release) does not exceed 210 feet in length; (2) The groundwater dewatering system for the immediately south West MacArthur Boulevard underpass would be expected to intercept and halt downgradient (southwest) migration of this plume; and (3) Low-permeability soils beneath the Site and in the site vicinity generally result in short-length groundwater hydrocarbon plumes throughout the East Bay. It is also worth noting that, while groundwater in B-28 (immediately south from the former UST) showed 910 ug/L, no BTEX or hydrocarbon constituents were detected in the groundwater sample from this boring.



7. The Site meets both the general and media-specific criteria for low-threat closure under Low-Threat Underground Storage Tank Case Closure Policy.

On July 6, 2015, Gribi Associates submitted the *Report of Data Gaps Investigation* on behalf of the site owners for the property located at 3800 San Pablo Avenue in Emeryville, California (Site). This report describes and documents: (1) The drilling and sampling of four investigative soil borings (B-31 through B-34) on March 10 and 11, 2015; (2) The re-installation and sampling of five soil gas wells (SG-1A through SG-5A) on March 10 and 11, 2015; (3) The monitoring and sampling of four Site wells (MW-1 through MW-4) on March 18, 2015; and (4) The installation and sampling of 11 sub-slab vapor wells (SS-1 through SS-11) on March 18 and March 25, 2015. The goal of these investigative activities has been to address previously-identified investigative data gaps in order to move the Site towards regulatory closure.

Soil samples collected at 4.5 feet and 9.5 feet in depth in B-31 showed no significant hydrocarbon detections. Soil samples from various depths in borings B-32, B-33, and B-34 showed no significant hydrocarbon detections. Grab groundwater samples from borings B-32, B-33, and B-34 showed detections of TPH-D, but no significant gasoline-range hydrocarbon detections.

Groundwater is held under confining conditions. Groundwater did not enter boring B-31, which was drilled to 10 feet in depth. Groundwater was encountered in borings B-32, B-33, and B-34 below 15 feet in depth and entered borings slowly. Groundwater laboratory analytical results from the four Site wells (MW-1 through MW-4) showed some hydrocarbon concentration rebound from pre-ozone injection results, but reductions from recent apparent rain-induced concentrations spikes.

Both soil gas and sub-slab vapor lab results showed: (1) Low to nondetectable concentrations of BTEX constituents in all wells; (3) Some isolated TPH-G detections in vapor wells associated with the main gasoline groundwater plume; and (3) Elevated concentrations of TPH-G and methane at soil gas well SG-4 and sub-slab vapor wells SS-1 and SS-7, located immediately adjacent to the former UST near the southwest corner of the Site.

### 2.3 Recent Activities and Results

## 2.3.1 Excavation of Hydrocarbon Impacted Soil

On September 25, 2015, AEI Consultants excavated soil in the vicinity of the former underground storage tank (UST) located in the sidewalk along West MacArthur Boulevard near the southwest corner of the Site building (see Figure 3). The goal of the soil removal activities was to attempt to mitigate continued generation of methane soil gas concentrations present in shallow soils in the vicinity of soil vapor well SG-4. The excavation extended south from the Site



building footing to the former UST excavation cavity and measured approximately 15 feet by 6 feet by 9.5 feet in depth.

Soils from the excavation generally consisted of dense brown to olive grey clays. Soils exhibited no unusual staining and no hydrocarbon odors. Two excavation pit bottom samples (EbW9ft6in and EbE9ft6in) were collected at approximately 9.5 feet in depth, and two sidewall samples (SWNW7ft6in and SWNE7ft6in) were collected from the north sidewall at approximately 7.5 feet in depth. In addition, one composite soil stockpile sample (SP1-4) was collected. Laboratory analytical results are summarized in Table 5, and the laboratory data report is included in Attachment A. The pit bottom and sidewall samples showed no detectable concentrations of TPH-G/BTEX, TPH-D, and TOG. The stockpile soil sample showed no detectable concentrations of TPH-G/BTEX and TPH-D.

## 2.3.2 Verification Vapor Sampling

On October 13, 2015, Gribi Associates samples sub-slab vapor well SS-1 and soil gas well SG-4, both located adjacent to the September 25 excavation area. Vapor sampling was conducted in general conformance with applicable DTSC guidelines using the methods described in previous reports. During sampling, helium was used as a leak detection compound. Gribi Associates requested laboratory analysis for TPH-G/BTEX, methane, fixed gases, and helium. However, the analytical laboratory indicated that, after analyzing for TPH-G/BTEX and methane, there was insufficient sample for fixed gas and helium analysis.

Laboratory analytical results are summarized in Table 4, and the laboratory data report is included in Attachment A. Vapor samples from SS-1 and SG-4 showed respective TPH-G concentrations of nondetect (RL=7,170  $\text{ug/m}^3$ ) and 174,000  $\text{ug/m}^3$  (Duplicate = 201,000  $\text{ug/m}^3$ ), and respective methane concentrations of nondetect (RL=0.0005 %) and 1.3 % (Duplicate = 1.5 %).

## 3.0 LOW-THREAT CLOSURE EVALUATION

### 3.1 LTCP General Criteria

The Site meets all of the LTCP general criteria, as summarized below:

- The Site is on a public water supply system; East Bay Municipal Utilities District.
- The release consists only of petroleum. COCs are primarily gasoline-range hydrocarbons.
- The major sources of contamination have been stopped. USTs removed in 1982, 2002, and 2012.
- There has been no free product encountered at the Site.



- A conceptual site model has been developed for this Site. Site Conceptual Model submitted on April 1, 2014.
- Secondary sources have been removed to the extent practicable. Soil overexcavation conducted and ozone injection conducted.
- Soil and groundwater has been tested for MTBE and reported.
- Nuisance as defined by Water Code section 13050 does not exist at the Site.

Note that previously-identified elevated methane vapor impacts present in shallow soils beneath the southwest corner of the Site building slab could potentially have represented a nuisance as a possible explosion hazard. However, soils adjacent to the methane-impacted area were excavated, and subsequent sub-slab and soil vapor sampling showed methane vapor results which were significantly below the lower explosion limit (LEL) of 4.4 %. Thus, soil excavation was effective in mitigating previously-identified methane vapor impacts, which clearly represented a relict vapor plume trapped beneath the building slab over many decades.

## 3.2 LTCP Media-Specific Criteria: Groundwater

The Site meets the following LTCP media-specific criteria for groundwater:

- The contaminant plume that exceeds groundwater quality objectives is less than 250 feet in length.
- The nearest existing water supply well and/or surface water body is greater than 1,000 feet from the defined plume boundary.
- An analysis of site-specific conditions determined that the site under current and reasonably anticipated near-term future scenarios poses a low-threat to human health and safety and to the environment, and water quality objectives will be achieved within a reasonable time frame.

## 3.3 LTCP Media-Specific Criteria: Vapor Intrusion to Indoor Air

The Site meets the following LTCP media-specific criteria for vapor intrusion to indoor air (Scenario 4 – Direct Measurement of Soil Gas Concentrations):

- There is a minimum of five vertical feet of soil between the depth of soil gas measurement and the building foundation. Soil gas samples were collected at 5.5 feet in depth; the concrete slab foundation is approximately 0.5 feet thick.
- Oxygen concentrations in soil gas are greater than 4 percent. The average soil gas oxygen concentration for all Site soil gas samples to date is 9.7 percent.
- Benzene concentrations in soil gas are less than 85,000 ug/m<sup>3</sup>. The highest benzene concentration for all Site soil gas samples is 1,700 ug/m<sup>3</sup>.



#### 3.4 LTCP Media-Specific Criteria: Direct Contact and Outdoor Air Exposure

The Site meets the following LTCP media-specific criteria for direct contact and outdoor air exposure:

- Benzene concentrations in soil are below LTCP Table 1 respective 0-5 ft bgs and 5-10 ft bgs residential risk levels of 1.9 mg/kg and 2.8 mg/kg. Benzene concentrations in these depth intervals in Site soil borings are nondetect.
- Ethylbenzene concentrations in soil are below LTCP Table 1 respective 0-5 ft bgs and 5-10 ft bgs residential risk levels of 21 mg/kg and 32 mg/kg. The highest Ethylbenzene concentrations in the 0-5 ft bgs and 5-10 ft bgs depth intervals in Site borings are nondetect and 3.2 mg/kg, respectively.
- Naphthalene concentrations in soil are below LTCP Table 1 respective 0-5 ft bgs and 5-10 ft bgs residential risk levels of 9.7 mg/kg and 9.7 mg/kg. The highest Naphthalene concentrations in the 0-5 ft bgs and 5-10 ft bgs depth intervals in Site borings are nondetect and 0.25 mg/kg, respectively.

Since the Site meets both the general and media-specific criteria, regulatory closure should be granted for this site.

We appreciate this opportunity to provide this letter for your review. Please contact us if there are questions or if additional information is required.

Very truly yours,

James E. Gribi **Professional Geologist** 

California No. 5843

JEG:ct Enclosure

C Mr. Bill Banker, Jr., San Pablo Avenue Venture

Mr. Tom Graf, GrafCon



## **TABLES**



## **CUMULATIVE SOIL LABORATORY ANALYTICAL RESULTS**

				F	ormer Maz Gl	ass UST Site			
Sample	Sample			:	Soil Concentra	ation, in millig	grams per kil	ogram (mg/kg)	
ID	Depth	TPH-D	TPH-G	В	Т	E	Х	ОХҮ	OTHER VOCs
US.	T Removal, Env	iro Soil Tech	Consultants,	May 2002					
T-1-7-1	7.0 feet	280L	440	<0.130	<0.130	<0.130	<0.130	MTBE <0.130	<ul><li>0.910 Propylbenzene</li><li>0.260 Isopropylbenzene</li><li>0.490 n-Butylbenzene</li></ul>
T-1-10-2	10.0 feet	97L	26	<0.023	<0.023	<0.023	<0.023	MTBE <0.023	<ul><li>0.140 Propylbenzene</li><li>0.037 Isopropylbenzene</li><li>0.067 n-Butylbenzene</li></ul>
T-2-6.5-1	6.5 feet	29L	46	<0.025	<0.025	0.057	<0.025	MTBE <0.025	0.640 Propylbenzene 0.130 Isopropylbenzene 0.150 sec-Butylbenzene 0.130 Isopropyl Toluene 0.670 n-Butylbenzene
T-2-8.5-2	8.5 feet	24L	370	<0.130	<0.130	3.2	0.48	MTBE <0.130	2.8 Propylbenzene 0.650 Isopropylbenzene 0.380 sec-Butylbenzene 0.510 Isopropyl Toluene 1.9 n-Butylbenzene 0.370 1,3,5-Trimethylbenzene 0.250 Naphthalene
T-2-11-3	11.0 feet	18L	59	<0.013	<0.013	0.069	<0.013	MTBE <0.013	0.059 Acetone 0.036 2-Butanone 0.039 Propylbenzene 0.019 n-Butylbenzene
Soi	l Boring Invest	igation, Envi	ro Soil Tech C	onsultants, N	lay 2007				
B-1-5	5.0 feet	<5	<0.5	<0.005	<0.005	<0.005	<0.010	NA	ND
B-1-10	10.0 feet	<5	<0.5	<0.005	<0.005	<0.005	<0.010	NA	ND
B-1-15	15.0 feet	<5	<0.5	0.030	<0.005	0.022	<0.010	NA	0.010 n-Propylbenzene
B-1-20	20.0 feet	7.7	7.7	0.085	<0.005	0.026	0.015	NA	0.019 1,2,4-Trimethylbenzene 0.0071 1,3,5-Trimethylbenzene 0.0055 n-Propylbenzene 0.014 Naphthalene
B-2-5	5.0 feet	<5	<0.5	<0.005	<0.005	<0.005	<0.010	NA	ND
B-2-10	10.0 feet	<5	<0.5	<0.005	<0.005	<0.005	<0.010	NA	ND
B-2-15	15.0 feet	<5	<0.5	<0.005	<0.005	<0.005	<0.010	NA	ND
B-2-20	20.0 feet	<5	<0.5	<0.005	<0.005	<0.005	<0.010	NA	ND
B-3-5	5.0 feet	<5	<0.5	<0.005	<0.005	<0.005	<0.010	NA	ND
B-3-10	10.0 feet	<5	<0.5	<0.005	<0.005	<0.005	<0.010	NA	ND
B-3-15	15.0 feet	<5	<0.5	<0.005	<0.005	<0.005	<0.010	NA	ND
B-3-20	20.0 feet	<5	7.5	<0.005	<0.005	<0.005	<0.010	NA	<b>0.110</b> Acetone

## CUMULATIVE SOIL LABORATORY ANALYTICAL RESULTS

					ormer Maz Gl				
Sample ID	Sample Depth	TPH-D	TPH-G	В	T T	E	grams per kilog X	OXY	OTHER VOCs
B-4-5	5.0 feet	<5 -5	<0.5	<0.005	<0.005	<0.005	<0.010	NA	ND ND
B-4-10	10.0 feet	<5 .5	<0.5	<0.005	<0.005	<0.005	<0.010	NA	ND
B-4-15	15.0 feet	<5 .5	<0.5	<0.005	<0.005	<0.005	<0.010	NA	ND
B-4-20	20.0 feet	<5	<0.5	<0.005	<0.005	<0.005	<0.010	NA	ND ND
B-5-5	5.0 feet	<b>&lt;</b> 5	<0.5	<0.005	<0.005	<0.005	<0.010	NA	ND
B-5-10	10.0 feet	<b>&lt;</b> 5	<0.5	<0.005	<0.005	<0.005	<0.010	NA	ND
B-5-15	15.0 feet	<b>&lt;</b> 5	<0.5	<0.005	<0.005	<0.005	<0.010	NA	ND
B-5-20	20.0 feet	<b>&lt;</b> 5	<0.5	<0.005	<0.005	<0.005	<0.010	NA	ND
B-6-5	5.0 feet	<5	<0.5	<0.005	<0.005	<0.005	<0.010	NA	ND
B-6-10	10.0 feet	<5	<0.5	<0.005	<0.005	<0.005	<0.010	NA	ND
B-6-15	15.0 feet	<b>&lt;</b> 5	<0.5	<0.005	<0.005	<0.005	<0.010	NA	0.0086 n-Propylbenzene
B-6-20	20.0 feet	<5	1.1	0.0071	<0.005	0.068	<0.010	NA	0.0082 1,2,4-Trimethylbenzene 0.006 1,3,5-Trimethyl benzene 0.0083 Isopropylbenzene 0.013 n-Propyl benzene 0.0055 Naphthalene
B-7-5	5.0 feet	<5	<0.5	<0.005	<0.005	<0.005	<0.010	NA	ND
B-7-10	10.0 feet	<5	<0.5	<0.005	<0.005	<0.005	<0.010	NA	ND
B-7-15	15.0 feet	<5	<0.5	<0.005	<0.005	<0.005	<0.010	NA	ND
B-7-20	20.0 feet	<5	<0.5	<0.005	<0.005	<0.005	<0.010	NA	ND
Soil	l Boring Investi	igation, Gribi	Associates, D	December 201	11				
B-8-6.0	6.0 feet	NA	<0.5	<0.005	<0.005	<0.005	<0.010	NA	NA
B-8-9.0	9.0 feet	NA	4.0	<0.005	<0.005	<0.005	<0.010	NA	NA
B-8-14.0	14.0 feet	22	22	<0.005	<0.005	<0.005	<0.010	NA	NA
B-9-7.5	7.5 feet	NA	<0.5	<0.005	<0.005	<0.005	<0.010	NA	NA
B-9-11.0	11.0 feet	NA	<0.5	<0.005	<0.005	<0.005	<0.010	NA	NA
B-9-16.0	16.0 feet	NA	<0.5	<0.005	<0.005	<0.005	<0.010	NA	NA
B-10-7.5	7.5 feet	NA	<0.5	<0.005	<0.005	<0.005	<0.010	NA	NA
B-10-13.5	13.5 feet	NA	<0.5	<0.005	<0.005	<0.005	<0.010	NA	NA
B-10-20.5	20.5 feet	NA	<0.5	<0.005	<0.005	<0.005	<0.010	NA	NA
B-11-10.5	10.5 feet	26	<0.5	<0.005	<0.005	<0.005	<0.010	NA	NA
B-11-15.0	15.0 feet	<10	<0.5	<0.005	<0.005	<0.005	<0.010	NA	NA
B-11-20.0	20.5 feet	NA	<0.5	<0.005	<0.005	<0.005	<0.010	NA	NA
B-12-7.5	7.5 feet	NA	<0.5	<0.005	<0.005	<0.005	<0.010	NA	NA
B-12-10.5	10.5 feet	NA	1.2	<0.005	<0.005	<0.005	<0.010	NA	NA
B-12-17.5	17.5 feet	NA	2.9	<0.005	<0.005	<0.005	<0.010	NA	NA
B-12-22.0	22.0 feet	<10	<0.5	<0.005	<0.005	<0.005	<0.010	NA	NA
B-13-7.5	7.5 feet	NA	<0.5	<0.005	<0.005	<0.005	<0.010	NA	NA
B-13-12.5	12.5 feet	NA	<0.5	<0.005	<0.005	<0.005	<0.010	NA	NA
B-13-14.5	14.5 feet	NA	2	<0.005	<0.005	<0.005	<0.010	NA	NA
B-13-20.0	20.0 feet	NA	3.9	<0.005	<0.005	0.07	<0.010	NA	NA

## CUMULATIVE SOIL LABORATORY ANALYTICAL RESULTS

Sample	Sample			:	Soil Concentra	ation, in millig	grams per kilog	gram (mg/kg)	
ID	Depth	TPH-D	TPH-G	В	Т	E	х	ОХҮ	OTHER VOCs
B-14-8.0	8.0 feet	NA	<0.5	<0.005	<0.005	<0.005	<0.010	NA	NA
B-14-12.0	12.0 feet	NA	1.6	<0.005	<0.005	<0.005	<0.010	NA	NA
B-14-15.5	15.5 feet	NA	<0.5	<0.005	<0.005	<0.005	<0.010	NA	NA
B-14-20.5	20.5 feet	NA	<0.5	<0.005	<0.005	<0.005	<0.010	NA	NA
Ren	nedial Investig	ation, Gribi	Associates, M	ay 2012					
B-15-12.0	12.0 feet	NA	<0.50	<0.005	<0.005	<0.005	<0.010	NA	NA
B-16-13.5	13.5 feet	NA	<0.50	<0.005	<0.005	<0.005	<0.010	NA	NA
B-17-11.5	11.5	NA	<0.50	<0.005	<0.005	<0.005	<0.010	NA	NA
B-18-13.0	13.0 feet	NA	<0.5	<0.005	<0.005	<0.005	<0.010	NA	NA
B-18-19.0	19.0 feet	NA	1.4	<0.005	0.013	<0.005	<0.010	NA	NA
B-18-23.0	23.0 feet	NA	0.63	<0.005	<0.005	<0.005	<0.010	NA	NA
B-19-17.5	17.5 feet	NA	<0.50	<0.005	<0.005	<0.005	<0.010	NA	NA
B-20-20.0	20.0 feet	NA	<0.50	<0.005	<0.005	<0.005	<0.010	NA	NA
B-21-14.5	14.5 feet	NA	0.52	<0.005	<0.005	<0.005	<0.010	NA	NA
B-21-16.0	16.0 feet	NA	<0.50	<0.005	<0.005	<0.005	<0.010	NA	NA
B-22-17.0	17.0 feet	NA	<0.50	<0.005	<0.005	<0.005	<0.010	NA	NA
B-23-11.0	11.0 feet	NA	0.70	<0.005	<0.005	<0.005	<0.010	NA	NA
MW-1-10.5	10.5 feet	NA	<0.50	<0.005	<0.005	<0.005	<0.010	NA	NA
MW-1-15.5	15.5 feet	NA	3.1	<0.005	0.017	0.013	0.0291	NA	NA
MW-1-20.0	20.0 feet	NA	4.7	0.032	0.013	0.12	<0.010	NA	NA
MW-1-23.0	23.0 feet	NA	2.8	0.025	0.0077	0.073	<0.010	NA	NA
MW-2-4.5	4.5 feet	NA	<0.50	<0.005	<0.005	<0.005	<0.010	NA	NA
MW-2-8.0	8.0 feet	NA	35	<0.005	0.13	0.038	0.086	NA	NA
MW-2-17.5	17.5 feet	NA	69	0.14	0.14	0.22	0.148	NA	NA
MW-2-24.0	24.0 feet	NA	54	0.22	0.14	0.57	0.121	NA	NA
MW-3-8.0	8.0 feet	NA	25	<0.005	0.1	<0.005	0.101	NA	NA
MW-3-17.5	17.5 feet	NA	1.3	<0.005	0.0076	0.011	<0.010	NA	NA
MW-3-23.0	23.0 feet	NA	28	0.36	0.052	0.35	0.236	NA	NA
MW-4-7.0	7.0 feet	NA	<0.50	<0.005	<0.005	<0.005	<0.010	NA	NA
MW-4-12.0	12.0 feet	NA	1.3	<0.005	0.0055	0.0081	<0.010	NA	NA
MW-4-16.0	16.0 feet	NA	7.3	0.0069	0.028	0.034	0.0215	NA	NA
MW-4-23.0	23.0 feet	NA	22	0.026	0.064	0.062	0.085	NA	NA
Sou	th UST Remov	al, Gribi Asso	ociates, Augus	st 2012					
T-1-W	10.0 feet	<10	<0.50	<0.005	<0.005	<0.005	<0.005	All ND	All ND
T-1-E	10.0 feet	<10	<0.50	<0.005	<0.005	<0.005	<0.005	All ND	All ND
T-1-N	7.0 feet	<10	0.52	<0.005	<0.005	<0.005	<0.005	All ND	All ND
T-1-S	7.0 feet	<10	<0.50	<0.005	<0.005	<0.005	<0.005	All ND	All ND

## CUMULATIVE SOIL LABORATORY ANALYTICAL RESULTS

					Soil Concentra		rams per kilo	gram (mg/kg)			
Sample ID	Sample Depth	TPH-D	TPH-G	В	T	E	X	OXY	OTHER VOCs		
Ren	nediation Pilot										
B-24-9.0	9.0 feet	NA	<0.5	<0.005	<0.005	<0.005	<0.010	All ND	NA		
B-24-15.0	15.0 feet	NA	1.3	<0.005	<0.005	<0.005	<0.010	All ND	NA		
B-27-7.0	7.0 feet	NA	25	<0.005	<0.005	<0.005	<0.010	All ND	NA		
B-27-15.5	15.5 feet	NA	4.4	0.0056	<0.005	0.12	0.008	All ND	NA		
B-28-7.5	7.5 feet	NA	<0.5	<0.005	<0.005	<0.005	<0.010	All ND	NA		
B-28-15.5	15.5 feet	NA	16	<0.005	<0.005	<0.005	<0.010	All ND	NA		
OW-1-7.5	7.5 feet	NA	<0.5	<0.005	<0.005	<0.005	<0.010	All ND	NA		
OW-1-15.0	15.0 feet	NA	7.4	0.039	<0.005	0.19	0.013	All ND	NA		
OW-1-17.0	17.0 feet	NA	18	0.013	<0.005	0.12	0.0074	All ND	NA		
OW-1-25.0	25.0 feet	NA	6.5	0.014	<0.005	0.047	0.011	All ND	NA		
OW-2-7.5	7.5 feet	NA	7.7	<0.005	<0.005	<0.005	<0.010	NA	NA		
OW-2-15.5	15.5 feet	NA	2.5	<0.005	<0.005	0.0084	<0.010	NA	NA		
OW-3-7.5	7.5 feet	NA	1.1	<0.005	<0.005	<0.005	<0.010	NA	NA		
OW-3-15.5	15.5 feet	NA	<0.5	<0.005	<0.005	<0.005	<0.010	NA	NA		
Soil	, Water, & Vap	or Investiga	tion, Gribi Ass	sociates, Aug	ust/Septembe	er 2014					
B-29-20.0	20.0 feet	NA	<0.50	<0.005	<0.005	<0.005	<0.010	NA	<0.005 Naphthalene		
B-30-20.0	20.0 feet	NA	<0.50	<0.005	<0.005	<0.005	<0.010	NA	<0.005 Naphthalene		
SG-2-2.5	2.5 feet	NA	<0.50	<0.005	<0.005	<0.005	<0.010	All ND	<0.005 Naphthalene		
SG-2-5.0	5.0 feet	NA	<0.50	<0.005	<0.005	<0.005	<0.010	All ND	<0.005 Naphthalene		
SG-5-2.5	2.5 feet	NA	<0.50	<0.005	<0.005	<0.005	<0.010	All ND	<0.005 Naphthalene		
SG-5-5.0	5.0 feet	NA	<0.50	<0.005	<0.005	<0.005	<0.010	All ND	<0.005 Naphthalene		
SS-1	1.0 foot	<10	<10	<0.005	<0.005	<0.005	<0.010	All ND	All ND		
SS-2	1.0 foot	<10	<10	<0.005	<0.005	<0.005	<0.010	All ND	All ND		
SS-3	1.0 foot	<10	<10	<0.005	<0.005	<0.005	<0.010	All ND	All ND		
SS-4	1.0 foot	<10	<10	<0.005	<0.005	<0.005	<0.010	All ND	All ND		
Soil	, Water, & Vap	or Investiga	tion, Gribi Ass	sociates, Mar	ch 2015						
B-31-4.5	4.5 feet	<10	<0.50	<0.005	<0.005	<0.005	<0.010	All ND	All ND		
B-31-9.5	9.5 feet	<10	<0.50	<0.005	0.0084	<0.005	<0.010	All ND	All ND		
B-32-4.5	4.5 feet	<10	<0.50	<0.005	0.0080	<0.005	<0.010	All ND	All ND		
B-32-7.5	7.5 feet	<10	<0.50	<0.005	0.0080	<0.005	<0.010	All ND	All ND		
B-32-12.5	12.5 feet	<10	4.8	<0.005	0.0083	<0.005	<0.010	All ND	All ND		
B-32-17.5	17.5 feet	<10	9.8	0.016	<0.005	0.014	<0.010	All ND	All ND		
B-32-19.5	19.5 feet	<10	<0.50	<0.005	0.0110	<0.005	<0.010	All ND	All ND		
B-32-24.5	24.5 feet	<10	0.50	<0.005	0,0090	<0.005	<0.010	All ND	All ND		
B-33-4.5	4.5 feet	<10	<0.50	<0.005	0.0086	<0.005	<0.010	All ND	All ND		
B-33-7.5	7.5 feet	<10	<0.50	<0.005	0.0082	<0.005	<0.010	All ND	All ND		
B-33-11.5	11.5 feet	<10	6.0	<0.005	0.0092	0.0050	<0.010	All ND	All ND		
B-33-14.5	14.5 feet	<10	1.5	<0.005	0.0100	0.0056	<0.010	All ND	All ND		
B-33-18.0	18.0 feet	<10	1.5	<0.005	0.0093	<0.005	<0.010	All ND	All ND		

#### **CUMULATIVE SOIL LABORATORY ANALYTICAL RESULTS** Former Maz Glass UST Site Soil Concentration, in milligrams per kilogram (mg/kg) Sample Sample Depth OTHER VOCs TPH-D TPH-G В Ε Х OXY B-34-7.5 7.5 feet <10 < 0.50 <0.005 0.0075 < 0.005 <0.010 All ND All ND B-34-12.5 12.5 feet <0.005 0.0093 <0.005 <0.010 All ND All ND <10 1.0 <0.010 B-34-14.5 0.0096 All ND 14.5 feet 2.0 < 0.005 < 0.005 All ND <10 B-34-17.5 17.5 feet <10 2.0 <0.005 < 0.005 <0.005 <0.010 All ND 0.0063 Isopropylbenzene 0.0069 n-Propylbenzene <10 <0.005 <0.005 <0.010 B-34-24.5 24.5 feet < 0.50 <0.005 All ND All ND <10 <0.005 SG-1A-3.0 3.0 feet < 0.50 <0.005 < 0.005 < 0.010 All ND All ND SG-2A-3.0 3.0 feet <10 <0.50 < 0.005 <0.005 <0.005 <0.010 All ND All ND <10 <0.005 SG-3A-3.0 3.0 feet < 0.005 < 0.010 All ND All ND < 0.50 < 0.005 <10 < 0.005 SG-4A-3.0 3.0 feet <0.50 <0.005 <0.005 <0.010 All ND All ND < 0.005 <10 SG-5A-3.0 3.0 feet < 0.50 < 0.005 < 0.005 < 0.010 All ND All ND 100 0.044 3.3 **8.4** MTBE NL 1,2,4-Trimethyl benzene ESL

NL 1,3,5-Trimethyl benzene
NL Isopropyl benzenee
NL n-Butylbenzene
NL sec-Butylbenzene
NL Isopropyl Toluene
NL n-Propylbenzene
3.1 Naphthalene

Table 1

TPH-D = Total Petroleum Hydrocarbons as Diesel

TPH-G = Total Petroleum Hydrocarbons as Gasoline

B = Benzene,

T = Toluene

E = Ethylbenzene

X = Xylenes

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)

L = Lighter hydrocarbons contributed to the quantitation.

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, May 2013.

				Table 2				
	CUN	/IULATIVE GR	AB GROUND	WATER LAB	ORATORY AN	IALYTICAL RE	SULTS	
			Forme	er Maz Glass	UST Site			
			Ground	dwater Conc	entration, in	micrograms	per liter (ug	/L)
	TPH-D	TPH-G	В	Т	E	Х	ОХҮ	OTHER VOCs
stiga	ition, Enviro	Soil Tech Cor	sultants, M	ay 2007				
	NA	54,000	6,700	120	3,000	2,300	NA	<b>2.8</b> 1,2,4-Trimethyl benzend 0.91 1,3,5-Trimethyl benzend 0.11 Isopropyl benzene
	<96	<50	<0.50	<0.50	<0.50	0.5	NA	All ND
	<54	4,500	7.5	<2.5	2.7	<2.5	NA	<b>0.0026</b> 1,2-Dichloroethane 0.055 Isopropylbenzene 0.031 n-Butylbenzene 0.071 n-Propylbenzene
	<120	<100	<0.50	<0.50	0.55	<0.50	NA	All ND
	<590	780,000	240	<50	1,400	640	NA	<b>1.10</b> 1,2,4-Trimethylbenzen 0.15 Isopropylbenzene 0.61 n-Propylbenzene
	<490	44,000	3,000	120	2,200	1,200	NA	<b>2.2</b> 1,2,4-Trimethylbenzene 0.72 1,3,5-Trimethylbenzen 0.11 Isopropylbenzene 0.52 n-Propylbenzene
	<56	<50	<0.50	<0.50	<0.50	<0.50	NA	<b>0.0032</b> 1,2-Dichloroethane
tiga	ition, Gribi A	Associates, De	cember 201	1				
	NA	68	<0.50	<0.50	<0.50	<1.0	All ND	NA
	NA	<50	<0.50	<0.50	<0.50	<1.0	All ND	NA
	<50	<50	<0.50	<0.50	<0.50	<1.0	All ND	NA
	NA	<50	<0.50	<0.50	<0.50	<1.0	All ND	NA
	NA	3,200	46	0.96	12	<1.0	All ND	NA
	1,400	9,100	270	4.0	390	52.4	All ND	NA
	<50	0.094	<0.50	<1.0	<1.0	<1.0	All ND	NA
igat	ion, Gribi As	ssociates, May	/ 2012					
	NA	<50	<0.50	<0.50	<0.50	<1.0	All ND	<b>1.4</b> 1,2-Dichloroethane
	NA	<50	<0.50	<0.50	<0.50	<1.0	All ND	1.0 1,2-Dichloroethane
	NA	<50	<0.50	<0.50	<0.50	<1.0	All ND	All ND
	NA	560	<0.50	<0.50	<0.50	<1.0	All ND	<b>1.6</b> Sec-Butylbenzene 2.5 Naphthalene 1.3 1,2,4-Trimethylbenzene

Sample	Sample			Ground	dwater Conc	entration, in	micrograms	per liter (ug	/L)
ID	Depth	TPH-D	TPH-G	В	т	E	х	ОХҮ	OTHER VOCs
Soil	Boring Investig	ation, Enviro	Soil Tech Cor	nsultants, M	ay 2007				
B-1-W	20 feet	NA	54,000	6,700	120	3,000	2,300	NA	<b>2.8</b> 1,2,4-Trimethyl benzene 0.91 1,3,5-Trimethyl benzene 0.11 Isopropyl benzene
B-2-W	20 feet	<96	<50	<0.50	<0.50	<0.50	0.5	NA	All ND
B-3-W	20 feet	<54	4,500	7.5	<2.5	2.7	<2.5	NA	<b>0.0026</b> 1,2-Dichloroethane 0.055 Isopropylbenzene 0.031 n-Butylbenzene 0.071 n-Propylbenzene
B-4-W	20 feet	<120	<100	<0.50	<0.50	0.55	<0.50	NA	All ND
B-5-W	20 feet	<590	780,000	240	<50	1,400	640	NA	<b>1.10</b> 1,2,4-Trimethylbenzene 0.15 Isopropylbenzene 0.61 n-Propylbenzene
B-6-W	20 feet	<490	44,000	3,000	120	2,200	1,200	NA	<b>2.2</b> 1,2,4-Trimethylbenzene 0.72 1,3,5-Trimethylbenzene 0.11 Isopropylbenzene 0.52 n-Propylbenzene
B-7-W	20 feet	<56	<50	<0.50	<0.50	<0.50	<0.50	NA	0.0032 1,2-Dichloroethane
Soil	Boring Investig	ation, Gribi	Associates, De	cember 201	1				
B-8-W	(15-20')	NA	68	<0.50	<0.50	<0.50	<1.0	All ND	NA
B-9-W	(16-21')	NA	<50	<0.50	<0.50	<0.50	<1.0	All ND	NA
B-10-W	(16-21')	<50	<50	<0.50	<0.50	<0.50	<1.0	All ND	NA
B-11-W	(17-22')	NA	<50	<0.50	<0.50	<0.50	<1.0	All ND	NA
B-12-W	(18-23')	NA	3,200	46	0.96	12	<1.0	All ND	NA
B-13-W	(18-23')	1,400	9,100	270	4.0	390	52.4	All ND	NA
B-14-W	(18-23')	<50	0.094	<0.50	<1.0	<1.0	<1.0	All ND	NA
Ren	nedial Investiga	tion, Gribi A	ssociates, May	y 2012					
B-15-W	(21-24 ft)	NA	<50	<0.50	<0.50	<0.50	<1.0	All ND	1.4 1,2-Dichloroethane
B-16-W	(24 ft)	NA	<50	<0.50	<0.50	<0.50	<1.0	All ND	<b>1.0</b> 1,2-Dichloroethane
B-17-W	(12 ft)	NA	<50	<0.50	<0.50	<0.50	<1.0	All ND	All ND
B-18-W	(13-24')	NA	560	<0.50	<0.50	<0.50	<1.0	All ND	1.6 Sec-Butylbenzene 2.5 Naphthalene 1.3 1,2,4-Trimethylbenzene
B-19-W	(13-24')	NA	<50	<0.50	<0.50	<0.50	<1.0	All ND	All ND
B-20-W	(17-23')	NA	<50	<0.50	<0.50	<0.50	<1.0	NA	NA
B-21-W	(15-23')	NA	<50	<0.50	<0.50	<0.50	<1.0	NA	NA
B-22-W	(24-31')	NA	<50	<0.50	<0.50	<0.50	<1.0	NA	NA
Ren	nediation Pilot	Test, Gribi As	sociates, Feb	ruary 2013					
B-24-W	(24')	NA	<50	<0.50	<0.50	<0.50	<1.0	All ND	NA
B-27-W	(24')	NA	7,900	1,100	99	1,500	1,169	All ND	NA

					Table 2										
		CUM	IULATIVE GR	AB GROUNI	OWATER LABO	RATORY A	NALYTICAL RE	SULTS							
Former Maz Glass UST Site															
Sample															
ID	Depth	TPH-D TPH-G B T E X OXY OTHER VOCs													
B-28-W	(20')	NA	910	<0.50	<0.50	<0.50	<1.0	All ND	NA						
Soil	Soil, Water, & Vapor Investigation, Gribi Associates, August/September 2014														
B-29-W															
B-30-W	· · · · · · · · · · · · · · · · · · ·														
Soil	Soil, Water, & Vapor Investigation, Gribi Associates, March 2015														
B-32-GW	12.91 ft	1,600	<50	1.6	<0.50	1.2	<1.0	<b>70</b> TBA							
B-33-GW	13.42 ft	720	<50	0.57	<0.50	2.0	<1.0	All ND							
B-34-GW	13.19 ft	700	<50	2.2	1.1	1.7	1.8	<b>82</b> TBA							
ES	SL .	100	100	27	9.50E+04	310	3.70E+04	Various	NL 1,2,4-Trimethyl benzene NL 1,3,5-Trimethyl benzene NL Isopropyl benzene 100 1,2-Dichloroethane NL Sec-Butylbenzene NL n-Butylbenzene 160 Naphthalene						

## **Table Notes:**

TPH-D = Total Petroleum Hydrocarbons as Diesel

TPH-G = Total Petroleum Hydrocarbons as Gasoline

B = Benzene,

T = Toluene

E = Ethylbenzene

X = Xylenes

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, May 2013.

## Table 3 CUMULATIVE GROUNDWATER LABORATORY ANALYTICAL RESULTS

								Former M	az Glass U	ST Site						
Well ID	Date	GW	GW								entration, i	n microgra	ams per lite	er (ug/L)		
		Depth	Elev.	TPH-G	TPH-D	ТРН-НО	В	T	E	Х	ОХҮ	Cr6	Br	N	SVOCs	Other VOCs
MW-1	5/18/2012	8.42	30.54	17,000	_	_	1,300	29	770	260	All ND	_	_	_	_	_
<38.96>	9/13/2012	10.55	28.41	13,000	_	_	630	10	780	86.7	All ND	_	_	_	_	_
.50.50	11/9/2012	9.72	29.24	15,000	_	_	1,200	21	1,100	283	All ND	_	_	_	_	_
	2/20/2013	8.34	30.62	9,800	_	_	970	15	860	171.5	All ND	_	_	75	_	_
	6/4/2013	9.39	29.57	8,600	_	_	880	15	770	121.2	All ND	_	_	74	_	_
	Ozone Injection			•			000	13	,,,	121.2	7111110			, ,		
	9/26/2013	10.38	28.58	16,000	_	_	220	8.9	610	152.4	All ND	<0.20	0.091	120	_	_
	12/30/2013	9.92	29.04	4,700	_	_	62	1.5	110	62.75	All ND	-	-	23	_	_
	Ozone Injection						02	1.5	110	02.73	All ND			23		
	3/7/2014	6.56	32.40	5,600	_	_	320	8.4	370	89.7	All ND	<0.20	0.047	68	_	_
	5/27/2014	9.77	29.19	2,900	_	_	180	4.3	290	38.51	All ND	-	-	24	_	_
	Ozone Injection			-			100	4.5	230	30.31	All ND					
	9/29/2014	11.25	27.71	400	<500	960	<0.50	<0.50	1.1	1.3	<b>38</b> TBA	-	-	<1.0	All ND	<b>7.0</b> 1,3,5-Trimethylbenzene <b>4.3</b> 1,2,4-Trimethyhlbenene
	Ozone Injection	Stopped on C	ctober 24,	2014												
	12/7/2014	6.01	32.95	12,000		_	250	2.8	270	54.51	All ND	_	_	_	_	_
	1/29/2015	8.91	30.05	15,000		_	240	3.6	210	59.51	All ND	_	_	_	_	_
	3/12/2015	8.28	30.68	3,700	1,300	-	210	2.3	120	63	All ND	-	-	19	-	<ul> <li>8.5 b-Butylbenzene</li> <li>2.9 sec-Butylbenzene</li> <li>16 Isopropylbenzene</li> <li>2.1 p-Isopropylbenzene</li> <li>40 n-Propylbenzene</li> <li>28 1,3,5-Trimethylbenzene</li> <li>45 1,2,4-Trimethylbenzene</li> </ul>
MW-2	5/18/2012	8.78	30.18	10,000	-	-	610	26	340	69	All ND	-	-	-	-	-
38.96>	9/13/2012	10.64	28.32	11,000	-	-	990	27	460	42.9	All ND	-	-	-	-	-
	11/9/2012	9.57	29.39	17,000	-	-	750	19	280	64.9	All ND	-	-	-	-	-
	2/20/2013	8.86	30.1	8,200	-	-	860	29	410	70	All ND	-	-	29	-	-
	6/4/2013	9.86	29.1	12,000	-	-	870	23	410	43.8	All ND	-	-	46	-	-
	Ozone Injection	Started on Se	ptember 9	, 2013												
	9/26/2013	13.32	25.64	930	-	-	39	5.6	26	20	All ND	1.1	0.09	13	-	-
	12/30/2013	10.33	28.63	270	-	-	7.9	<0.50	2.9	<1.0	<b>20</b> TBA	-	-	<1.0	-	-
	Ozone Injection	Stopped on F	ebruary 7,	2014												
	3/7/2014	6.95	32.01	440	-	-	41	0.91	4.2	2.9	All ND	<0.20	0.13	4.2	-	_
	5/27/2014	9.95	29.01	1,200	-	-	250	5.9	34	14.2	All ND	-	_	8.1	-	-
	Ozone Injection	Resumed on A	August 5, 2	2014												
	9/29/2014	11.28	27.68	180	<500	<500	4.5	< 0.50	0.73	<1.0	<b>87</b> TBA		_	<1.0	ALL ND	ALL ND

## Table 3 CUMULATIVE GROUNDWATER LABORATORY ANALYTICAL RESULTS

								Former M	az Glass US	ST Site						
Well ID	Date	GW	GW						Groundw	ater Conc	entration, i	in microgra	ıms per lite	r (ug/L)		
	2360	Depth	Elev.	TPH-G	TPH-D	ТРН-НО	В	Т	E	Х	OXY	Cr6	Br	N	SVOCs	Other VOCs
	12/7/2014	6.15	32.81	430	-	-	41	1.1	4.3	3.4	<b>25</b> TBA	-	-	-	-	-
	1/29/2015	8.63	30.33	6,900	-	-	180	5.4	37	19.2	All ND	-	-	-	-	-
	3/12/2015	8.3	30.66	3,200	1,100	-	270	5.4	61	7.7	<b>90</b> TBA	-	-	6.3	-	<ul> <li>8.5 n-Butylbenzene</li> <li>2.9 sec-Butylbenzene</li> <li>16 Isopropylbenzene</li> <li>2.1 p-Isopropylbenzene</li> <li>40 n-Propylbenzene</li> <li>28 1,3,5-Trimethylbenzene</li> <li>45 1,2,4-Trimethylbenzene</li> </ul>
MW-3	5/18/2012	8.61	30.23	13,000	-	-	1,400	36	350	378	All ND	-	-	-	-	-
<38.84>	9/13/2012	10.3	28.54	12,000	-	-	1,800	25	680	565.5	All ND	-	-	-	-	-
	11/9/2012	9.25	29.59	17,000	-	-	2,000	32	540	318.6	All ND	-	-	_	-	_
	2/20/2013	8.8	30.04	12,000	-	-	1,400	15	330	43.9	All ND	-	-	8.4	-	-
	6/4/2013	9.49	29.35	12,000	-	-	1,400	11	89	32.4	All ND	_	-	13	-	-
	Ozone Injection 9	Started on Se	ptember 9	, 2013												
	9/26/2013	10.89	27.95	5,500	-	-	190	2.8	42	27	All ND	<0.20	0.096	18	-	-
	12/30/2013	14.59	24.25	380	-	-	8.3	<0.50	2.3	1.6	All ND	_	-	<1.0	-	-
	Ozone Injection S	Stopped on F	ebruary 7,	2014												
	3/7/2014	6.99	31.85	400	-	-	31	0.75	2.6	2.9	All ND	<0.20	0.083	1.9	-	-
	5/27/2014	9.63	29.21	510	-	-	120	1.3	9.8	2.8	All ND	-	-	<1.0	-	-
	Ozone Injection I	Resumed on A	August 5, 2	014												
	9/29/2014	10.31	28.53	<50	<500	<500	2.3	<0.50	<0.50	<1.0	All ND	-	-	<1.0	ALL ND	ALL ND
	Ozone Injection S	Stopped on O	ctober 24,	2014												
	12/7/2014	6.23	32.61	1,900	-	-	290	1.8	2.1	12.4	<b>30</b> TBA	-	-	-	-	-
	1/29/2015	8.97	29.87	3,100	-	-	110	0.57	9.1	1.3	<b>22</b> TBA	-	-	-	-	-
	3/12/2015	8.07	30.77	190	830	-	50	<0.50	2.7	<1.0	<b>53</b> TBA	-	-		-	<ul><li>1.5 Isopropylbenzene</li><li>1.3 n-Propylbenzene</li><li>1.3 1,2,4-Trimethylbenzene</li></ul>
MW-4	5/18/2012	8.28	30.2	10,000	-	-	82	32	330	278	All ND	-	-	-	-	_
<38.48>	9/13/2012	8.8	29.68	10,000	-	-	110	24	270	178.1	All ND	-	-	-	-	-
	11/9/2012	8.06	30.42	11,000	-	-	110	13	170	124.4	All ND	-	-	-	-	-
	2/20/2013	8.16	30.32	4,500	-	-	100	9.5	190	65.3	All ND	-	-	7.1	-	-
	6/4/2013	8.73	29.75	6,300	-	-	72	6.2	61	48.4	All ND	-	-	12	-	-
	Ozone Injection S	Started on Se	ptember 9	, 2013												
	9/26/2013	9.76	28.72	12,000	-	-	48	3.7	70	18.2	All ND	<0.20	0.056	13	-	-
	12/30/2013	9.81	28.67	7,600	-	-	50	6.6	68	104.3	All ND	-	-	37	-	-
	Ozone Injection S	Stopped on F	ebruary 7,	2014												
	3/7/2014	6.76	31.72	3,100	-	-	38	4.3	51	76.5	All ND	<0.020	0.016	20	-	-
	5/27/2014	9.11	29.37	2,900	_	-	47	3.5	68	68.6	All ND	_	_	<1.0	_	-

	Table 3 CUMULATIVE GROUNDWATER LABORATORY ANALYTICAL RESULTS															
						CUMULAT	IVE GRO	UNDWATER Former Ma			YTICAL RES	ULTS				
		GW	GW					TOTTILET IVIE			entration, i	n microgr	ams nor lite	or (ug/L)		
Well ID	Date	Depth	Elev.	TPH-G	TPH-D	ТРН-НО	В	т	E	X	OXY	Cr6	Br	N N	SVOCs	Other VOCs
	Ozone Injection	Resumed on	August 5, 2	2014												
	9/29/2014	11.19	27.29	5,600	2,200	4,900	16	0.78	6.1	9.04	All ND	-	-	<1.0	All ND	<ul> <li>1.3 sec-Butylbenzene</li> <li>2.8 Isopropylbenzene</li> <li>2.9 p-Isopropylbenzene</li> <li>5.7 n-Propylbenzene</li> <li>22 1,3,5-Trimethylbenzene</li> <li>20 1,2,4-Trimethylbenzene</li> </ul>
	Ozone Injection	Stopped on C	October 24,	2014												,,
	12/7/2014	5.82	32.66	5,700	_	_	28	2.9	30	23.2	All ND	_	_	_	_	_
	1/29/2015	7.70	30.78	43,000	_	_	50	7.7	70	79.5	All ND	_	_	_	_	_
	3/12/2015	7.04	31.44	2,700	1,500	-	41	7.7	52	41.2	All ND	-	-	18	-	<ul> <li>6.4 n-Butylbenzene</li> <li>3.1 sec-Butylbenzene</li> <li>13 Isopropylbenzene</li> <li>1.6 p-Isopropylbenzene</li> <li>21 n-Propylbenzene</li> <li>8.4 1,3,5-Trimethylbenzene</li> <li>40 1 2 4-Trimethylbenzene</li> </ul>
	Enviromental Scre	ening Levels		100	110	NL	27	95,000	310	37,000	110 TBA	21	NL	160	Various	Various

### **TABLE NOTES**

GW Elev = Groundwater mean sea level elevation

TPH-G = Total Petroleum Hydrocarbons as gasoline

B = Benzene,

T = Toluene

E = Ethylbenzene

TPH-D = Total Petroleum Hydrocarbons as Diesel

TPH-HO = Total Petroleum Hydrocarbons as Heating Oil

X = Xylenes

OXY = Oxygenates, including MTBE = Methyl-t-Butyl Ether, ter-Butanol (TBA), Di-isopropyl Ether (DIPE), Ethyl-t-butyl Ether

(ETBE), and Tert-amyl Methyl Ether (TAME).

Cr6 = Hexavalent Chromium

Br = Bromate

N = Naphthalene.

<38.96> = Top of casing mean sea level elevation (Virgil Chavez Land Survey).

All ND = No detectable concentrations of all analytes.

- = Not analyzed for this analyte.

SVOCs = semi-volatile organic compounds

VOCs = volatile organic compounds

<1.0 = Not detected above the expressed value.

ESL = Environmental Screening Levels, as contained in Screening for Environmental

Concerns at Sites with Contaminated Soil and Groundwater, San Francisco Bay Regional Water Quality Control Board,

December 2013, Table E-1, Groundwater to Indoor Air, fine grained soils, residential land use.

NL = Not Listed

							Та	ble 4						
					CUMUL	ATIVE SOIL			IALYTICAL RESULTS					
								Glass UST S						
Sample ID	Date	Sample Depth	<b>TPH-D</b> (ug/m3)	TPH-G (ug/m3)	<b>B</b> (ug/m3)	<b>T</b> (ug/m3)	<b>E</b> (ug/m3)	<b>X</b> (ug/m3)	Other (ug/m3)	Methane (%)	CO2 (%)	N (%)	<b>O2</b> (%)	Helium (%)
S	OIL GAS SAMPI	LES												
SG-1	8/28/2014	5.5 ft	NA	<7,170	<3.3	<3.8	<4.4	<8.8	Heptane = <b>5.1</b>	<0.00081	<1.62	62.1	14.2	<1.62
	12/7/2014							Sucked water	r; did not sample					
	1/29/2015							Sucked water	r; did not sample					
SG-2	9/15/2014	5.5 ft	NA	7,600	<3.3	<3.8	<4.4	<8.8	Cyclohexane = <b>310</b> Heptane = <b>46</b> Hexane = <b>1,000</b> 1,3,5-TMB = <b>56</b>	0.017	3.87	51.0	13.2	<1.57
	9/25/2014	5.5 ft	NA	<7,170	<160	<190	<220	<220	Cyclohexane = <b>1,900</b> Hexane = <b>1,000</b>	0.0077	5.3	58.3	2.01	0.00
	12/7/2014		1					Sucked water	r; did not sample					
	1/29/2015		NA	<7,170	<3.3	<3.8	<4.4	<8.8	Cyclohexane = <b>53</b> Heptane = <b>14</b> Hexane = <b>42</b> TCE = <b>16</b>	0.0493	<1.75	59.2	2.11	0.00
SG-3	8/28/2014	5.5 ft	NA	<7,170	<3.3	<3.8	<4.4	<8.8	All ND	<0.00076	<1.51	49.7	16.6	<1.51
	12/7/2014					Did r	not attempt	to sample du	e to shallow groundwater depths					
	1/29/2015							Sucked water	r; did not sample					
SG-4	8/28/2014	5.5 ft	NA	<7,170	<3.3	<3.8	<4.4	<8.8	1,2,4-TMB = <b>13</b>	0.024	<1.54	52.3	5.87	<1.54
	12/7/2014					Did ı	not attempt	to sample du	e to shallow groundwater depths					
	1/29/2015		NA	440,000	<160	<190	<220	<220	Cyclohexane = <b>52,000</b> Heptane = <b>9,800</b> Hexane = <b>26,000</b>	0.0121	6.49	64.5	<1.72	0.00
	3/11/2015		120,000 (A)	420,000	<160	<190	<220	<220	Cyclohexane = <b>35,000</b> Heptane = <b>150,000</b> Hexane = <b>9,700</b>	38	8.01	68.5	2.08	0.00
(Dup)	3/11/2015		NA	485,000	<160	<190	<220	<220	Cyclohexane = <b>48,000</b> Heptane = <b>37,000</b> Hexane = <b>20,000</b>	43	8.64	70.9	<1.72	0.00
	3/18/2015		NA	NA	<10,000	<10,000	<10,000	<10,000	All ND	26	14.0	NA	0.93	0.00
	10/13/2015		NA	174,000	<3.3	<3.8	<4.4	<8.8	All ND	1.3	NA	NA	NA	NA
(Dup)	10/13/2015		NA	201,000	<3.3	<3.8	<4.4	<8.8	All ND	1.5	NA	NA	NA	NA

							Tal	ble 4						
					CUMUL				NALYTICAL RESULTS					
Sample		Sample	TPH-D	TPH-G	В	F (	ormer Maz <b>E</b>	Glass UST S X	ite Other	Methane	CO2	N	02	Helium
ID	Date	Depth	(ug/m3)	(ug/m3)	(ug/m3)	(ug/m3)	(ug/m3)	(ug/m3)	(ug/m3)	(%)	(%)	(%)	(%)	(%)
SG-5	8/28/2014	5.5 ft	NA	<7,170	1,700	5,600	1,200	4,570	All ND	0.015	<1.53	49.7	12.5	<1.53
	9/25/2014		NA	<7,170	<3.3	<3.8	<4.4	<8.8	All ND	0.0018	2.01	54.7	9.28	0.00
(Dup)	9/25/2014		NA	<7,170	<3.3	<3.8	<4.4	<8.9	All ND	<0.00079	2.01	53.5	10.8	0.00
	12/7/2014							Sucked wate	r; did not sample					
	1/29/2015		NA	<7,170	<3.3	<3.8	<4.4	<8.8	Tetrahydrofuran = <b>47</b> Tetrachloroethene = <b>8.7</b> 2-Butanone (MEK) = <b>47</b>	0.00031	<1.54	41.9	2.1	0.00
	3/11/2015		<1,000	<7,170	<3.3	<3.8	<4.4	<8.8	Heptane = 4.8 Hexane = 4.0 Tetrachloroethene = 39 1,1,2-Trichloroethane = 17 Trichloroethene = 11	0.17	<1.85	71.1	11	0.00
9	SUB-SLAB VAPO	R SAMPLES												
SS-1	3/18/2015	0.5 ft	NA	NA	17	23	<22	<66	All ND	5.8	10.0	NA	1.0	0.00
	10/13/2015	0.5 FT	NA	NA	<7,170	<3.3	<3.8	<8.8	All ND	<0.00050	NA	NA	NA	NA
SS-2	3/18/2015	0.5 ft	NA	NA	<16	35	<22	130	Chloroform = <b>36</b> 4-Ethyltoluene = <b>31</b> 1,2,4-Trimethylbenzene = <b>140</b> 1,3,5-Trimethylbenzene = <b>74</b>	0.0047	3.2	NA	14	0.00
SS-3	3/18/2015	0.5 ft	NA	NA	4.0	4.3	5.4	32	Chloroform = 27 4-Ethyltoluene = 6.3 MIBK = 5.1 Tetrachloroethene = 4.3 1,2,4-Trimethylbenzene = 19 1,3,5-Trimethylbenzene = 6.8	0.0003	9.6	NA	9.0	0.00
SS-4	3/25/2015	0.5 ft	NA	1,100	8.6	86	40	330	Acetone = 66 2-Butanone (MEK) = 19 4-Methyl-2-pentanone = 1,300 Cumene = 6.1 4-Ethyltoluene = 7.6 1,2,4-Trimethylbenzene = 19	<0.00021	6.8	NA	12	<0.11
SS-5	3/25/2015	0.5 ft	NA	<430	<3.4	<4.0	<4.6	<4.6	Acetone = <b>27</b> 4-Methyl-2-pentanone = <b>5.9</b>	<0.00021	5.7	NA	14	<0.11

	Table 4													
	CUMULATIVE SOIL GAS LABORATORY ANALYTICAL RESULTS													
Camania	Former Maz Glass UST Site  Sample TPH-D TPH-G B T E X Other Methane CO2 N O2 Helium													
Sample ID	Date	Depth	(ug/m3)	(%)	(%)	(%)	(%)	(%)						
SS-6	3/25/2015	0.5 ft	NA	9,000	<3.4	25	30	252	Acetone = 120 2-Butanone (MEK) = 14 Tetrahydrofuran = 7.7 2,2,4-Trimethylpentane = 16 4-Methyl-2-pentanone = 500 4-Ethyltoluene = 5.4 1,2,4-Trimethylbenzene = 8.1	0.32	13	NA	1.6	<0.11
SS-7	3/25/2015	0.5 ft	NA	260,000	<27	<32	<37	<37	Acetone = <b>410</b>	20	9.9	NA	1.1	<0.14
SS-8	3/25/2015	0.5 ft	NA	490	<3.4	<4.0	<4.6	<4.6	4-Methyl-2-pentanone = 5.8	0.015	0.58	NA	20	<0.13
SS-9	3/25/2015	0.5 ft	NA	<430	4.6	<4.0	<4.6	6.5	Acetone = 34 Chloroform = 9.1 Carbon Tetrachloride = 78 4-Methyl-2-pentanone = 12	<0.00021	1.2	NA	19	<0.10
SS-10	3/25/2015	0.5 ft	NA	2,500	<3.4	6.6	5.5	48	4-Methyl-2-pentanone = <b>34</b>	<0.00021	0.12		20	<0.10
SS-11	3/25/2015	0.5 ft	NA	<440	6.0	6.2	6.0	28	Aceton = <b>38</b> Carbon Disulfide = <b>68</b> 4-Methyl-2-pentanone = <b>52</b> Tetrachloroethene = <b>62</b>	<0.00021	0.14	NA	19	<0.11
_	Soil Gas ESL		2.5E+06	2.5E+06	420	1.3E+06	4,900	4.4E+05	Various	LEL = 4.4				

### **Table Notes**

B = Benzene 1,2,4-TMB = 1,2,4-Trimethylbenzene Other = Other VOCs, includes approxmately 47 individual VOC compounds

T = Toluene ug/m3 = micrograms per cubic meter <7,170 = Not detected at or above the expressed value.

E = Ethylhbenzene ppmv = parts per million by volume ND = Not detected above laboratory detection levels.

X = Xylenes % = Percent NA = Not analyzed for this analyte

(A) = The McCampbell Analytical report states: "Due to the high organic content observed in the sample, a quantification of the internal standards were unobtainable. The quantitated TPH-diesel and naphthalene concentrations are calculated using a modified TO-17 analytical procedure which includes an external calibration. The TPH-diesel and naphthalene results are estimated. It is noted that the majority of the calculated TPH-diesel concentration is derived from an observed lighter eluting TPH-gas range pattern."

Table 5  EXCAVATION SOIL LABORATORY ANALYTICAL RESULTS  Former Maz Glass UST Site										
Sample ID	Date	Sample Depth	POG (mg/Kg)	TPH-D (mg/Kg)	TPH-G (mg/Kg)	MTBE (mg/Kg)	<b>B</b> (mg/Kg)	<b>T</b> (mg/Kg)	<b>E</b> (mg/Kg)	<b>X</b> (mg/Kg)
EbW9ft 6in	9/25/2015	9 ft	<10	<1.0	<1.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050
EbE9ft 6in	9/25/2015	9 ft	<50	<1.0	<1.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050
SWNE7ft 6in	9/25/2015	7 ft	<50	<1.0	<1.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050
SWNW7ft 6in	9/25/2015	7 ft	<50	<1.0	<1.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050
SP1-4	9/25/2015	NA	<50	1.5	<1.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050
	Soil ESL				100	0.023	0.044	2.9	3.3	2.3

## **Table Notes**

POG = Total Petroleum Oil and Grease B = Benzene mg/Kg = milligrams per kilogram

TPH-D = Total Petroleum Hydrocarbons as Diesel T = Toluene NA = Not applicable

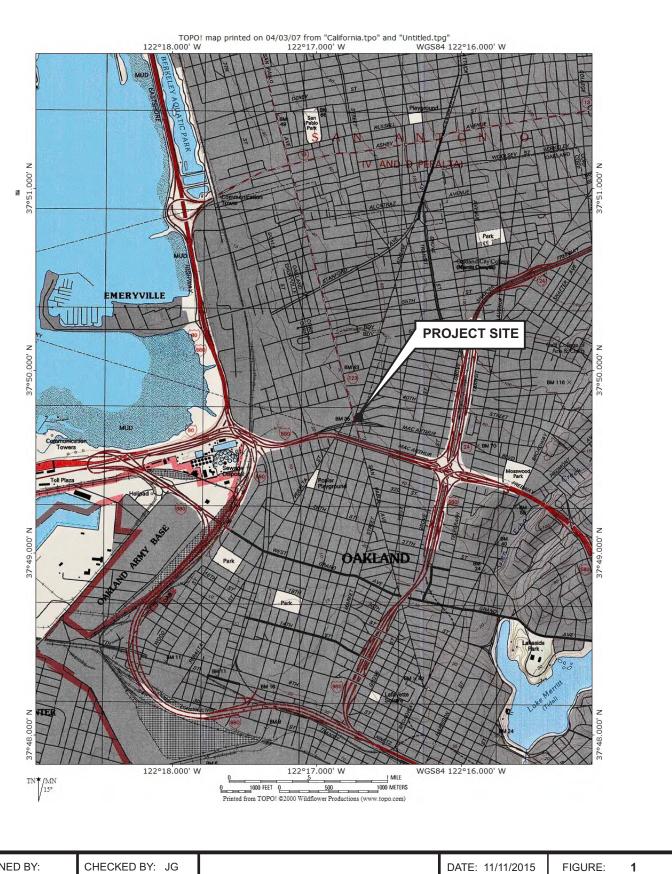
TPH-G = Total Petroleum Hydrocarbons as Gasoline E = Ethylhbenzene

MTBE = Methyl Tertiary Butyl Ether X = Xylenes

ESL = Environmental Screening Levels, as contained in Screening for Environmental Concerns at Sites with Contaminated Soil and

## **FIGURES**





DESIGNED BY: CHECKED BY: JG

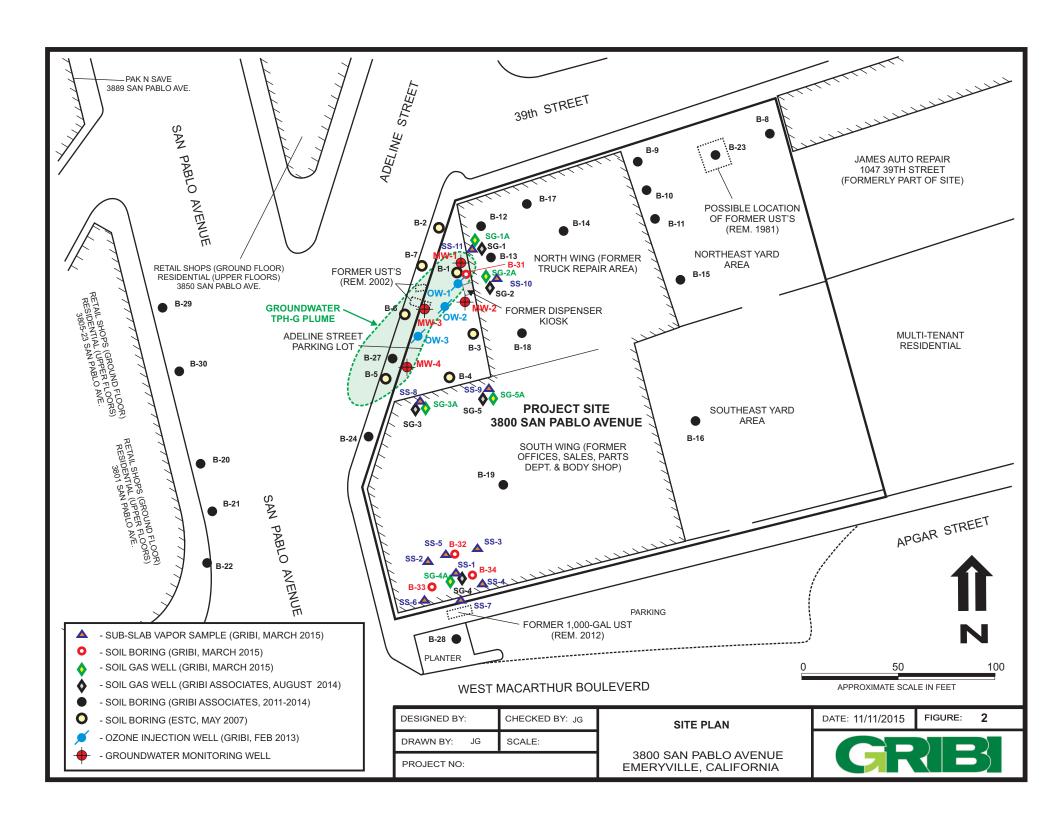
DRAWN BY: MR SCALE:

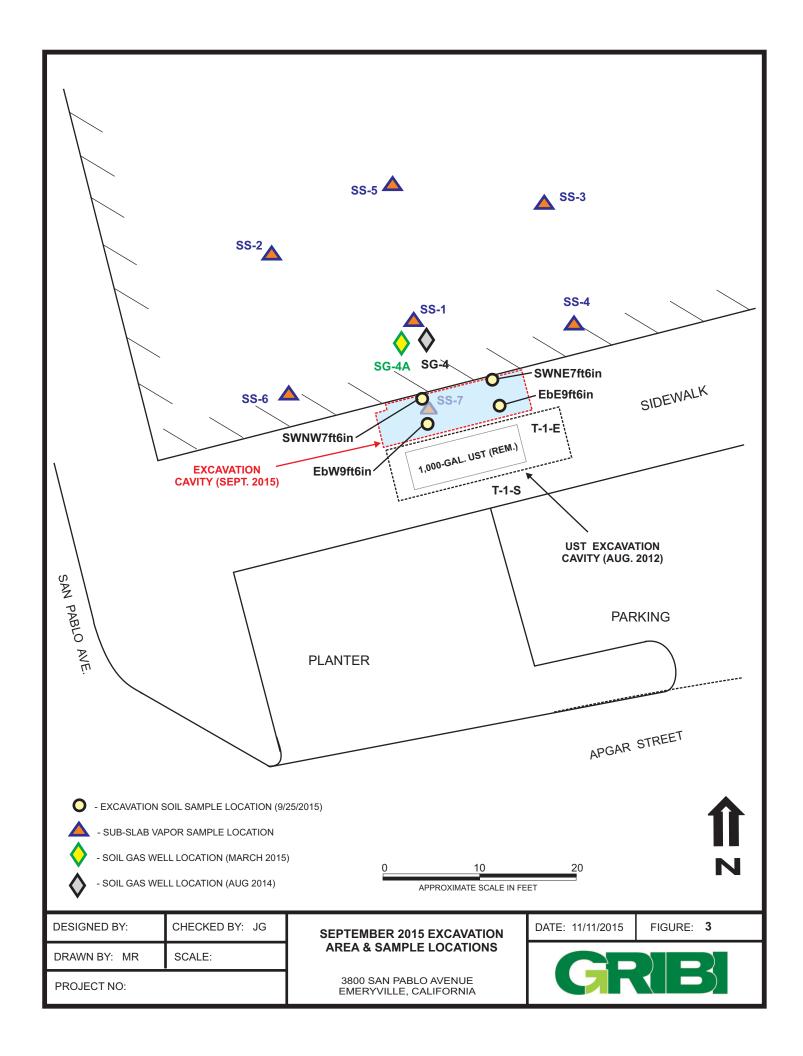
PROJECT NO:

SITE VICINITY MAP

3800 SAN PABLO AVENUE EMERYVILLE, CALIFORNIA







## **ATTACHMENT A**

LABORATORY DATA REPORTS AND CHAIN-OF-CUSTODY RECORDS





# McCampbell Analytical, Inc.

"When Quality Counts"

## **Analytical Report**

**WorkOrder:** 1509A60

**Report Created for:** AEI Consultants

2500 Camino Diablo, Ste.#200

Walnut Creek, CA 94597

**Project Contact:** Nick Woods

**Project P.O.:** 

**Project Name:** 348918; The Intersection

**Project Received:** 09/25/2015

Analytical Report reviewed & approved for release on 10/01/2015 by:

Angela Rydelius,

Laboratory Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.



1534 Willow Pass Rd. Pittsburg, CA 94565 ♦ TEL: (877) 252-9262 ♦ FAX: (925) 252-9269 ♦ www.mccampbell.com NELAP: 4033ORELAP ♦ ELAP: 1644 ♦ ISO/IEC: 17025:2005 ♦ WSDE: C972-11 ♦ ADEC: UST-098 ♦ UCMR3

## **Glossary of Terms & Qualifier Definitions**

**Client:** AEI Consultants

**Project:** 348918; The Intersection

WorkOrder: 1509A60

### **Glossary Abbreviation**

95% Interval 95% Confident Interval

DF Dilution Factor

DI WET (DISTLC) Waste Extraction Test using DI water

DISS Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)

DUP Duplicate

EDL Estimated Detection Limit

ITEF International Toxicity Equivalence Factor

LCS Laboratory Control Sample

MB Method Blank

MB % Rec % Recovery of Surrogate in Method Blank, if applicable

MDL Method Detection Limit

ML Minimum Level of Quantitation

MS Matrix Spike

MSD Matrix Spike Duplicate

N/A Not Applicable

ND Not detected at or above the indicated MDL or RL

NR Data Not Reported due to matrix interference or insufficient sample amount.

PF Prep Factor

RD Relative Difference

RL Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)

RPD Relative Percent Deviation
RRT Relative Retention Time

SPK Val Spike Value

SPKRef Val Spike Reference Value

SPLP Synthetic Precipitation Leachate Procedure
TCLP Toxicity Characteristic Leachate Procedure

TEQ Toxicity Equivalents

WET (STLC) Waste Extraction Test (Soluble Threshold Limit Concentration)

## **Analytical Qualifiers**

e2 diesel range compounds are significant; no recognizable pattern

e7 oil range compounds are significant

## **Analytical Report**

**Client: AEI Consultants Date Received:** 9/25/15 14:50 **Date Prepared:** 9/29/15

**Project:** 348918; The Intersection WorkOrder: 1509A60

**Extraction Method:** SM5520E/F **Analytical Method:** SM5520E/F

Unit: mg/Kg

Client ID	Lab ID	Matrix	Date Co	ollected Instrument	Batch ID
EbW9ft 6in	1509A60-001A	Soil	09/25/20	15 10:15 O&G	110856
Analytes	Result		<u>RL</u>	<u>DF</u>	Date Analyzed
POG	ND		10	1	09/29/2015 11:30

## Analyst(s): HN

Client ID	Lab ID	Matrix	Date Collect	ed Instrument	Batch ID
EbE9ft 6in	1509A60-002A	Soil	09/25/2015 11:	30 O&G	110856
<u>Analytes</u>	Result		<u>RL</u> <u>DF</u>		Date Analyzed
POG	ND		50 1		09/29/2015 11:35

### Analyst(s):

Client ID	Lab ID	Matrix	Date Collected 1	Instrument Batch ID
SWNE7ft 6in	1509A60-003A	Soil	09/25/2015 11:40	D&G 110856
<u>Analytes</u>	Result		<u>RL</u> <u>DF</u>	Date Analyzed
POG	ND		50 1	09/29/2015 11:40

### Analyst(s): HN

Client ID	Lab ID	Matrix	Date C	ollected Instrument	Batch ID
SWNW7ft 6in	1509A60-004A	Soil	09/25/20	015 11:00 O&G	110856
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	Date Analyzed
POG	ND		50	1	09/29/2015 11:45

Analyst(s): HN

## **Analytical Report**

Client:AEI ConsultantsWorkOrder:1509A60Date Received:9/25/15 14:50Extraction Method:SW5030B

**Date Prepared:** 9/28/15 **Analytical Method:** SW8021B/8015Bm

**Project:** 348918; The Intersection **Unit:** mg/Kg

## Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID Mat	rix Date Co	ollected Instrument	Batch ID
EbW9ft 6in	1509A60-001A Soil	09/25/20	15 10:15 GC19	110776
Analytes	Result	<u>RL</u>	<u>DF</u>	Date Analyzed
TPH(g)	ND	1.0	1	09/28/2015 15:46
MTBE	ND	0.050	1	09/28/2015 15:46
Benzene	ND	0.0050	1	09/28/2015 15:46
Toluene	ND	0.0050	1	09/28/2015 15:46
Ethylbenzene	ND	0.0050	1	09/28/2015 15:46
Xylenes	ND	0.0050	1	09/28/2015 15:46
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	122	70-130		09/28/2015 15:46
A I 1/- \				

Analyst(s): IA

Client ID	Lab ID Mat	rix Date Collect	ed Instrument	Batch ID
EbE9ft 6in	1509A60-002A Soil	09/25/2015 11	:30 GC19	110776
<u>Analytes</u>	Result	<u>RL</u> <u>DF</u>		Date Analyzed
TPH(g)	ND	1.0 1		09/28/2015 16:17
MTBE	ND	0.050 1		09/28/2015 16:17
Benzene	ND	0.0050 1		09/28/2015 16:17
Toluene	ND	0.0050 1		09/28/2015 16:17
Ethylbenzene	ND	0.0050 1		09/28/2015 16:17
Xylenes	ND	0.0050 1		09/28/2015 16:17
Surrogates	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	117	70-130		09/28/2015 16:17
Analyst(s): IA				

## **Analytical Report**

Client:AEI ConsultantsWorkOrder:1509A60Date Received:9/25/15 14:50Extraction Method:SW5030B

**Date Prepared:** 9/28/15 **Analytical Method:** SW8021B/8015Bm

**Project:** 348918; The Intersection **Unit:** mg/Kg

## Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID Ma	trix Date Co	ollected Instrument	Batch ID
SWNE7ft 6in	1509A60-003A Soil	09/25/20	15 11:40 GC19	110776
Analytes	Result	<u>RL</u>	<u>DF</u>	Date Analyzed
TPH(g)	ND	1.0	1	09/28/2015 17:50
MTBE	ND	0.050	1	09/28/2015 17:50
Benzene	ND	0.0050	1	09/28/2015 17:50
Toluene	ND	0.0050	1	09/28/2015 17:50
Ethylbenzene	ND	0.0050	1	09/28/2015 17:50
Xylenes	ND	0.0050	1	09/28/2015 17:50
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	112	70-130		09/28/2015 17:50
A 1 (/-) 1 A				

Analyst(s): IA

Client ID	Lab ID Matrix	Date Collected Instrument	Batch ID
SWNW7ft 6in	1509A60-004A Soil	09/25/2015 11:00 GC19	110776
Analytes	Result	<u>RL</u> <u>DF</u>	Date Analyzed
TPH(g)	ND	1.0 1	09/28/2015 18:21
MTBE	ND	0.050 1	09/28/2015 18:21
Benzene	ND	0.0050 1	09/28/2015 18:21
Toluene	ND	0.0050 1	09/28/2015 18:21
Ethylbenzene	ND	0.0050 1	09/28/2015 18:21
Xylenes	ND	0.0050 1	09/28/2015 18:21
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	
2-Fluorotoluene	112	70-130	09/28/2015 18:21
Analyst(s): IA			

### **Analytical Report**

Client:AEI ConsultantsWorkOrder:1509A60Date Received:9/25/15 14:50Extraction Method:SW5030B

**Date Prepared:** 9/28/15 **Analytical Method:** SW8021B/8015Bm

**Project:** 348918; The Intersection **Unit:** mg/Kg

#### Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID Matrix	<b>Date Collected Instrument</b>	Batch ID
SP1-4	1509A60-005A Soil	09/25/2015 13:00 GC19	110776
<u>Analytes</u>	Result	<u>RL</u> <u>DF</u>	Date Analyzed
TPH(g)	ND	1.0 1	09/28/2015 18:52
MTBE	ND	0.050 1	09/28/2015 18:52
Benzene	ND	0.0050 1	09/28/2015 18:52
Toluene	ND	0.0050 1	09/28/2015 18:52
Ethylbenzene	ND	0.0050 1	09/28/2015 18:52
Xylenes	ND	0.0050 1	09/28/2015 18:52
Surrogates	<u>REC (%)</u>	<u>Limits</u>	
2-Fluorotoluene	116	70-130	09/28/2015 18:52
Analyst(s): IA			

### **Analytical Report**

Client: AEI Consultants

Date Received: 9/25/15 14:50

Date Prepared: 9/28/15

**Project:** 348918; The Intersection

WorkOrder: 1509A60
Extraction Method: SW3550B
Analytical Method: SW8015B
Unit: mg/Kg

Tota	al Extractable Petro	leum Hydr	ocarbons w/out SC	G Clean-Up	
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EbW9ft 6in	1509A60-001A	Soil	09/25/2015 10:15	GC11B	110777
<u>Analytes</u>	Result		<u>RL</u> <u>DF</u>		Date Analyzed
TPH-Diesel (C10-C23)	ND		1.0 1		09/29/2015 04:03
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
C9	105		70-130		09/29/2015 04:03
Analyst(s): TK					
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EbE9ft 6in	1509A60-002A	Soil	09/25/2015 11:30	GC11B	110777
Analytes	<u>Result</u>		<u>RL</u> <u>DF</u>		Date Analyzed
TPH-Diesel (C10-C23)	ND		1.0 1		09/28/2015 20:03
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
C9	105		70-130		09/28/2015 20:03
Analyst(s): TK					
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SWNE7ft 6in	1509A60-003A	Soil	09/25/2015 11:40	GC9a	110777
Analytes	<u>Result</u>		<u>RL</u> <u>DF</u>		Date Analyzed
TPH-Diesel (C10-C23)	ND		1.0 1		09/29/2015 10:04
Surrogates	<u>REC (%)</u>		<u>Limits</u>		
C9	101		70-130		09/29/2015 10:04
Analyst(s): TK					
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SWNW7ft 6in	1509A60-004A	Soil	09/25/2015 11:00	GC9b	110777
Analytes	<u>Result</u>		<u>RL</u> <u>DF</u>		Date Analyzed
TPH-Diesel (C10-C23)	ND		1.0 1		09/30/2015 11:33
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
C9	96		70-130		09/30/2015 11:33
Analyst(s): TK					

### **Analytical Report**

Client:AEI ConsultantsWorkOrder:1509A60Date Received:9/25/15 14:50Extraction Method:SW3550BDate Prepared:9/28/15Analytical Method:SW8015BProject:348918; The IntersectionUnit:mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up									
Client ID	Lab ID Ma	atrix Date Collected Instrument	Batch ID						
SP1-4	1509A60-005A Soi	il 09/25/2015 13:00 GC11B	110777						
<u>Analytes</u>	Result	<u>RL</u> <u>DF</u>	Date Analyzed						
TPH-Diesel (C10-C23)	1.5	1.0 1	09/29/2015 06:20						
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>							
C9	106	70-130	09/29/2015 06:20						
Analyst(s): TK		Analytical Comments: e7,e2							

### **Quality Control Report**

**Client:** AEI Consultants

**Date Prepared:** 9/29/15 **Date Analyzed:** 9/29/15 **Instrument:** O&G

Matrix: Soil

**Project:** 348918; The Intersection

WorkOrder: 1509A60

**BatchID:** 110856

**Extraction Method:** SM5520E/F **Analytical Method:** SM5520E/F

**Unit:** mg/Kg

Sample ID: MB/LCS-110856

1509915-001AMS/MSD

QC Summary Report for SM5520E/F
---------------------------------

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
POG	ND	2080	50	2000	-	104	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
POG	2380	2340	2000	80.00	115	113	70-130	1.70	30

### **Quality Control Report**

 Client:
 AEI Consultants
 WorkOrder:
 1509A60

 Date Prepared:
 9/28/15
 BatchID:
 110776

**Date Analyzed:** 9/29/15 **Extraction Method:** SW5030B

Instrument:GC3Analytical Method:SW8021B/8015BmMatrix:SoilUnit:mg/Kg

**Project:** 348918; The Intersection **Sample ID:** MB/LCS-110776

1509A61-014AMS/MSD

#### QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.652	0.40	0.60	-	109	70-130
MTBE	ND	0.113	0.050	0.10	-	113	70-130
Benzene	ND	0.105	0.0050	0.10	-	105	70-130
Toluene	ND	0.116	0.0050	0.10	-	116	70-130
Ethylbenzene	ND	0.118	0.0050	0.10	-	118	70-130
Xylenes	ND	0.377	0.0050	0.30	-	126	70-130

#### **Surrogate Recovery**

2-Fluorotoluene 0.106 0.104 0.10 106 104 70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	NR	NR		74	NR	NR	_	NR	
MTBE	NR	NR		ND<1	NR	NR	-	NR	
Benzene	NR	NR		ND<0.1	NR	NR	-	NR	
Toluene	NR	NR		ND<0.1	NR	NR	-	NR	
Ethylbenzene	NR	NR		0.4	NR	NR	-	NR	
Xylenes	NR	NR		1.5	NR	NR	-	NR	
Surrogate Recovery									
2-Fluorotoluene	NR	NR			NR	NR	-	NR	

### **Quality Control Report**

**Client:** AEI Consultants

**Date Prepared:** 9/28/15

**Date Analyzed:** 9/28/15 - 9/29/15 **Instrument:** GC9a, GC9b

Matrix: Soil

**Project:** 348918; The Intersection

WorkOrder: 1509A60

**BatchID:** 110777

**Extraction Method:** SW3550B

**Analytical Method:** SW8015B

**Unit:** mg/Kg

Sample ID: MB/LCS-110777

1509A60-005AMS/MSD

QC Report for SW8015B w/out SG Clean-Up									
Analyte	MB Result	LCS Result		RL	SPK Val			LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	35.6		1.0	40	-		89	70-130
TPH-Motor Oil (C18-C36)	ND	-		5.0	-	-		-	-
Surrogate Recovery									
C9	25.0	23.5			25	10	00	94	70-130
Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MS		PD RPD Limit
TPH-Diesel (C10-C23)	44.8	47.7	40	1.473	108	116	70-130	) 6. <sup>-</sup>	15 30
Surrogate Recovery									
C9	26.5	26.5	25		106	106	70-130	0	30

### McCampbell Analytical, Inc.

### **CHAIN-OF-CUSTODY RECORD**

Page 1 of

1534 Willow Pass Rd Pittsburg, CA 94565-1701 (925) 252-9262

WorkOrder: 1509A60 ClientCode: AEL

WaterTrax	WriteOn	EDF	Excel	EQuIS	<b>y</b> Email	HardCopy	ThirdParty	J-fla
-----------	---------	-----	-------	-------	----------------	----------	------------	-------

Report to: Bill to: Requested TAT: 5 days;

Nick Woods Email: nwoods@aeiconsultants.com Accounts Payable
AEI Consultants cc/3rd Party: AEI Consultants

2500 Camino Diablo, Ste.#200 PO: 2500 Camino Diablo, Ste. #200 Date Received: 09/25/2015
Walnut Creek, CA 94597 ProjectNo: 348918; The Intersection Walnut Creek, CA 94597 Date Printed: 09/28/2015

(925) 283-6000 FAX: (925) 944-2895 AccountsPayable@AEIConsultants.com

					Requested Tests (See legend below)											
Lab ID	Client ID	Matrix	Collection Date	Hold	1	2	3	4	5	6	7	8	9	10	11	12
1509A60-001	EbW9ft 6in	Soil	9/25/2015 10:15		Α	Α	А									
1509A60-002	EbE9ft 6in	Soil	9/25/2015 11:30		Α	Α	Α									
1509A60-003	SWNE7ft 6in	Soil	9/25/2015 11:40		Α	Α	Α									
1509A60-004	SWNW7ft 6in	Soil	9/25/2015 11:00		Α	Α	Α									
1509A60-005	SP1-4	Soil	9/25/2015 13:00			Α	Α									

#### **Test Legend:**

1 5520E_SG_S	2 G-MBTEX_S	3 TPH(D)_S	4
5	6	7	8
9	10	11	12

Prepared by: Maria Venegas

#### **Comments:**

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).

Hazardous samples will be returned to client or disposed of at client expense.



### McCampbell Analytical, Inc.

"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701 Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269 http://www.mccampbell.com / E-mail: main@mccampbell.com

#### **WORK ORDER SUMMARY**

Client Name:	AEI CONSULTANTS	QC Level: LEVEL 2 Wor	rk Order:	1509A60
Project:	348918; The Intersection	Client Contact: Nick Woods Date 1	Received:	9/25/2015

Comments: Contact's Email: nwoods@aeiconsultants.com

		☐ WaterTrax	☐ WriteOn ☐ EDF	Excel	]Fax <b></b> ✓Email	HardC	opyThirdPart	у 🗀	J-flag
Lab ID	Client ID	Matrix	x Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Hold SubOut Content
1509A60-001A	EbW9ft 6in	Soil	SW8015B (Diesel)	1	Stainless Steel tube 2"x3"		9/25/2015 10:15	5 days	
			SW8021B/8015Bm (G/MBTEX)					5 days	
			SM5520B (O&G w/ S.G. Clean-Up)					5 days	
1509A60-002A	EbE9ft 6in	Soil	SW8015B (Diesel)	1	Stainless Steel tube 2"x3"		9/25/2015 11:30	5 days	
			SW8021B/8015Bm (G/MBTEX)					5 days	
			SM5520B (O&G w/ S.G. Clean-Up)					5 days	
1509A60-003A	SWNE7ft 6in	Soil	SW8015B (Diesel)	1	Stainless Steel tube 2"x3"		9/25/2015 11:40	5 days	
			SW8021B/8015Bm (G/MBTEX)					5 days	
			SM5520B (O&G w/ S.G. Clean-Up)					5 days	
1509A60-004A	SWNW7ft 6in	Soil	SW8015B (Diesel)	1	Stainless Steel tube 2"x3"		9/25/2015 11:00	5 days	
			SW8021B/8015Bm (G/MBTEX)					5 days	
			SM5520B (O&G w/ S.G. Clean-Up)					5 days	
1509A60-005A	SP1-4	Soil	SW8015B (Diesel)	1	Stainless Steel tube 2"x3"		9/25/2015 13:00	5 days	
			SW8021B/8015Bm (G/MBTEX)					5 days	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

1509ALOD

Bill To: AEI Consultants

Fax: (925) 746-6099

Containers

Project Name: The Intersection

MATRIX

Report To: Nick Woods

Company: AEI Consultants

Tele: (925) 746-6000 x1105

Project #: 348918

SAMPLE ID

E-Mail: nwoods@aeiconsultants.com

Sampler Signature: Thick Whed

Project Location: 3800 San Pablo Ave

LOCATION/

Field Point

Name

#### McCAMPBELL ANALYTICAL, INC.

1534 WILLOW PASS ROAD PITTSBURG, CA 94565-1701

Website: www.mccampbell.com Email: main@mccampbell.com

Telephone: (877) 252-9262 Fax: (925) 252-9269

2500 Camino Diablo #200, Walnut Creek 94597

SAMPLING

Date

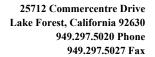
Time

						RN . Tra		OU	EDI	T	IMI	E PD Che	F	RUS	H Ex	24 ccel	HR	1	48 H Wri	ite On ( d "J" fla	HR 5 DAY <b>DW</b> )	
					_				A	nal	ysis	Rec	lues	t						Other	Comment	S
N		THO		BTEX & TPH as Gas (602 / 8021 + 8015) / MTBE	8015)	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Fotal Petroleum Hydrocarbons (418.1)	EPA 502.2 / 601 / 8010 / 8021 (HVOCs)	MTBE / BTEX ONLY (EPA 602 / 8021)	EPA 505/ 608 / 8081 (CI Pesticides)	EPA 608 / 8082 PCB's ONLY; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic CI Herbicides)	/ 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.7 / 200.8 / 6010 / 6020).	LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	Lend (200.7 / 200.8 / 6010 / 6020)	Jean Up Only	Filter Samples for Metals analysis: Yes / No	s
ICE	HCL	HNO3	Other	BTEX & TPH a	TPH as Diesel (8015)	Total Petroleum	Total Petroleum	EPA 502.2 / 601	MTBE / BTEX	EPA 505/ 608 / 8	EPA 608 / 8082 1	EPA 507 / 8141	EPA 515 / 8151	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625	EPA 8270 SIM	CAM 17 Metals	LUFT 5 Metals	Lead (200.7 / 200	w/Silica Gel Clean Up Only		
X				×	X	×																
X				×	X	X																
X				X	X	X																
X				X	X	X																
				X	X																	
1																						
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			P 4	#	Ţ	3	So	A	S	5	3 5		ō	BT	F	Tot	Tot	EP	M	EP	EP	EP	EP.	EP	EP	EP	CA	3	Lea	W/W			
Ebwaft 510		9/25	10:15am	1			X			>	<			×	X	×																	
EBE9 FH 6 in		9/25	11:30am	1			X			1	X			×	×	X																	
SWNE7F+6in		9/25	11:40am	1			X			1				×	×	X																	
5WNW7f+6in		9/25	11:00am	1			X			1	7			X	X	X																	
SP 1-4		9/25	(:00pm	4			X			1		-		X	X																		
										1																			1	+			
									+	+		+																	+	-	+		
										1																							
									+																			H	+	╀	+	-	
				1					+	+														T					+	+	+		
Relinquished By: Nick Woods	nix was	Date: 9/25	Time:		ived B		7	1	1	1	_			GC	E/t°_	CON	NDIT	ION	ENT	_								CO	MM	ENT	S:		
Relinquished By: Lennick Ser		Date:	Time: 2:480n	Rece	ived B	y: 4		0	1					DE AF	PRO	OR	INAT ATE	CO	IN L		RS_												
Relinquished By:		Date:	Time:	Rece	ived B	y: "	vak	(	1	1	10	7/2	50				TIO	ve	DAS	08	&G	ME pH<		LS	оті	HER							

#### **Sample Receipt Checklist**

Client Name:	AEI Consultants				Date and T	Time Received:	9/25/2015 2:50:00 PM
Project Name:	348918; The Interse	ection			LogIn Revi	iewed by:	Maria Venegas
WorkOrder №:	1509A60	Matrix: Soil			Carrier:	Client Drop-In	
		Chain of C	ustody	/ (COC) I	nformation		
Chain of custody	present?		Yes	<b>✓</b>	No 🗌		
Chain of custody	signed when relinquis	shed and received?	Yes	<b>✓</b>	No 🗌		
Chain of custody	agrees with sample la	abels?	Yes	<b>✓</b>	No $\square$		
Sample IDs noted	d by Client on COC?		Yes	•	No 🗆		
Date and Time of	f collection noted by C	Client on COC?	Yes	•	No 🗌		
Sampler's name	noted on COC?		Yes	<b>✓</b>	No $\square$		
		Sampl	e Rece	eipt Infori	mation		
Custody seals int	tact on shipping conta	-	Yes		No 🗌		NA 🗹
Shipping containe	er/cooler in good cond	dition?	Yes	•	No 🗌		
Samples in prope	er containers/bottles?		Yes	<b>✓</b>	No $\square$		
Sample container	rs intact?		Yes	<b>✓</b>	No 🗌		
Sufficient sample	volume for indicated	test?	Yes	<b>✓</b>	No 🗌		
		Sample Preservation	on and	Hold Tin	ne (HT) Info	rmation	
All samples recei	ived within holding tim	ne?	Yes	<b>✓</b>	No 🗆		
Sample/Temp Bla	ank temperature			Temp:	2°C		NA 🗌
Water - VOA vials	s have zero headspac	ce / no bubbles?	Yes		No 🗌		NA 🗹
Sample labels ch	ecked for correct pres	servation?	Yes	•	No 🗌		
pH acceptable up	oon receipt (Metal: <2	; 522: <4; 218.7: >8)?	Yes		No 🗌		NA 🗹
Samples Receive	ed on Ice?		Yes	✓	No 🗆		
		(Ice Type	e: WE	TICE )	)		
UCMR3 Samples		e upon receipt for EPA 522?	Yes		No 🗌		NA 🗹
		upon receipt for EPA 218.7,			No 🗆		NA <b>✓</b>
300.1, 537, 539		upor receipt for EFA 216.7,	162		NO L		IVA 🖭
* NOTE: If the "N	lo" box is checked, se	ee comments below.					
Comments:		=======	==:				





28 October 2015

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 10/17/15 10:32. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Kotherine Running Crane

Katherine RunningCrane Project Manager



Benicia CA, 94510

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]

Project Manager: Jim Gribi

**Reported:** 10/28/15 13:52

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS-1	T152585-01	Air	10/13/15 11:57	10/17/15 10:32
SG-4A	T152585-02	Air	10/13/15 12:56	10/17/15 10:32
SG-4A (DUPLICATE)	T152585-03	Air	10/13/15 13:22	10/17/15 10:32



Gribi Associates Project: Maz Glass

1090 Adam Street, Suite KProject Number: [none]Benicia CA, 94510Project Manager: Jim Gribi

**Reported:** 10/28/15 13:52

#### **DETECTIONS SUMMARY**

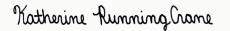
**Sample ID:** SS-1 **Laboratory ID:** T152585-01

No Results Detected

Sample ID: SG-4A	Labora	tory ID:	T152585-02		
		Reporting			
Analyte	Result	Limit	Units	Method	Notes
Methane	13000	5.0	ppm(v)	8015M	
C6-C12 (GRO)	174000	7170	ug/m³ Air	TO-3/TO-14 m	
Sample ID: SG-4A (DUPLICATE)	Labora	tory ID:	T152585-03		
		Reporting			
Analyte	Result	Limit	Units	Method	Notes
Methane	15000	5.0	ppm(v)	8015M	
C6-C12 (GRO)	201000	7170	ug/m³ Air	TO-3/TO-14 m	

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.



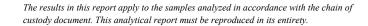


Gribi Associates Project: Maz Glass

1090 Adam Street, Suite KProject Number: [none]Reported:Benicia CA, 94510Project Manager: Jim Gribi10/28/15 13:52

#### SS-1 T152585-01(Air)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
rmaryte	Result	MIDL	LIIIII	Omts	Dilution	Datell	rrepareu	Analyzeu	iviculou	110165
			SunStar I	_aboratories	s, Inc.					
TO-15										
Benzene	ND		3.3	ug/m³ Air	1.96	5101929	10/20/15	10/22/15	TO-15	
Toluene	ND		3.8	"	"	"	"	"	"	
Ethylbenzene	ND		4.4	"	"	"	"	"	"	
m,p-Xylene	ND		8.8	"	"	"	"	"	"	
o-Xylene	ND		4.4	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene			79.4 %	40-1	60	"	"	"	"	
Methane by GC										
Methane	ND		5.0	ppm(v)	1	5101428	10/14/15	10/20/15	8015M	
Total Volatile Organic Compounds	s by TO-3 (modified)									
C6-C12 (GRO)	ND		7170	ug/m³ Air	1.96	5101928	10/19/15	10/20/15	TO-3/TO-14 m	
Fixed Gases ASTM D1946-90										
Helium	ND		5.00	%	1	5101924	10/19/15	10/22/15	GC	I-02





Gribi Associates Project: Maz Glass

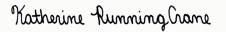
1090 Adam Street, Suite KProject Number: [none]Reported:Benicia CA, 94510Project Manager: Jim Gribi10/28/15 13:52

#### SG-4A T152585-02(Air)

Analyte	Result	Re MDL	porting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Su	ınStar I	aboratories	s, Inc.					
TO-15										
Benzene	ND		3.3	ug/m³ Air	2.05	5101929	10/20/15	10/20/15	TO-15	TO-14
Toluene	ND		3.8	"	"	"	"	"	"	TO-14
Ethylbenzene	ND		4.4	"	"	"	"	"	"	TO-14
m,p-Xylene	ND		8.8	"	"	"	"	"	"	TO-14
o-Xylene	ND		4.4	"	"	"	"	"	"	TO-14
Methane by GC										
Methane	13000		5.0	ppm(v)	1	5101428	10/14/15	10/20/15	8015M	
Total Volatile Organic Comp	pounds by TO-3 (modified)									
C6-C12 (GRO)	174000		7170	ug/m³ Air	2.05	5101928	10/19/15	10/20/15	TO-3/TO-14 m	

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.





Gribi Associates Project: Maz Glass

1090 Adam Street, Suite KProject Number: [none]Reported:Benicia CA, 94510Project Manager: Jim Gribi10/28/15 13:52

#### SG-4A (DUPLICATE) T152585-03(Air)

Analyte	Result	Reporting MDL Limi	•	Dilution	Batch	Prepared	Analyzed	Method	Notes
		<u>SunStar</u>	Laboratorie	es, Inc.					
TO-15									
Benzene	ND	3.3	ug/m³ Air	2.1	5101929	10/20/15	10/20/15	TO-15	TO-14
Toluene	ND	3.8	"	"	"	"	"	"	TO-14
Ethylbenzene	ND	4.4	. "	"	"	"	"	"	TO-14
m,p-Xylene	ND	8.8	"	"	"	"	"	"	TO-14
o-Xylene	ND	4.4	. "	"	"	"	"	"	TO-14
Surrogate: 4-Bromofluorobenzene		%	3 40-	160	"	"	"	"	TO-14
Methane by GC									
Methane	15000	5.0	ppm(v)	1	5101428	10/14/15	10/20/15	8015M	
Total Volatile Organic Compounds	s by TO-3 (modified)								
C6-C12 (GRO)	201000	7170	ug/m³ Air	2.1	5101928	10/19/15	10/20/15	TO-3/TO-14	

SunStar Laboratories, Inc.

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Gribi Associates Project: Maz Glass

1090 Adam Street, Suite KProject Number: [none]Benicia CA, 94510Project Manager: Jim Gribi

**Reported:** 10/28/15 13:52

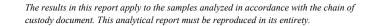
#### **TO-15 - Quality Control**

#### SunStar Laboratories, Inc.

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

**Batch 5101929 - Canister Analysis** 

Blank (5101929-BLK1)		Pr	epared: 10/19/15 A	analyzed: 10/22/15	
Surrogate: 4-Bromofluorobenzene	37.9	ug/m³ Air	36.2	105 40-160	
Benzene	ND	3.3 "			
Toluene	ND	3.8 "			
Ethylbenzene	ND	4.4 "			
m,p-Xylene	ND	8.8 "			
o-Xylene	ND	4.4 "			
Duplicate (5101929-DUP1)	So	urce: T152585-01 Pr	epared: 10/19/15 A	analyzed: 10/22/15	
Surrogate: 4-Bromofluorobenzene	36.0	ug/m³ Air	36.2	99.4 40-160	
Benzene	ND	3.3 "	ND		30
Benzene Toluene	ND ND	3.3 " 3.8 "	ND ND		30 30
Γoluene					
	ND	3.8 "	ND		30





Gribi Associates Project: Maz Glass

1090 Adam Street, Suite KProject Number: [none]Benicia CA, 94510Project Manager: Jim Gribi

**Reported:** 10/28/15 13:52

### Methane by GC - Quality Control

#### SunStar Laboratories, Inc.

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

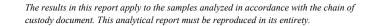
Batch 5101428 - EPA 5030 GC

 Blank (5101428-BLK1)
 Prepared: 10/14/15 Analyzed: 10/20/15

 Methane
 ND
 5.0 ppm(v)

 Duplicate (5101428-DUP1)
 Source: T152520-01 Prepared: 10/14/15 Analyzed: 10/20/15

 Methane
 ND
 5.0 ppm(v)
 1.51
 20







Gribi Associates Project: Maz Glass

1090 Adam Street, Suite KProject Number: [none]Reported:Benicia CA, 94510Project Manager: Jim Gribi10/28/15 13:52

# Total Volatile Organic Compounds by TO-3 (modified) - Quality Control SunStar Laboratories, Inc.

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

**Batch 5101928 - Canister Analysis** 

Blank (5101928-BLK1) Prepared: 10/19/15 Analyzed: 10/20/15

C6-C12 (GRO) ND 7170 ug/m³ Air

**Duplicate (5101928-DUP1)** Source: T152585-01 Prepared: 10/19/15 Analyzed: 10/20/15

C6-C12 (GRO) ND 7170 ug/m³ Air ND 30

SunStar Laboratories, Inc.

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

Katherine Running Crane



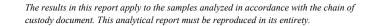
Gribi Associates Project: Maz Glass

1090 Adam Street, Suite K Project Number: [none] Reported: Benicia CA, 94510 10/28/15 13:52 Project Manager: Jim Gribi

#### Fixed Gases ASTM D1946-90 - Quality Control

#### SunStar Laboratories, Inc.

Analyte	Result	Reporting MDL Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5101924 - EPA 5030 GC										
Blank (5101924-BLK1)				Prepared: 1	0/19/15 A	nalyzed: 10	/22/15			
Helium	ND	5.00	%							
<b>Duplicate (5101924-DUP1)</b>		Source: T152585-01		Prepared: 1	0/19/15 A	nalyzed: 10	/22/15			
Helium	ND	5.00	%		ND				200	I-02







Gribi Associates Project: Maz Glass

1090 Adam Street, Suite KProject Number: [none]Reported:Benicia CA, 94510Project Manager: Jim Gribi10/28/15 13:52

#### **Notes and Definitions**

TO-14 TO-15 analysis of sample was not performed due to high concentration of analyte(s). Sample was analyzed utilizing method TO-14

and reporting limit has been adjusted accordingly.

I-02 This result was analyzed outside of the EPA recommended holding time.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

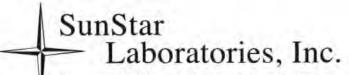
NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

## AIR LABORATORY

Chain of Custody Record



Providing Quality Analytical Services Nationwide 25712 Commercentre Drive, Lake Forest, CA 92630 949-297-5020

Client: Address: 1090 A Phone: 707-748- Project Manager:	7743 Grib	Fax: 7	148-	17.63	i Tic ( #	Project N Collector Batch #:_	MI	८०८	-		-	las.		200	nt Project #:	
Sample ID	Date Sampled	Start Time	Finish Time	Sample Type : Soil Gas / Indoor Air	Container Type: Summa Can / Tedlar	Initial Pressure	Final Pressure	TO-3	TO-14	TO-15 TAH-G, BJ	8015m Methane	8015m Gasoline	Fixed Gases by TCD	Heliym	Summa Can # / Comments	Laboratory ID #
55-1	10/13	1151	1159	56	Summs	79	5			×	X		×	X	332	10
SG-4A	10/13	1250	1256	56	Summy	27	5			×	X		X	X	659	OZ
SG-44 (Duplicak)	10/13	1345	1322	56	Suma	29	5			×	X		Х	X	388	63
Relinquished by: (signature) Relinquished by: (signature)	10/13/21	/ Time	PED	by: (signed by: (s	-	te / Time	00 Cha	in of	Cust	tal#	eals	Y/N/	NA	3 Y Y	STD. TAT	1
Relinquished by: (signature)	10-17-17 Date	/ Time	Receive	ed by: (sign		9-15 103 te / Time	Turn			me:_	-	ion/c		4	(3-17-15	-1



# SAMPLE RECEIVING REVIEW SHEET

Client Name: Project:	Maz Gl	43)	
Received by: Date/Time F	teceived:	10-17-	-15 (032
Delivered by: Client SunStar Courier GSO FedEx	Other		
Total number of coolers received Temp criteria = 6°C	C > 0°C (no	frozen con	tainers)
Temperature: cooler #1 Ze 1 °C +/- the CF (-0.2°C) = 20 0 °C con	ected temperati	ure	
cooler #2°C +/- the CF (- 0.2°C) =°C con	rected temperate	ure	
cooler #3°C +/- the CF (-0.2°C) =°C cor	rected temperat	ure	
Samples outside temp. but received on ice, w/in 6 hours of final sampling.	□Yes	□No*	⊠N/A
Custody Seals Intact on Cooler/Sample	⊠Yes	□No*	□N/A
Sample Containers Intact	⊠Yes	□No*	
Sample labels match COC ID's	<b>∑</b> Yes	□No*	
Total number of containers received match COC	⊠Yes	□No*	
Proper containers received for analyses requested on COC	⊠Yes	□No*	
Proper preservative indicated on COC/containers for analyses requested	□Yes	□No*	⊠N/A
Complete shipment received in good condition with correct temperatures, preservatives and within method specified holding times.  Yes		abels, volu	mes
* Complete Non-Conformance Receiving Sheet if checked Cooler/Sample	Review - Initi	als and date	MM 10-17-1
Comments:			