

**Soil and Groundwater Assessment Report  
Housewives Marketplace  
801 Clay Street  
Oakland, California**

**Prepared for:**

City of Oakland  
Public Works Agency  
Environmental Services Division  
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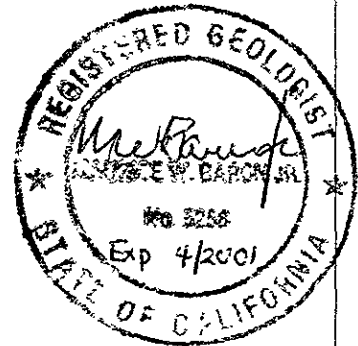
**Prepared by:**

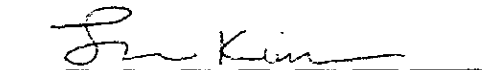
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# Technical Report

## Soil and Groundwater Assessment Report

Housewives Marketplace  
801 Clay Street  
Oakland, California

This report presents the methodologies employed and the findings of the soil and groundwater assessment performed at the Housewife's Market formerly located at 801 Clay Street in Oakland, California (site) on December 7 and 8, 2000 by Chow Engineering, Inc. (CE) on behalf of Harding Lawson Associates.

### 1.0 Introduction

The site is located on the City of Oakland block encompassed by 8<sup>th</sup> Street, 9<sup>th</sup> Street, Jefferson Street, and Clay Street (Plates 1 and 2). Previous investigations at the site indicated the presence of groundwater impact from petroleum hydrocarbons; namely Total Petroleum Hydrocarbons as mineral spirits (TPHms), Total Petroleum Hydrocarbons as gasoline (TPHg), Total Petroleum Hydrocarbons motor oil (TPHmo), benzene, toluene, ethyl benzene and total xylenes (BTEX). Previous studies of the site indicated two automobile fuel dispensing and service stations formerly occupied the eastern and western corners of the site. Plate 2 presents a site sketch indicating the layout of the site, previous sample collection locations and the estimated location of the sample collection points for this assessment.

This investigation was performed to further assess the horizontal extent of groundwater contamination on site and possible sources of the impact. Five soil borings were advanced this investigation. Four borings (SB-1, SB-2, SB-3 and SB-5) were advanced around the presumed location of the underground storage tank (UST) at the service station on the eastern corner of the site. One boring (SB-4) was advanced north of the presumed location of the UST at the former service station located on the western corner of the site. Soil samples were collected from each boring. Groundwater was encountered in four of the five borings and subsequently sampled. Groundwater was not detected or sampled at SB-5. Select soil and the groundwater samples were analyzed for lead, total petroleum hydrocarbons, and volatile organic compounds. The results of the soil and groundwater analyses are presented below in sections 7.0 and 8.0.

## 2.0 Background

Three previous assessments of the site have been performed for the City of Oakland. In September 1997, SECOR performed a Phase I environmental site assessment. The Phase I indicated two service stations had previously existed on the site at the eastern corners of the site and had been removed in the 1950s.

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In 1997, SECOR advanced soil borings at four locations and collected soil and groundwater samples (SECOR 1997b) to determine if soil or groundwater had been impacted on the site. The four borings are labeled GP-1 through GP-4 on Plate 2 of this report. Borings GP-1 and GP-2 were located in the western corner of the site. Borings GP-3 and GP-4 were located near the center of the site and in the eastern corner of the site, respectively. Soil and groundwater samples were collected and analyzed for petroleum hydrocarbons and BTEX. Soil sample analytical results did not indicate TPH or BTEX impact in the soil.

The only impact detected was low concentrations of TPHmo 670 micrograms per liter ( $\mu\text{g/L}$ ) in the groundwater collected from GP-1 (western exterior parking lot) and elevated concentrations of TPHg and TPHms (1,700,000  $\mu\text{g/L}$  and 210,000  $\mu\text{g/L}$ , respectively) and BTEX (ranging from 3,200 to 53,000  $\mu\text{g/L}$ ) in the groundwater at GP-4 (easternmost sidewalk). GP-1 was believed to be located in the vicinity of the underground storage tank (UST) associated with the former service station on the western corner of the site. GP-4 was believed to be slightly upgradient of the UST associated with the former service station located on the eastern corner of the site.

Groundwater impact from petroleum hydrocarbon compounds was detected in boring GP-4 located on the eastern corner of the site indicating the possibility of an off-site up-gradient source for the hydrocarbon impact at the site. Groundwater flow in the area of the site is presumed to flow in a westerly direction; diagonally across the site (SECOR 1997b).

In 1998, SECOR advanced six additional Geoprobe borings (GP-5 through GP-10) and collected soil and groundwater samples (SECOR 1998) for analyses to further assess the groundwater impact detected in the previous investigations and to further evaluate the existence of off-site sources of hydrocarbon impact. The six borings ringed the outside of the Housewives Marketplace building. Soil and groundwater samples were collected and analyzed for petroleum hydrocarbons and BTEX. The soil and groundwater sample results did not indicate TPH or BTEX impact.

The purpose of this <sup>(new)</sup> investigation was two-fold: 1) assess the possibility of an up-gradient source of hydrocarbons that may be or has been impacting the site groundwater and 2) assess the areas of the site where the former service stations were located for possible sources of contaminants. During this

investigation, borings SB-1, SB-2, SB-3 and SB-5 were located around the four sides of the presumed location of the UST at the former service station located on the eastern corner of the site. SB-4 was located near the former service station UST located on the western corner of the site, closest to GP-1.

### **3.0 Health and Safety Plan preparation, Permitting and Utility Clearance**

Prior to the commencement of work in the field, CE prepared a site-specific Health and Safety Plan (HASP) for use at the site during the performance of the work in the field. A copy of the HASP was kept at the site during the performance of the work.

A boring permit (number WOO-884) for the collection of grab soil and groundwater samples at the site was obtained from the Alameda County Public Works Agency Water Resources Section.

Forty-eight hours prior to the performance of the fieldwork the locations of the work areas were marked in accordance with the requirements of Underground Services Alert for clearance of subsurface utilities. Additionally, CE contracted with Cruz Brothers, Inc., a subsurface utility locating company, to perform a clearance of the work areas prior to fieldwork.

### **4.0 Soil Sample and Grab Groundwater Sampling Protocol**

Five (5) soil borings (SB1 through SB5) were advanced at the site on December 7 and 8, 2000. Prior to advancing the four borings inside the building (SB-1, SB-2, SB-3 and SB-5), personnel from the sampling contractor (Precision Sampling, Inc.) cored through the concrete foundation of the building. Four (4) borings, SB1 through SB4, penetrated the first ground water bearing zone under the site. The estimated locations of the soil and groundwater grab borings are presented on the site sketch (Plate 2).

#### **4.1 Soil Sampling Protocol**

The sampling plan specified continuous coring of subsurface sediments under the site to a depth sufficient to penetrate the first water-bearing zone at the site. A hollow sample probe, approximately three feet in length, lined with a clear two-inch diameter acetate liner was hydraulically advanced into the sediments under the site in three-foot increments. After penetrating three feet into the sediments the sample probe was withdrawn from the boring and the soil core was retrieved for visual examination field screening for VOCs and for possible chemical analysis. The soils encountered during the drilling operations are described using the Unified Soil Classification System and shown on the boring logs in Appendix A.

Upon retrieval of the core from the probe, a sample of sediment from each end of the core was removed for classification purposes. Samples of the sediments, at five-foot increments, or intervals indicating hydrocarbon odor, were placed in a ZipLock® bag, placed on a warm surface to permit volatilization of possible hydrocarbons from the sediment into the bag headspace. After approximately 10-minutes, the headspace in the plastic bag was evaluated for the presence of volatile vapors using a photo-ionization detector (PID) calibrated using a hexane calibration gas standard. Prior to commencing field screening of sediment, samples of the "background" vapor concentration inside a warm unused ZipLock® bag were evaluated using a PID to assess for VOC concentrations contributed by the bag itself. Vapor concentrations were noted, along with the sediment description, on the boring logs.

After removing the previously mentioned samples, sheets of Teflon® film, followed by plastic end caps, were immediately placed over the ends of the core to minimize the possible loss of volatile compounds in the core. Based on the PID headspace evaluation, selected sections of the cores were prepared for transport to a laboratory for analysis. The section of the core selected for analysis was removed from the rest of the core, using a hacksaw. Both ends of the sample were sealed using Teflon® film and plastic end caps.

#### **4.2 Groundwater Sampling Protocol**

After penetrating the groundwater-bearing zone, the sample probe was withdrawn from the boring and 1-inch slotted Schedule 40 polyvinyl chloride casing was placed in the boring. After approximately 10-minutes, depth to groundwater was measured using a water level probe that emitted an audible tone upon entering water. Groundwater samples were then collected from inside the casing using a new clean disposable bailer. Groundwater from the bailer was slowly decanted into the sample containers to minimize the volatilization of organic compound possibly contained in the sample.

Groundwater samples for TPH and VOC analyses were collected in 40-milliliter glass vials equipped with Teflon® septa and preserved with hydrochloric acid. Groundwater samples collected for TPHms were collected in 1-liter amber glass containers.

#### **4.3 Sample Analysis Plan**

The groundwater samples were analyzed for Total Petroleum Hydrocarbons (TPH) in the gasoline (TPHg) and mineral spirit (TPHms) ranges using EPA Method 8015 Modified and for BTEX using EPA Method 8020. These analyses are based on compounds previously detected at elevated concentrations during a previous subsurface investigation performed by others for the City of Oakland (SECOR, 1997b and 1998). The groundwater sample from the western corner of the site (SB-4) was also analyzed for TPHmo since motor oil had previously been

detected at low concentrations at GP-1 during a previous investigation. Analysis for VOC's using, EPA Method 8260, was added to the analytical protocol for the groundwater samples in order to assess for the presence of solvents or other compound potentially originating from the former service stations in the groundwater and for future use during health risk assessments as suggested by Harding ESE.

Since the former service stations dispensed gasoline during the time that tetraethyl lead was present in the fuel, lead was a considered to pose a potential impact to the site soil and groundwater therefore a near surface soil sample from each boring was analyzed for lead using EPA Method 6010 to assess the degree of impact.

Soil samples exhibiting elevated PID readings, but exceeding the number of samples scheduled for analysis, were identified and shipped to the laboratory on a "hold until further notice " basis pending receipt of the analytical results of other soil samples. Analysis of the "hold" samples would be performed by the laboratory to provide additional data should the initial series of analyses indicate the need for further analytical data.

#### **5.0 Sample Documentation and Preservation**

A label indicating the date and time of the sample collection, sample number, sample collection location, analysis requested and identity of the sampler were placed on each sample container. The sample containers were placed for preservation in a pre-cooled container and transported under chain-of-custody protocol. Copies of the Chain of Custody's for this investigation are presented as Appendix B.

Soil samples for analysis were preserved solely by refrigeration. Likewise, groundwater samples for TPHms analysis were also preserved by refrigeration.

Groundwater samples for TPHg, BTEX, and VOCs were preserved using refrigeration in laboratory prepared containers containing hydrochloric acid.

#### **6.0 Analytical Protocol and Quality Assurance and Quality Control (QA/QC)**

Soil samples were analyzed for the following constituents:

Lead using EPA Method 6010B

TPHg and TPHms using EPA Method 8015M and

BTEX using EPA Method 8020

One soil sample was analyzed for VOCs using EPA Method 8260 (full scan).

Groundwater samples were analyzed for the following constituents:

TPHg, TPHms, and TPHmo using EPA Method 8015M,

BTEX using EPA Method 8020 and

VOCs using EPA Method 8260 (full scan). *include AT135? done*

A water trip blank, prepared by the analytical laboratory, accompanied the groundwater sample during their residence at the site and during transport to the laboratory.

Soil and groundwater samples were submitted for analysis to Chromalab, Inc., a State of California Department of Health Services certified laboratory under (CLEP) using analytical methodologies in accord with EPA Solid Waste Analysis 846 (SWA-846) protocols. QA/QC for sample analysis were also performed in accord with the specifications of EPA SWA-846 and/or the QA/QC protocols of the laboratory CLEP permit.

## 7.0 Soil Sample Analytical Results

Soil samples from six inches to three feet below ground surface (bgs) from each of the five borings were analyzed for lead. The samples were analyzed for lead to provide information to contractors excavating at the area in the future. The samples from SB-1, SB-2, and SB-3 were each collected from one-foot bgs; analytical results indicated 270 milligrams per kilogram (mg/kg), 170 mg/kg and 400 mg/kg of lead, respectively. The analytical results for the 3-foot bgs sample from SB-4 and the 0.5 foot bgs sample collected from SB-5 indicated 1.9 and 2.7 mg/kg of lead, respectively. The EPA Region IX Preliminary Remedial Goal (PRG) for lead is 400 mg/kg for soil in residential areas and 1,000 mg/kg for soil in industrial areas. Concentrations of lead in the soil samples were at or below the PRG for lead.

*? is this a reasonable depth?*

The 25-foot bgs soil sample collected from SB-3 had a PID reading of 202 parts per million (ppm) and exhibited a hydrocarbon odor. This sample was analyzed for TPHg, TPHms, and VOCs (EPA Method 8260). Analytical results indicated less than (<) 1.0 mg/kg TPHg, <10 mg/kg TPHms and the absence of concentrations of VOCs at or exceeding the instrument detection limits on the 8260 analyses

A four-point composite soil sample consisting of the five-foot bgs samples from SB-1 SB-2 SB-3 and SB-5 (interior borings) were analyzed for TPHg, TPHms, and BTEX. The analytical results indicated the absence of concentrations of VOCs at or exceeding the instrument detection limits for each analysis



A cumulative summary of groundwater sample analytical results for this and preceding investigations is presented in Table 1. Copies of analytical results and chain of custody documents are presented in Appendix B.

## 8.0 Groundwater Analytical Results

Groundwater samples were collected and analyzed from SB-1, SB-2, SB-3 and SB-4. At SB-5, refusal was encountered at 18.5 feet bgs, above the first water bearing zone. The four ground water samples were analyzed for TPHg, TPHms, VOCs, and BTEX. The sample collected from SB-4 also was analyzed ~~for~~ <sup>for</sup> TPHmo.

- Analytical results for the sample collected from SB-1 indicated <50 µg/L for TPHg and 88 µg/L for TPHms. With the exception of 68 µg/L of trichloroethene (TCE), no VOCs were present in concentrations at or exceeding the instrument detection limit.
- Analytical results for the sample collected from SB-2 indicated <50 µg/L TPHg and TPHms. With the exception of 23 µg/L of TCE, no VOCs were present in concentrations at or exceeding the instrument detection limit.
- Analytical results for the sample collected from SB-3 indicated 2,900 µg/L TPHg, 290 µg/L using EPA Method M8015, TPHms, 670 µg/L benzene, 450 µg/L toluene, 100 µg/L ethylbenzene, and 480 µg/L total xylenes using EPA Method 8020. Detectable concentrations of the following VOCs were present in this sample; 9.0 µg/L 1,2 dichloroethane, 6.4 µg/L isopropylbenzene, 8.9 µg/L naphthalene, 14 µg/L n-propylbenzene, 30 µg/L TCE, 82 µg/L 1,2,4-trimethylbenzene, and 19 µg/L 1,3,5-trimethylbenzene were present in the groundwater sample.
- Analytical results for the sample collected from SB-4 indicated <50 µg/L TPHg, 100 µg/L TPHms, and <500 µg/L TPHmo (motor oil). Concentrations of BTEX and VOCs, if present, were below the instrument detection limits for these previously mentioned analyses.

A cumulative summary of groundwater sample analytical results for this and preceding investigations is presented in Tables 2 and 3. A graphical presentation of analytical results is presented on Plate 3. Volatile organic compound results are presented on Plate 4. Copies of analytical results and chain of custody documents are presented in Appendix B.

A summary of the VOCs detected in the groundwater samples and comparing them to the Maximum Contaminant Levels (MCL) State Action Levels or EPA Region IX PRGs where no MCL is available is presented in Table 3. The MCL for TCE was exceeded in three of four groundwater samples (SB-1, SB-2 and

how about a to scale  
cross section

SB-3). The MCL for benzene and 1,2-DCA also were exceeded in the groundwater sample collected from SB-3.

## 9.0 Conclusions & Recommendations

gradient borehole

### 9.1 Conclusions

Analytical results from previous investigations and the current investigation indicate the absence of concentrations of TPH compounds and BTEX at or exceeding the instrument detection limit in the soil samples collected. The only analyte detected was lead, at or below the PRG for lead. Based on the soil analytical results, the source of petroleum hydrocarbons for the impact to the site ground water from TPH and BTEX does not appear to be located at the site.

generally

The low concentrations of TPHmo detected in the groundwater in the previous investigation in GP-1 (670 µg/L) and GP-2 (<500 µg/L) and < 500 µg/L in SB-4 from this investigation strongly suggests the TPHmo impact to ground water in the area of the former service station on the western corner of the site is very localized.

The low concentrations of TPHms detected at SB-4 (100 µg/L) and the < 50 µg/L detected in the sample collected from GP-1 and GP-2, during the previous investigation strongly suggests, like the TPHmo impact, the TPHms impact appears to be limited in area. The likelihood of TPHms impact in this area of the site migrating from an upgradient source in the vicinity of the service station formerly located on the eastern corner of the site appears to be remote based on the < 50 µg/L indicated for the groundwater sample collected from boring GP-3 between the locations of the former service stations located on the eastern and western corners of the site.

At the location of the former service station on the eastern corner of the site, the only analytical results indicating petroleum hydrocarbon impact to ground water were in the samples collected from GP-4 and SB-3-GW. These borings are in close proximity. Analytical results for groundwater samples collected from these borings indicate concentrations of TPHg and BTEX are several orders of magnitude lower in SB-3-GW (2000) than the slightly up gradient boring GP-4 (1997). These analytical results combined with the analytical results for SB-1-GW and SB-2-GW (at the presumed west and north ends of former UST) suggests impact to groundwater from petroleum hydrocarbons in this area of the site also appears to be limited in area and strongly suggests a possible up gradient source for the ground water impact in this area of the site

The previous investigations did not analyze ground water samples for VOCs other than BTEX so a conclusion cannot be made regarding the relative levels of other VOCs between SB-3 and GP-4. Groundwater concentrations for TCE exceeded the MCL in the samples collected from SB-1, SB-2 and SB-3. The

MCLs also were exceeded for benzene and 1,2 DCA in the sample collected from SB-3. With the exception of the TCE concentrations, low concentrations of non-BTEX VOCs were detected only in the sample collected from SB-3, it is possible that a source for the TCE, 1,2 DCA, IPB, naphthalene, n-PB, 1,2,4 TMB, and 1,3,5 TMB, like the source of the TPHg and TPHms originates from an off-site source.

~~Groundwater at the site occurs between 27 and 29 feet bgs in a silty to clayey~~  
~~sandy sand.~~ The sand varied in color from predominantly olive brown to dark yellowish brown to yellowish brown. Based on depth to groundwater measurements collected during this investigation ground water in the first water bearing zone at the site appears to be confined. The ground water gradient at the site is presumed to be oriented in a westerly direction.

## 9.2 Recommendations

Aerial photos of the site from the 1930's through 1950's should be reviewed and if possible enlarged to further assess for the location of the former USTs at the site. UST fill point may be discernable on high-resolution aerial photos. ✓

Prior to demolition and construction activities at the site, the City of Oakland (CO) should inform the contractors of the lead levels detected in the near surface soil samples so that appropriate mitigation measures can be employed to reduce the exposure risk to site workers and persons in the general area of the site.

After the removal of the building concrete foundation and prior to initiating future construction activities at the site the CO should perform an electromagnetic survey of the area of the former gasoline service stations to assess for the presence of USTs. ✓

The CO may wish to advance additional borings for the collection and analyses of soil and groundwater samples east of the location of GP-4 to further assess whether the levels of TPHg, TPHms, BTEX, and other organic compounds detected in the ground water sample collected from GP-4 originate at an up gradient off-site source.

Should the CO opt not to install groundwater monitoring wells to assess the groundwater gradient direction and magnitude at the site, a survey of existing monitoring wells and potentiometric data in the area of the site should be performed to assess the groundwater flow direction(s) the area of the site ✓

A health risk assessment may also be performed to assess the risk associated with the levels of compounds of concern found at the site and to identify the best remedial options

## 10.0 References

SECOR, Phase I Environmental Site Assessment Report, The Housewives Marketplace and Associated Retail/Office Space, 8<sup>th</sup>, 9<sup>th</sup>, Clay and Jefferson, Oakland, California, September 10, 1997 (SECOR 1997a)

SECOR, Report of Soil and Groundwater Sampling Results, The Housewives Market and Retail/Office Space, 8<sup>th</sup>, 9<sup>th</sup>, Clay and Jefferson Streets, Oakland, California, December 3, 1997 (SECOR 1997b)

Report of Additional Soil and Groundwater Sampling Results, The Housewives Market and Retail/Office Space, 8<sup>th</sup>, 9<sup>th</sup>, Clay and Jefferson Streets, Oakland, California, March 16, 1998 (SECOR 1998)

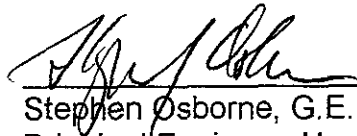
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Quality Control Reviewer



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# TABLES

Chow Engineering, Inc.

**Table 1 - Soil Analytical Results - Petroleum Hydrocarbons**

801 Clay Street, Oakland, California

Sample Number	Date Collected	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl Benzene (mg/Kg)	Total Xylenes (mg/Kg)	TPHg (mg/Kg)	TPHd (mg/Kg)	TPHms (mg/Kg)	TPH ss (mg/Kg)	TPHk (mg/Kg)	TPHjf (mg/Kg)	TPHbo (mg/Kg)	TPHmo (mg/Kg)	TPHun (mg/Kg)	Lead (mg/Kg)	Fuel Scan (mg/Kg)
GP-1 @ 10	10/21/97	< 0.005	< 0.005	< 0.005	< 0.005	< 10	< 1	< 10	< 10	< 10	< 10	< 100	< 20	< 1	NA	NA
GP-1 @ 20	10/21/97	< 0.005	< 0.005	< 0.005	< 0.005	< 10	< 1	< 10	< 10	< 10	< 10	< 100	< 20	< 1	NA	NA
GP-2 @ 15	10/21/97	< 0.005	< 0.005	< 0.005	< 0.005	< 10	< 1	< 10	< 10	< 10	< 10	< 100	< 20	< 1	NA	NA
GP-2 @ 22	10/21/97	< 0.005	< 0.005	< 0.005	< 0.005	< 10	< 1	< 10	< 10	< 10	< 10	< 100	< 20	< 1	NA	NA
GP-3 @ 15	10/21/97	< 0.005	< 0.005	< 0.005	< 0.005	< 10	< 1	< 10	< 10	< 10	< 10	< 100	< 20	< 1	NA	NA
GP-3 @ 23	10/21/97	< 0.005	< 0.005	< 0.005	< 0.005	< 10	< 1	< 10	< 10	< 10	< 10	< 100	< 20	< 1	NA	NA
GP-4 @ 10	10/21/97	< 0.005	< 0.005	< 0.005	< 0.005	< 10	< 1	< 10	< 10	< 10	< 10	< 100	< 20	< 1	NA	NA
GP-4 @ 15	10/21/97	< 0.005	< 0.005	< 0.005	< 0.005	< 10	< 1	< 10	< 10	< 10	< 10	< 100	< 20	< 1	NA	NA
GP-4 @ 20	10/21/97	< 0.005	< 0.005	< 0.005	< 0.005	< 10	< 1	< 10	< 10	< 10	< 10	< 100	< 20	< 1	NA	NA
GP-5 @ 15	01/23/98	< 0.005	< 0.005	< 0.005	< 0.005	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.0
GP-5 @ 23	01/23/98	< 0.005	< 0.005	< 0.005	< 0.005	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.0
GP-6 @ 15	01/23/98	< 0.005	< 0.005	< 0.005	< 0.005	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.0
GP-6 @ 22	01/23/98	< 0.005	< 0.005	< 0.005	< 0.005	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.0
GP-7 @ 15	01/23/98	< 0.005	< 0.005	< 0.005	< 0.005	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.0
GP-7 @ 21.5	01/23/98	< 0.005	< 0.005	< 0.005	< 0.005	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.0
GP-8 @ 15	01/23/98	< 0.005	< 0.005	< 0.005	< 0.005	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.0
GP-8 @ 21	01/23/98	< 0.005	< 0.005	< 0.005	< 0.005	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.0
GP-9 @ 15	01/23/98	< 0.005	< 0.005	< 0.005	< 0.005	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.0
GP-9 @ 22	01/23/98	< 0.005	< 0.005	< 0.005	< 0.005	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.0
GP-10 @ 15	01/23/98	< 0.005	< 0.005	< 0.005	< 0.005	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.0
GP-10 @ 21.5	01/23/98	< 0.005	< 0.005	< 0.005	< 0.005	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.0
SB-1 @ 1'	12/07/00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	270	NA
SB-3 1.2 @ 5'	12/03/00	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 10	NA	< 10	NA	NA	NA	NA	NA	NA	NA	NA
SB-4 @ 1'	12/07/00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	170	NA
SB-4 @ 1'	12/07/00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	400	NA
SB-3 @ 25'	12/07/00	NA	NA	NA	NA	< 1.0	NA	< 10	NA	NA	NA	NA	NA	NA	NA	NA
SB-4 @ 3'	12/03/00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.9	NA
SB-5 @ 0.5'	12/03/00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.7	NA

**Notes**

- TPHg Total Petroleum Hydrocarbons as gasoline
- TPHd Total Petroleum Hydrocarbons as diesel
- TPHms Total Petroleum Hydrocarbons as mineral spirits
- TPH ss Total Petroleum Hydrocarbons as Stoddard Solvent
- TPHk Total Petroleum Hydrocarbons as kerosene
- TPHjf Total Petroleum Hydrocarbons as jet fuel
- TPHbo Total Petroleum Hydrocarbons as bunker oil
- TPHmo Total Petroleum Hydrocarbons as motor oil
- TPHun Total Petroleum Hydrocarbons-unknown
- mg/Kg milligrams per kilogram
- µg/L micrograms per liter
- VOCs Volatile organic compounds
- < Less than
- NA Not analyzed

Chow Engineering, Inc.

**Table 2 - Grab Groundwater Analytical Results - Petroleum Hydrocarbons**

801 Clay Street, Oakland, California

Sample Number	Date Collected	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Total Xylenes (µg/L)	TPHg (µg/L)	TPHd (µg/L)	TPHms (µg/L)	TPHss (µg/L)	TPHk (µg/L)	TPHj (µg/L)	TPHbo (µg/L)	TPHmo (µg/L)	TPHun (µg/L)	Fuel Scan (µg/L)
GP-1	10/21/97	< 0.5	< 0.5	< 0.5	< 0.5	< 500	< 50	< 50	< 50	< 50	< 50	< 500	670	< 50	NA
GP-2	10/21/97	< 0.5	< 0.5	< 0.5	< 0.5	< 500	< 50	< 50	< 50	< 50	< 50	< 500	< 500	< 50	NA
GP-3	10/21/97	< 0.5	< 0.5	< 0.5	< 0.5	< 500	< 50	< 50	< 50	< 50	< 50	< 500	< 500	< 50	NA
GP-4	10/21/97	3,200	13,000	13,000	53,000	1,700,000	< 10,000	210,000	< 10,000	< 10,000	< 10,000	< 100,000	< 100,000	< 10,000	NA
GP-5	01/22/98	< 0.5	< 0.5	< 0.5	< 0.5	< 50	NA	NA	NA	NA	NA	NA	NA	NA	NA
GP-6	01/22/98	< 0.5	< 0.5	< 0.5	< 0.5	< 50	NA	NA	NA	NA	NA	NA	NA	NA	< 50
GP-7	01/23/98	< 0.5	< 0.5	< 0.5	< 0.5	< 50	NA	NA	NA	NA	NA	NA	NA	NA	NA
GP-8	01/23/98	< 0.5	< 0.5	< 0.5	< 0.5	< 50	NA	NA	NA	NA	NA	NA	NA	NA	< 50
GP-9	01/23/98	< 0.5	< 0.5	< 0.5	< 0.5	< 50	NA	NA	NA	NA	NA	NA	NA	NA	< 50
GP-10	01/23/98	< 0.5	< 0.5	< 0.5	< 0.5	< 50	NA	NA	NA	NA	NA	NA	NA	NA	< 50
SB-1-GW	12/08/00	< 0.50	< 0.50	< 0.50	< 0.50	< 50	NA	88	NA	NA	NA	NA	NA	NA	NA
SB-2-GW	12/08/00	< 0.50	< 0.50	< 0.50	< 0.50	< 50	NA	< 50	NA	NA	NA	NA	NA	NA	NA
SB-3-GW	12/08/00	670	450	100	480	2,900	NA	290	NA	NA	NA	NA	NA	NA	NA
SB-4-GW	12/08/00	< 0.50	< 0.50	< 0.50	< 0.50	< 50	NA	100	NA	NA	NA	NA	< 500	NA	NA

- Notes:
- TPHg Total Petroleum Hydrocarbons as gasoline
  - TPHd Total Petroleum Hydrocarbons as diesel
  - TPHms Total Petroleum Hydrocarbons as mineral spirits
  - TPHss Total Petroleum Hydrocarbons as Stoddard Solvent
  - TPHk Total Petroleum Hydrocarbons as kerosene
  - TPHj Total Petroleum Hydrocarbons as jet fuel
  - TPHbo Total Petroleum Hydrocarbons as bunker oil
  - TPHmo Total Petroleum Hydrocarbons as motor oil
  - TPHun Total Petroleum Hydrocarbons-unknown
  - mg/Kg milligrams per kilogram
  - µg/L micrograms per liter
  - VOCs Volatile organic compounds
  - < Less than
  - NA Not analyzed



Chow Engineering, Inc.

**Table 3 - Groundwater Analytical Results - VOCs**

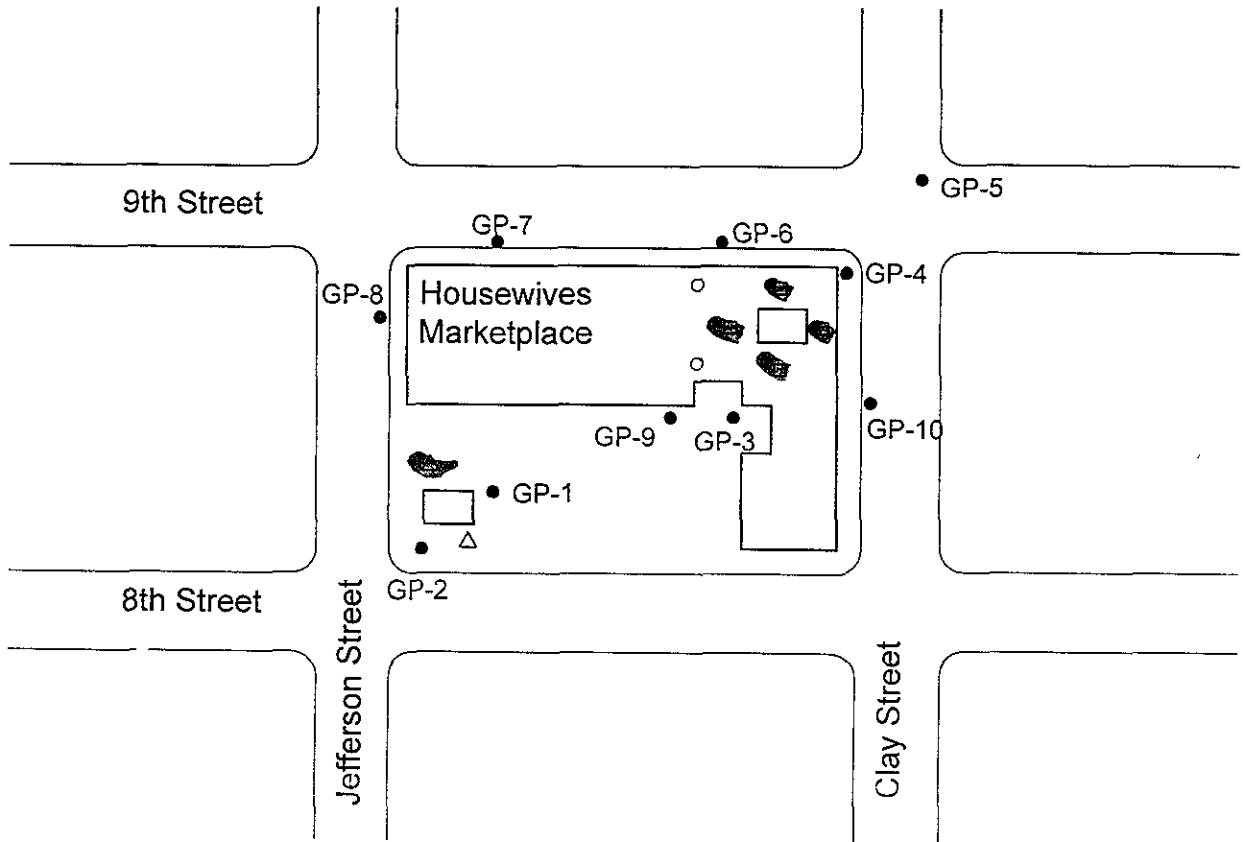
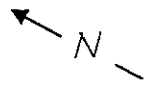
801 Clay Street, Oakland, California

Sample Number	Date Collected	Benzene (µg/L)	1,2 DCA (µg/L)	Ethyl Benzene (µg/L)	IPB (µg/L)	Napthalene (µg/L)	n-PB (µg/L)	Toluene (µg/L)	TCE (µg/L)	1,2,4 TMB (µg/L)	1,3,5 TMB (µg/L)	Total Xylenes (µg/L)
SB-1-GW	12/08/00	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	68	< 1.0	< 1.0	< 1.0
SB-2-GW	12/08/00	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	23	< 1.0	< 1.0	< 1.0
SB-3-GW	12/08/00	510	9.0	99	6.4	8.9	14	350	30	82	19	370
SB-4-GW	12/08/00	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

Notes:

1,2 DCA	1,2 Dichloroethane
IPB	Isopropylbenzene
n-PB	normal Propylbenzene
TCE	Trichloroethene
1,2,4 TMB	1,2,4 Trimethylbenzene
1,3,5 TMB	1,3,5 Trimethylbenzene
µg/L	Micrograms per liter
<	Less than

**PLATES**



NOT TO SCALE

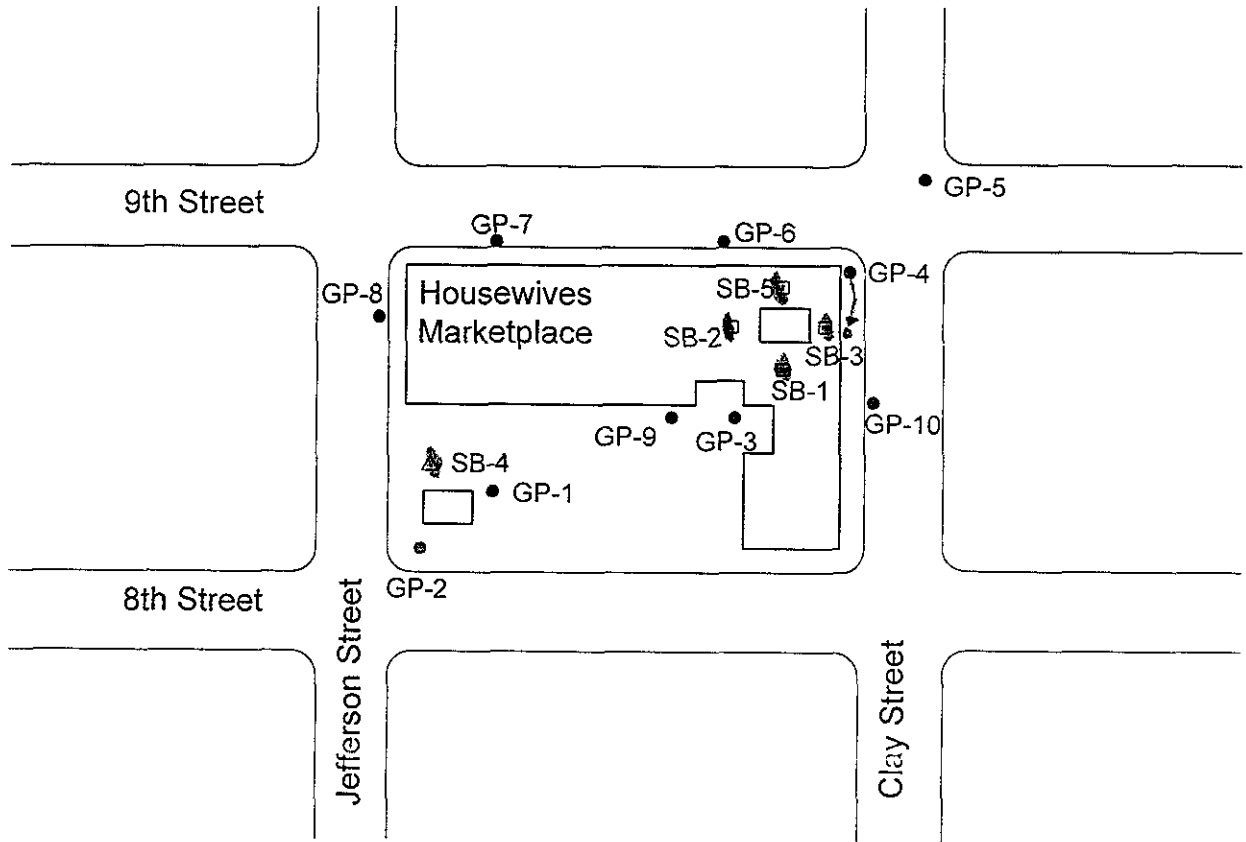
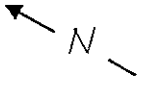
**LEGEND**

- Initial Interior Sample Location
- Step-Out Interior Sample Location
- △ Exterior Sample Location
- ▭ Presumed location of former service station UST
- GP-5 Previous Soil Boring



CHOW ENGINEERING, INC.

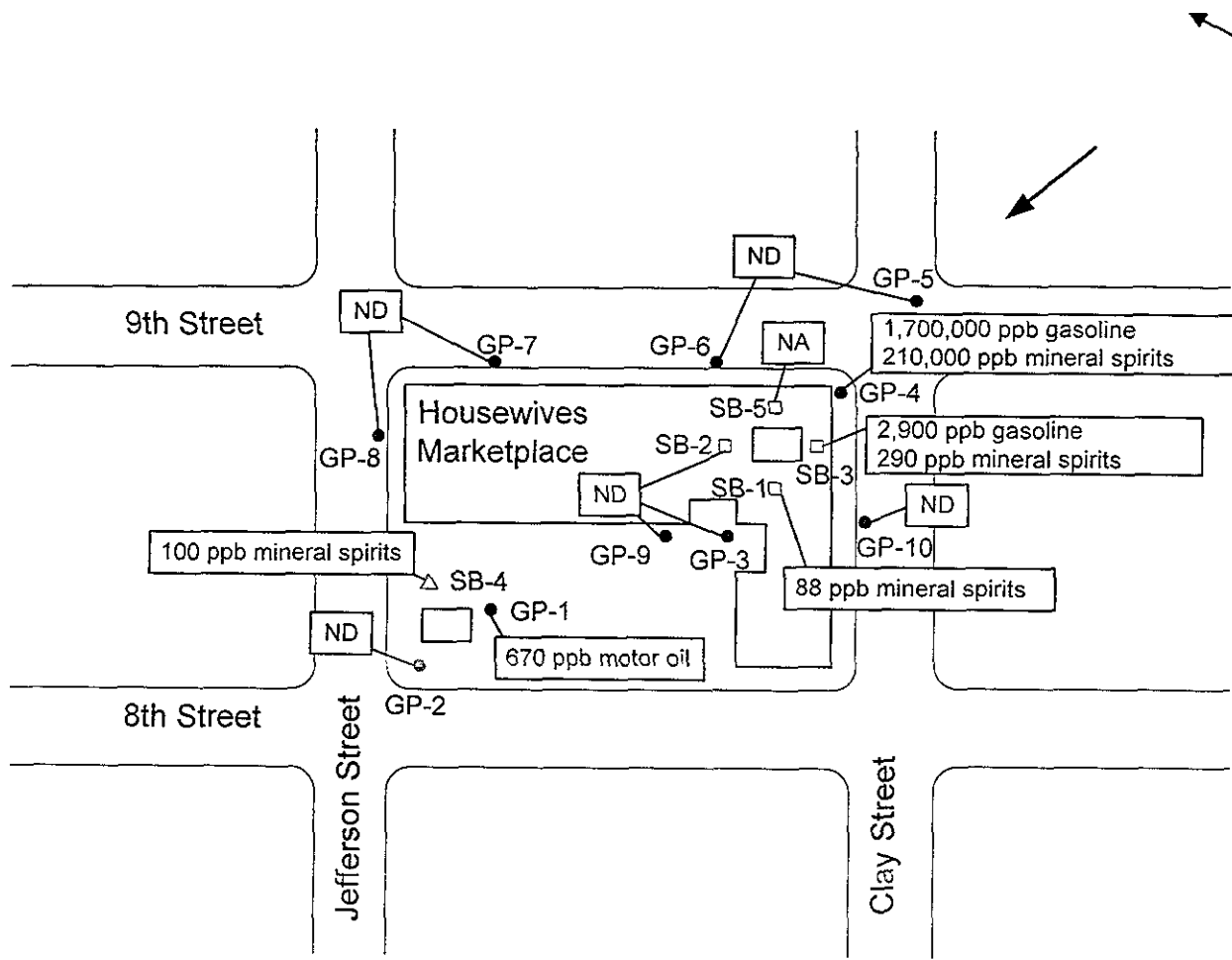
Sample Location Sketch  
Harding Lawson / City of Oakland  
Housewives Market Proposal



NOT TO SCALE

**LEGEND**

- SB-3 Initial Interior Sample Location
- △ SB-4 Exterior Sample Location
- Presumed location of former service station UST
- GP-5 Previous Soil Boring



NOT TO SCALE

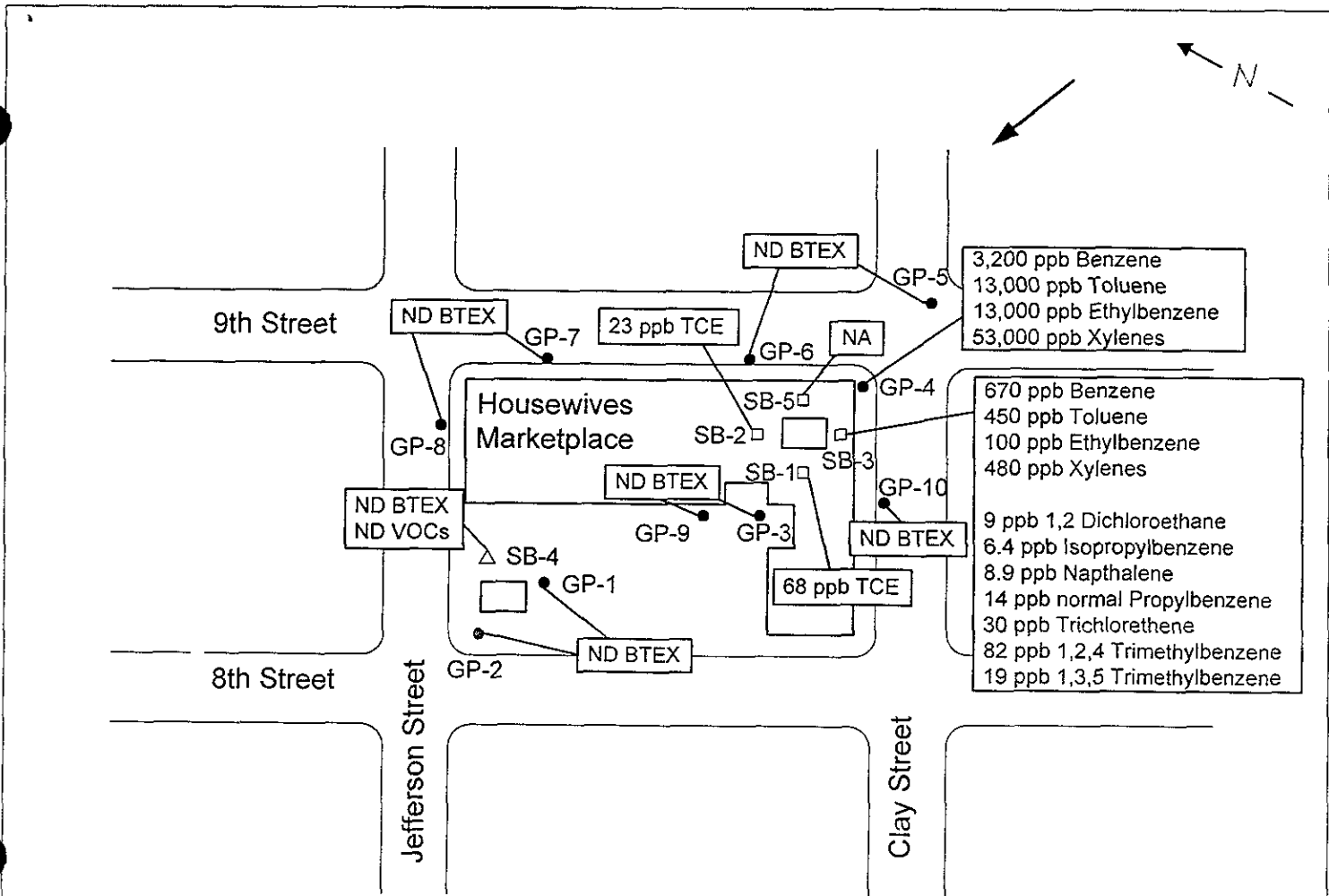
**LEGEND**

□ SB-3	Initial Interior Sample Location	NA	Not Analyzed
△ SB-4	Exterior Sample Location	ND	Non-Detect
□	Presumed location of former service station UST		
● GP-5	Previous Soil Boring		
↙	Presumed Groundwater Flow Direction		



CHOW ENGINEERING, INC.

Plate 3 Petroleum Hydrocarbon Groundwater Results  
Housewives Marketplace  
City of Oakland



NOT TO SCALE

**LEGEND**

- |        |   |      |   |
|--------|---|------|---|
| □ SB-3 | Interior Sample Location                        | NA   | Not Analyzed                            |
| △ SB-4 | Exterior Sample Location                        | ND   | Non-Detect                              |
| □      | Presumed location of former service station UST | BTEX | Benzene, Toluene, Ethylbenzene, Xylenes |
| ● GP-5 | Previous Soil Boring                            | VOCs | Volatile Organic Compounds              |
| ↙      | Presumed Groundwater Flow Direction             | ppb  | parts per billion (µg/L)                |



CHOW ENGINEERING, INC.

Plate 4 Volatile Organic Compounds Groundwater Results  
Housewives Marketplace  
City of Oakland

## APPENDICES

**APPENDIX A**  
**Soil Boring Logs**



**Chow Engineering, inc.**

**Soil/Well Boring Log**

7700 Edgewater Drive, Site 729

Oakland, CA 94621 USA

Phone: (510) 636-8500

Fax: (510) 636-8544

Boring Number: SB-1

Location: 801 Clay Street  
Oakland, California

Start Date: December 7, 2000

Stop Date: December 8, 2000

Logger: Maurice W. Baron, Jr.

Time (hrs)	Depth	Description	Strat Symbol	Well Construct	Recovery (%)	Odor	PID (ppm)
	0	Foundation, concrete. Approximately 4 to 6 inches. Clayey silt, very dark grey, 10YR 3/1, unconsolidated, moist, no hydrocarbon odor.					
0916	5	Silty sand, dark yellowish brown, 10YR 4/4, semi-consolidated, moist, no hydrocarbon odor. Sand is fine to very fine grain.	ML		66	No	20
0924		Silty sand, dark yellowish brown, 10YR 4/4, semi-consolidated, moist, no hydrocarbon odor. Sand is fine to very fine grain.	SM		80	No	
0939	10	Clayey silty sand, dark yellowish brown, 10YR 5/4, semi-consolidated, moist, no hydrocarbon odor. Sand is fine to very fine grain.			90	No	18
1000		Clayey silty sand, dark yellowish brown, 10YR 5/4, semi-consolidated, moist, no hydrocarbon odor. Sand is fine to very fine grain.			95	No	
	15		SM/SC				19
1005		Clayey silty sand, dark yellowish brown, 10YR 4/4, semi-consolidated, moist, no hydrocarbon odor. Sand is fine to very fine grain.			80	No	
1019	20	Clayey silty sand, dark yellowish brown, 10YR 4/4, semi-consolidated, moist, no hydrocarbon odor. Sand is fine to very fine grain.			95	No	39
Refusal		Clayey sand, olive brown, 2.5YR 4/3, consolidated, moist, no hydrocarbon odor.	SC		45	No	20
0751		Silty sand, light olive brown, 2.5YR 5/3, semi-consolidated, moist, no hydrocarbon odor. Sand is fine grained, well sorted w/3 <5% silt. Heavy mineral grains present.			100	No	14
0810	25	Silty sand, olive brown, 2.5YR 4/3, semi-consolidated, moist, no hydrocarbon odor. Sand is fine to very fine grain with approx 15% silt and clay. Heavy mineral grains present. Some planar iron oxide staining features noted.	SM		95	No	14
0823		Silty sand, olive brown, 2.5YR 4/3, semi-consolidated, moist, no hydrocarbon odor. Sand is fine to very fine grain with approx 10% silt. Heavy mineral grains present. Saturated zone @ 27.5 feet bgs.			75	No	
		See also SB-1B excursions of saturation and water table.					
		Refusal @ 11:07:00. Sampling continued @ 11:08:00.					
		To a depth of 50' below ground surface.					
		Color description from Munsell Color Chart (2000).					
		Depth given @ 11:08:11 @ 10' below surface.					

Chow Engineering, inc.  
 7700 Edgewater Drive, Site 729  
 Oakland, CA 94621 USA  
 Phone: (510) 636-8500  
 Fax: (510) 636-8544

# Soil/Well Boring Log

Boring Number: SB-2  
 Location: 801 Clay Street  
Oakland, California  
 Start Date: December 7, 2000  
 Stop Date: December 8, 2000  
 Logger: Maurice W. Baron, Jr.

Time (hrs)	Depth	Description	Strat Symbol	Well Construct	Recovery (%)	Odor	PID (ppm)
	0	Foundation, concrete. Approximately 4 to 6 inches					
		Silty sand, dark greyish brown, 10YR 4/2, unconsolidated, moist, no hydrocarbon odor	SM				
1103	5	Clayey silty sand, strong brown, 7.5YR 4/6, semi-consolidated moist, no hydrocarbon odor.			90	No	26
1109		Clayey silty sand, dark yellowish brown, 10YR 4/4, semi-consolidated, moist, no hydrocarbon odor. Sand is fine to very fine grain			90	No	
1122	10	Clayey silty sand, dark yellowish brown, 10YR 5/4, semi-consolidated, moist, no hydrocarbon odor			90	No	28
1129		Clayey silty sand, dark yellowish brown, 10YR 4/4, semi-consolidated, moist, no hydrocarbon odor	SM/SC		95	No	
1133	15	Clayey silty sand, dark yellowish brown, 10YR 4/4, semi-consolidated, moist, no hydrocarbon odor			95	No	60
1153	20	Refusal 12/07/00 Same as 101007 sample 12/06/00 re-start Sluff			85	No	19
1008		Silty sand, dark yellowish brown, 10YR 4/4, consolidated, moist, no hydrocarbon odor. Sand is fine to very fine grained					
		Silty sand, light olive brown, 2.5YR 5/4, semi-consolidated, moist, no hydrocarbon odor. Sand fine to very fine grained < 5% silt			70	No	
1022	25	Silty sand, olive brown, 2.5Y 4/3, semi-consolidated, moist, no hydrocarbon odor. Sand fine grained to very fine grained < 5% silt. Heavy mineral grains noted. Moisture increasing	SM		90	No	35
1126		Silty sand, olive brown, 2.5Y 4/3, semi-consolidated, moist, no hydrocarbon odor. Sand fine to very fine grained < 5% silt. Heavy mineral grains noted. Moisture increasing.			95	No	
	30	Silty sand, olive brown, 2.5Y 4/3, semi-consolidated, moist, no hydrocarbon odor. Sand fine to very fine grained < 5% silt. Heavy mineral grains noted. Moisture increasing.			95	No	
		Refusal @ 19' 10" 12/07/00. Resumed sampling @ 21' 12/08/00					
		Total sand in 100' wet bed 100% fine					
		Colorimeter bottom Murk. Col. Chart 2000					
		Ground water @ 12' 10" 12/07/00					
		Depth to water @ 10' 4" 12/08/00 @ 24' 0" 12/08/00. No hydrocarbon odor					

Chow Engineering, Inc.  
 7700 Edgewater Drive, Site 729  
 Oakland, CA 94621 USA  
 Phone: (510) 636-8500  
 Fax: (510) 636-8544

# Soil/Well Boring Log

Boring Number: SB-3  
 Location: 801 Clay Street  
Oakland, California  
 Start Date: December 7, 2000  
 Stop Date: December 7, 2000  
 Logger: Maurice W. Baron, Jr.

Time (hrs)	Depth	Description	Strat Symbol	Well Construct	Recovery (%)	Odor	PID (ppm)
	0	Foundation, concrete. Approximately 4 to 6 inches					
		Clayey silty gravelly sand, very dark grey, 10YR 3/1, unconsolidated, moist, no hydrocarbon odor. Grades into clayey silty sand, yellowish brown, 10YR 5/4, semi-consolidated, moist, very slight disinfectant odor (?).	GM				
1309		Clayey silty sand, dark yellowish brown, 10YR 4/6, semi-consolidated, moist, no hydrocarbon odor. Sand is fine to very fine grain.	SM/SC		95	No	11
	5						23
1313		Clayey silty sand, dark yellowish brown, 10YR 4/6, semi-consolidated, moist, no hydrocarbon odor. Sand is fine to very fine grain.	SM/SC		90	No	
	10						
1317		Clayey silt, dark yellowish brown, 10YR 4/4, moist, no hydrocarbon odor.	ML		90	No	36
	15						
1417		Clayey silty sand, yellowish brown, 10YR 5/4, semi-consolidated, moist, no hydrocarbon odor. Sand is fine to very fine grain w some heavy mineral grains	SM/SC		90	No	
	20						19
1421		Clayey silty sand, dark yellowish brown, 10YR 4/4, semi-consolidated, moist, no hydrocarbon odor. Sand is fine grain to very fine grain.	SM/SC		85	No	
	25						
1429		Clayey silty sand, yellowish brown, 10YR 5/4, semi-consolidated, moist, very slight hydrocarbon (TPHg) odor. Sand is fine to very fine grain	SM/SC		90	Yes	69
	30						78
1445		Sand, dark greenish grey, GLEY 1 4/10Y, semi-consolidated, moist, slight septic/TPHg (degraded gasoline) odor. Sand is fine to very fine grain	SW		90	Slight	42
	35						
1455		Silty sand, dark greenish grey, GLEY 1 4/10Y, semi-consolidated, moist, no slight septic/hydrocarbon odor (degraded gasoline). Sand is fine to very fine grain	SM		95	Yes	202
	40						
1546		Silty sand, dark yellowish brown, 10YR 4/3, semi-consolidated, moist, no hydrocarbon odor. Sand is fine to very fine grain w/ approx 10% silt.	SM		90	Slight No	35
	45						
	50	Silty sand, dark yellowish brown, 10YR 4/3, semi-consolidated, moist, no hydrocarbon odor. Sand is fine to very fine grain w/ approx 15% silt & clay.	SM		90	No	
	55						
	60						
	65						
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**Chow Engineering, inc.**  
 7700 Edgewater Drive, Site 729  
 Oakland, CA 94621 USA  
 Phone: (510) 636-8500  
 Fax: (510) 636-8544

# Soil/Well Boring Log

Boring Number: SB-4  
 Location: 801 Clay Street  
Oakland, California  
 Start Date: December 8, 2000  
 Stop Date: December 8, 2000  
 Logger: Maurice W. Baron, Jr.

Time (hrs)	Depth	Description	Strat Symbol	Well Construct	Recovery (%)	Odor	PID (ppm)
1242	0	Asphalt. Approximately 4 inches qth base underneath Fill material Silty, clayey, sand gravel (pea)	GM				
1251	5	Silty sand, very dark greyish brown, 10YR 3/2, unconsolidated, slightly moist, no hydrocarbon odor	SM		10	No	26
1300		Silty sand, dark yellowish brown, 10YR 4/6, semi-consolidated, slightly moist, no hydrocarbon odor Sand is fine to very fine grained			75	No	
1305	10	Silty sand, dark yellowish brown, 10YR 4/4, semi-consolidated, slightly moist, no hydrocarbon odor. Sand is fine to very fine grained			95	No	42
1310		Clayey silty sand, yellowish brown, 10YR 5/4, semi-consolidated, moist, no hydrocarbon odor. Sand is fine to very fine grain w some heavy mineral ganns	SM/SC		75	No	
1316	15	Clayey silty sand, dark yellowish brown, 10YR 4/4, semi-consolidated, moist, no hydrocarbon odor. Sand is fine to very fine grain			75	No	27
1324	20	Silty sand, yellowish brown, 10YR 5/4, unconsolidated, moisture increasing, no hydrocarbon odor Sand is fine to very fine grain	SM		95	No	16
1350		Silty clayey sand, brown, 10YR 5/3, semi-consolidated, moist to patchy saturation, no hydrocarbon odor. Sand is fine to very fine grain with approx 5-10% silt & clay.	SM/SC		95	No	
1410	25	Clayey silty sand, light olive brown, 2.5Y 5/3, semi-consolidated, moist to saturated, no hydrocarbon odor Sand is fine to very fine grain with approx 10-15% silt and clay			90	No	15
1422		Clayey silty sand, yellowish brown, 10YR 5/4, semi-consolidated, moist, no hydrocarbon odor. Sand is fine to very fine grain with approx 5-10% silt and clay			90	No	
410		Clayey silty sand, yellowish brown, 10YR 5/4, semi-consolidated, moist, no hydrocarbon odor. Sand is fine to very fine grain with approx 5-10% silt and clay.			90	No	15

Total depth of boring: 25 feet below ground surface

Color description from Munsell Color Chart 1970

Groundwater sample @ 2750 hrs @ 20:00

Depth of water @ 2750 hrs @ 20:00 = 24.1 feet bgs

▼ Free Surface

▼ Bottom of Pipe

Chow Engineering, inc.  
 7700 Edgewater Drive, Site 729  
 Oakland, CA 94621 USA  
 Phone: (510) 636-8500  
 Fax: (510) 636-8544

# Soil/Well Boring Log

Boring Number: SB-5  
 Location: 801 Clay Street  
Oakland, California  
 Start Date: December 8, 2000  
 Stop Date: December 8, 2000  
 Logger: Maurice W. Baron, Jr

Time (hrs)	Depth	Description	Strat Symbol	Well Construct	Recovery (%)	Odor	PID (ppm)
	0	Foundation, concrete. Approximately 4 to 6 inches Silty sand, dark yellowish brown, 10YR 4/4, semi-consolidated, moist, no hydrocarbon odor. Sand is fine to very fine grain.					
1500		Silty sand, dark brown, 7.5YR 3/2, unconsolidated, dry to moist, no hydrocarbon odor. Sand is fine to very fine grain.			90	No	
	5						
1508		Silty sand, dark yellowish brown, 10YR 4/4, unconsolidated, moist, no hydrocarbon odor. Sand is fine to very fine grain.			95	No	32
	10						
1511		Silty sand, yellowish brown, 10YR 5/6 mottled with gray (GLEYS 1-6/N), unconsolidated, moist, no hydrocarbon odor. Sand is fine to very fine grain.	SM		90	No	33
	15						
1517		Silty sand, yellowish brown, 10YR 5/6 mottled with gray (GLEYS 1-6/N), unconsolidated, moist, no hydrocarbon odor. Sand is fine to very fine grain.			90	No	
	18.5						
1535		Clayey silty sand, yellowish brown, 10YR 4/4, semi-consolidated, moist, no hydrocarbon odor. Sand is fine to very fine grain with approx 10-15% silt & clay.	ML		90	Yes	49
<p>Total depth of boring 18.5 feet below ground surface</p> <p>Color description from Munsell Color Chart (2000)</p> <p>Groundwater not encountered.</p>							
<p>Total depth of boring 18.5 feet below ground surface</p> <p>Color description from Munsell Color Chart (2000)</p> <p>Groundwater not encountered.</p>							

**APPENDIX B**

**Chain of Custody  
and  
Analytical Results**

**Chow Engineering, Inc**  
7700 Edgewater Dr # 729  
Oakland, CA 94621

Attn.: Lisa Kimura

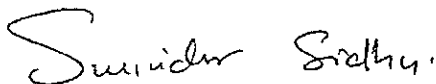
Project: 2R-1121  
Housewife's Market

Dear Lisa

Attached is our report for your samples received on Friday December 8, 2000  
This report has been reviewed and approved for release. Reproduction of this report  
is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after January 22, 2001  
unless you have requested otherwise. We appreciate the opportunity to be of service to you.  
If you have any questions, please call me at (925) 484-1919. You can also contact me via email.  
My email address is: [ssidhu@chromalab.com](mailto:ssidhu@chromalab.com)

Sincerely,



Surinder Sidhu

Total Lead

Chow Engineering, Inc

✉ 7700 Edgewater Dr # 729  
Oakland, CA 94621

Attn: Lisa Kimura

Phone: (510) 636-8500 Fax: (510) 636-8544

Project #: 2R-1121

Project: Housewife's Market

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
SB-1 @ 1'	Soil	12/07/2000 09:16	1
SB-2 @ 1'	Soil	12/07/2000 11:03	2
SB-3 @ 1'	Soil	12/07/2000 13:09	3



# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0170

To: **Chow Engineering, Inc**  
Attn.: Lisa Kimura

Test Method: 6010B  
Prep Method: 3050B

Total Lead

Sample ID: <b>SB-1 @ 1'</b>	Lab Sample ID: <b>2000-12-0170-001</b>
Project: 2R-1121 Housewife's Market	Received: 12/08/2000 11:25
Sampled: 12/07/2000 09:16	Extracted: 12/11/2000 07:11
Matrix: Soil	QC-Batch: 2000/12/11-03.15

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Lead	270	1.0	mg/Kg	1.00	12/11/2000 18:33	

1220 Quarry Lane \* Pleasanton, CA 94566-4756  
Telephone (925) 484-1919 \* Facsimile (925) 484-1096

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0170

To: **Chow Engineering, Inc**  
Attn.: Lisa Kimura

Test Method: 6010B  
Prep Method: 3050B

## Total Lead

Sample ID:	SB-2 @ 1'	Lab Sample ID:	2000-12-0170-002
Project:	2R-1121 Housewife's Market	Received:	12/08/2000 11:25
Sampled:	12/07/2000 11:03	Extracted:	12/11/2000 07:11
Matrix:	Soil	QC-Batch:	2000/12/11-03.15

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Lead	170	1.0	mg/Kg	1.00	12/11/2000 18:37	

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0170

To: **Chow Engineering, Inc**

Test Method: 6010B

Attn.: Lisa Kimura

Prep Method: 3050B

## Total Lead

Sample ID: SB-3 @ 1'	Lab Sample ID: 2000-12-0170-003
Project: 2R-1121 Housewife's Market	Received: 12/08/2000 11:25
Sampled: 12/07/2000 13:09	Extracted: 12/11/2000 07:11
Matrix: Soil	QC-Batch: 2000/12/11-03.15

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Lead	400	1.0	mg/Kg	1.00	12/11/2000 18:41	

1220 Quarry Lane \* Pleasanton, CA 94566-4756  
Telephone (925) 484-1919 \* Facsimile (925) 484-1096

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0170

To: **Chow Engineering, Inc**  
Attn.: Lisa Kimura

Test Method: 6010B  
Prep Method: 3050B

## Batch QC Report Total Lead

Method Blank	Soil	QC Batch # 2000/12/11-03.15
MB: 2000/12/11-03.15-049		Date Extracted: 12/11/2000 07:11

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Lead	ND	1.0	mg/Kg	12/11/2000 17:29	

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0170

To: **Chow Engineering, Inc**

Test Method: 6010B

Attn: Lisa Kimura

Prep Method: 3050B

## Batch QC Report

Total Lead

Laboratory Control Spike (LCS/LCSD)	Soil	QC Batch # 2000/12/11-03.15
LCS: 2000/12/11-03.15-050	Extracted: 12/11/2000 07:11	Analyzed 12/11/2000 17:34
LCSD: 2000/12/11-03.15-051	Extracted: 12/11/2000 07:11	Analyzed 12/11/2000 17:37

Compound	Conc. [ mg/Kg ]		Exp. Conc. [ mg/Kg ]		Recovery [%] RPD			Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	RPD [%]	Recovery	RPD	LCS	LCSD
Lead	99.1	97.9	100.0	100.0	99.1	97.9	1.2	80-120	20		

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

## Total Lead

<b>Chow Engineering, Inc</b>	✉ 7700 Edgewater Dr # 729 Oakland, CA 94621
Attn: Lisa Kimura	Phone: (510) 636-8500 Fax: (510) 636-8544
Project #: 2R-1121	Project: Housewives Market

## Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
SB-4@3'	Soil	12/08/2000 13:00	8
SB-5@0.5'	Soil	12/08/2000 15:00	9

1200 Quarry Lane \* Pleasanton, CA 94566-4768  
Telephone: (925) 484-1919 \* Facsimile: (925) 484-1096

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: Chow Engineering, Inc

Test Method: 6010B

Attn.: Lisa Kimura

Prep Method: 3050B

## Total Lead

Sample ID: SB-4@3	Lab Sample ID: 2000-12-0188-008
Project: 2R-1121 Housewives Market	Received: 12/08/2000 18:30
Sampled: 12/08/2000 13:00	Extracted: 12/12/2000 06:13
Matrix: Soil	QC-Batch: 2000/12/12-01.15

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Lead	1.9	1.0	mg/Kg	1.00	12/12/2000 12:25	

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: **Chow Engineering, Inc**

Test Method: 6010B

Attn.: Lisa Kimura

Prep Method: 3050B

## Total Lead

Sample ID: <b>SB-5@0.5</b>	Lab Sample ID: <b>2000-12-0188-009</b>
Project: 2R-1121 Housewives Market	Received: 12/08/2000 18:30
Sampled: 12/08/2000 15:00	Extracted: 12/12/2000 06:13
Matrix: Soil	QC-Batch: 2000/12/12-01.15

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Lead	2.7	1.0	mg/Kg	1.00	12/12/2000 12:29	

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# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: Chow Engineering, Inc  
Attn.: Lisa Kimura

Test Method: 6010B  
Prep Method: 3050B

## Batch QC Report Total Lead

Method Blank	Soil	QC Batch # 2000/12/12-01.15
MB: 2000/12/12-01.15-011		Date Extracted: 12/12/2000 06:13

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Lead	ND	1.0	mg/Kg	12/12/2000 09:25	

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: Chow Engineering, Inc

Test Method: 6010B

Attn: Lisa Kimura

Prep Method: 3050B

## Batch QC Report

Total Lead

Laboratory Control Spike (LCS/LCSD)	Soil	QC Batch # 2000/12/12-01.15
LCS: 2000/12/12-01.15-012	Extracted: 12/12/2000 06:13	Analyzed 12/12/2000 09:29
LCSD: 2000/12/12-01.15-013	Extracted: 12/12/2000 06:13	Analyzed 12/12/2000 09:33

Compound	Conc. [mg/Kg]		Exp. Conc. [mg/Kg]		Recovery [%]			RPD		Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD		
Lead	94.8	98.2	100.0	100.0	94.8	98.2	3.5	80-120	20				

Total Extractable Petroleum Hydrocarbons (TEPH)

<b>Chow Engineering, Inc</b>	✉ 7700 Edgewater Dr # 729 Oakland, CA 94621
Attn: Lisa Kimura	Phone: (510) 636-8500 Fax: (510) 636-8544
Project #: 2R-1121	Project: Housewife's Market

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
SB-3 @ 25'	Soil	12/07/2000 14:55	5

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0170

To: Chow Engineering, Inc

Test Method: 8020  
8015M

Attn.: Lisa Kimura

Prep Method: 5030

Gas/BTEX Compounds by 8015M/8020

Sample ID: SB-3 @ 25'	Lab Sample ID: 2000-12-0170-005
Project: 2R-1121 Housewife's Market	Received: 12/08/2000 11:25
Sampled: 12/07/2000 14:55	Extracted: 12/11/2000 16:02
Matrix: Soil	QC-Batch: 2000/12/11-01.03

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	12/11/2000 16:02	
<i>Surrogate(s)</i> 4-Bromofluorobenzene-FID	93.5	58-124	%	1.00	12/11/2000 16:02	

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Telephone (925) 484-1919 \* Facsimile (925) 484-1096

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0170

To: Chow Engineering, Inc

Test Method: 8015M

8020

Attn.: Lisa Kimura

Prep Method: 5030

## Batch QC Report

Gas/BTEX Compounds by 8015M/8020

Method Blank	Soil	QC Batch # 2000/12/11-01.03
MB: 2000/12/11-01.03-003		Date Extracted: 12/11/2000 06:42

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	12/11/2000 06:42	
<b>Surrogate(s)</b> 4-Bromofluorobenzene-FID	91.8	58-124	ug/L	12/11/2000 06:42	

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0170

To: Chow Engineering, Inc

Test Method: 8015M  
8020

Attn: Lisa Kimura

Prep Method: 5030

## Batch QC Report

Gas/BTEX Compounds by 8015M/8020

Laboratory Control Spike (LCS/LCSD)	Soil	QC Batch # 2000/12/11-01.03
LCS: 2000/12/11-01.03-006	Extracted: 12/11/2000 08:22	Analyzed 12/11/2000 08:22
LCSD: 2000/12/11-01.03-007	Extracted: 12/11/2000 08:55	Analyzed 12/11/2000 08:55

Compound	Conc. [mg/Kg]		Exp. Conc. [mg/Kg]		Recovery [%] RPD			Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	RPD	Recovery	RPD	LCS	LCSD
Gasoline	0.390	0.396	0.500	0.500	78.0	79.2	1.5	75-125	35		
<b>Surrogate(s)</b>											
4-Bromofluorobenzene-FI	406	408	500	500	81.2	81.6		58-124			

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0170

Gas/BTEX Compounds by 8015M/8020

<b>Chow Engineering, Inc</b>	✉ 7700 Edgewater Dr # 729 Oakland, CA 94621
Attn: Lisa Kimura	Phone: (510) 636-8500 Fax: (510) 636-8544
Project #: 2R-1121	Project: Housewife's Market

### Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
SB-3 @ 25'	Soil	12/07/2000 14:55	5

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# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0170

To: **Chow Engineering, Inc**

Test Method: 8015M

Attn.: Lisa Kimura

Prep Method: 3550/8015M

## Total Extractable Petroleum Hydrocarbons (TEPH)

Sample ID: <b>SB-3 @ 25'</b>	Lab Sample ID: <b>2000-12-0170-005</b>
Project: 2R-1121 Housewife's Market	Received: 12/08/2000 11:25
Sampled: 12/07/2000 14:55	Extracted: 12/08/2000 08:44
Matrix: Soil	QC-Batch: 2000/12/08-01.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Mineral spirits	ND	10	mg/Kg	1.00	12/09/2000 10:07	
<b>Surrogate(s)</b> o-Terphenyl	102.7	60-130	%	1.00	12/09/2000 10:07	



# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0170

To: **Chow Engineering, Inc**  
Attn.: Lisa Kimura

Test Method: 8015M  
Prep Method: 3550/8015M

**Batch QC Report**  
Total Extractable Petroleum Hydrocarbons (TEPH)

<b>Method Blank</b>	<b>Soil</b>	<b>QC Batch # 2000/12/08-01.10</b>
MB: 2000/12/08-01.10-001		Date Extracted: 12/08/2000 08:44

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Diesel	ND	1	mg/Kg	12/08/2000 15:33	
Mineral spirits	ND	10	mg/Kg	12/08/2000 15:33	
<b>Surrogate(s)</b> o-Terphenyl	91.0	60-130	%	12/08/2000 15:33	

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0170

To: Chow Engineering, Inc

Test Method: 8015M

Attn: Lisa Kimura

Prep Method: 3550/8015M

## Batch QC Report

Total Extractable Petroleum Hydrocarbons (TEPH)

Laboratory Control Spike (LCS/LCSD)	Soil	QC Batch # 2000/12/08-01.10
LCS: 2000/12/08-01.10-002	Extracted: 12/08/2000 08:44	Analyzed 12/08/2000 16:12
LCSD: 2000/12/08-01.10-003	Extracted: 12/08/2000 08:44	Analyzed 12/08/2000 16:51

Compound	Conc. [mg/Kg]		Exp. Conc. [mg/Kg]		Recovery [%] RPD			Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	RPD [%]	Recovery	RPD	LCS	LCSD
Diesel	30.7	29.7	41.7	41.7	73.6	71.2	3.3	60-130	25		
<b>Surrogate(s)</b>											
o-Terphenyl	18.8	18.8	20.0	20.0	94.0	94.0		60-130			

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Volatile Organic Compounds by 8260A

<b>Chow Engineering, Inc</b>	✉ 7700 Edgewater Dr # 729 Oakland, CA 94621
Attn: Lisa Kimura	Phone: (510) 636-8500 Fax: (510) 636-8544
Project #: 2R-1121	Project: Housewife's Market

**Samples Reported**

Sample ID	Matrix	Date Sampled	Lab #
SB-3 @ 25'	Soil	12/07/2000 14:55	5

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0170

To: Chow Engineering, Inc

Test Method: 8260A

Attn.: Lisa Kimura

Prep Method: 5030

## Volatile Organic Compounds by 8260A

Sample ID: SB-3 @ 25'	Lab Sample ID: 2000-12-0170-005
Project: 2R-1121 Housewife's Market	Received: 12/08/2000 11:25
Sampled: 12/07/2000 14:55	Extracted: 12/15/2000 21:05
Matrix: Soil	QC-Batch: 2000/12/15-01.06

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Acetone	ND	50	ug/Kg	1.00	12/15/2000 21:05	
Benzene	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	
Bromodichloromethane	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	
Bromoform	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	
Bromomethane	ND	10	ug/Kg	1.00	12/15/2000 21:05	
Carbon tetrachloride	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	
Chlorobenzene	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	
Chloroethane	ND	10	ug/Kg	1.00	12/15/2000 21:05	
2-Butanone(MEK)	ND	50	ug/Kg	1.00	12/15/2000 21:05	
2-Chloroethylvinyl ether	ND	50	ug/Kg	1.00	12/15/2000 21:05	
Chloroform	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	
Chloromethane	ND	10	ug/Kg	1.00	12/15/2000 21:05	
Dibromochloromethane	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	
1,2-Dichlorobenzene	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	
1,3-Dichlorobenzene	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	
1,4-Dichlorobenzene	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	
1,2-Dibromo-3-chloropropane	ND	50	ug/Kg	1.00	12/15/2000 21:05	
1,2-Dibromoethane	ND	10	ug/Kg	1.00	12/15/2000 21:05	
Dibromomethane	ND	10	ug/Kg	1.00	12/15/2000 21:05	
Dichlorodifluoromethane	ND	10	ug/Kg	1.00	12/15/2000 21:05	
1,1-Dichloroethane	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	
1,2-Dichloroethane	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	
1,1-Dichloroethene	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	
cis-1,2-Dichloroethene	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	
trans-1,2-Dichloroethene	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	
1,2-Dichloropropane	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	
cis-1,3-Dichloropropene	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	
Ethylbenzene	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	
2-Hexanone	ND	50	ug/Kg	1.00	12/15/2000 21:05	
Methylene chloride	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/Kg	1.00	12/15/2000 21:05	
Napthalene	ND	10	ug/Kg	1.00	12/15/2000 21:05	
Styrene	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	
Tetrachloroethene	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	

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# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0170

To: Chow Engineering, Inc

Test Method: 8260A

Attn.: Lisa Kimura

Prep Method: 5030

## Volatile Organic Compounds by 8260A

Sample ID: SB-3 @ 25'	Lab Sample ID: 2000-12-0170-005
Project: 2R-1121 Housewife's Market	Received: 12/08/2000 11:25
Sampled: 12/07/2000 14:55	Extracted: 12/15/2000 21:05
Matrix: Soil	QC-Batch: 2000/12/15-01.06

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Toluene	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	
1,1,1-Trichloroethane	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	
1,1,2-Trichloroethane	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	
Trichloroethene	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	
1,1,1,2-Tetrachloroethane	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	
Vinyl acetate	ND	50	ug/Kg	1.00	12/15/2000 21:05	
Vinyl chloride	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	
Total xylenes	ND	10	ug/Kg	1.00	12/15/2000 21:05	
Trichlorotrifluoroethane	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	
Carbon disulfide	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	
Isopropylbenzene	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	
Bromobenzene	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	
Bromochloromethane	ND	20	ug/Kg	1.00	12/15/2000 21:05	
Trichlorofluoromethane	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	
MTBE	ND	5.0	ug/Kg	1.00	12/15/2000 21:05	
<b>Surrogate(s)</b>						
4-Bromofluorobenzene	105.9	74-121	%	1.00	12/15/2000 21:05	
1,2-Dichloroethane-d4	87.7	70-121	%	1.00	12/15/2000 21:05	
Toluene-d8	97.7	81-117	%	1.00	12/15/2000 21:05	

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Telephone (925) 484-1919 \* Facsimile (925) 484-1096

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0170

To: Chow Engineering, Inc

Test Method: 8260A

Attn.: Lisa Kimura

Prep Method: 5030

## Batch QC Report Volatile Organic Compounds by 8260A

<b>Method Blank</b>	<b>Soil</b>	<b>QC Batch # 2000/12/15-01.06</b>
MB: 2000/12/15-01.06-004		Date Extracted: 12/15/2000 13:00

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Acetone	ND	50	ug/Kg	12/15/2000 13:00	
Benzene	ND	5.0	ug/Kg	12/15/2000 13:00	
Bromodichloromethane	ND	5.0	ug/Kg	12/15/2000 13:00	
Bromoform	ND	5.0	ug/Kg	12/15/2000 13:00	
Bromomethane	ND	10.0	ug/Kg	12/15/2000 13:00	
Carbon tetrachloride	ND	5.0	ug/Kg	12/15/2000 13:00	
Chlorobenzene	ND	5.0	ug/Kg	12/15/2000 13:00	
Chloroethane	ND	10	ug/Kg	12/15/2000 13:00	
Chloroethane	ND	10	ug/Kg	12/15/2000 13:00	
2-Butanone(MEK)	ND	50	ug/Kg	12/15/2000 13:00	
2-Chloroethylvinyl ether	ND	50	ug/Kg	12/15/2000 13:00	
Chloroform	ND	5.0	ug/Kg	12/15/2000 13:00	
Dibromochloromethane	ND	5.0	ug/Kg	12/15/2000 13:00	
1,2-Dichlorobenzene	ND	5.0	ug/Kg	12/15/2000 13:00	
1,3-Dichlorobenzene	ND	5.0	ug/Kg	12/15/2000 13:00	
1,4-Dichlorobenzene	ND	5.0	ug/Kg	12/15/2000 13:00	
1,2-Dibromo-3-chloropropane	ND	50	ug/Kg	12/15/2000 13:00	
1,2-Dibromoethane	ND	10	ug/Kg	12/15/2000 13:00	
Dibromomethane	ND	10	ug/Kg	12/15/2000 13:00	
Dichlorodifluoromethane	ND	10	ug/Kg	12/15/2000 13:00	
1,1-Dichloroethane	ND	5.0	ug/Kg	12/15/2000 13:00	
1,2-Dichloroethane	ND	5.0	ug/Kg	12/15/2000 13:00	
1,1-Dichloroethene	ND	5.0	ug/Kg	12/15/2000 13:00	
cis-1,2-Dichloroethene	ND	5.0	ug/Kg	12/15/2000 13:00	
trans-1,2-Dichloroethene	ND	5.0	ug/Kg	12/15/2000 13:00	
1,2-Dichloropropane	ND	5.0	ug/Kg	12/15/2000 13:00	
1,2-Dichloropropane	ND	5.0	ug/Kg	12/15/2000 13:00	
cis-1,3-Dichloropropene	ND	5.0	ug/Kg	12/15/2000 13:00	
trans-1,3-Dichloropropene	ND	5.0	ug/Kg	12/15/2000 13:00	
Ethylbenzene	ND	5.0	ug/Kg	12/15/2000 13:00	
2-Hexanone	ND	50	ug/Kg	12/15/2000 13:00	
Methylene chloride	ND	5.0	ug/Kg	12/15/2000 13:00	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/Kg	12/15/2000 13:00	
Naphthalene	ND	10	ug/Kg	12/15/2000 13:00	
Styrene	ND	5.0	ug/Kg	12/15/2000 13:00	
1,1,2,2-Tetrachloroethane	ND	5.0	ug/Kg	12/15/2000 13:00	
Tetrachloroethene	ND	5.0	ug/Kg	12/15/2000 13:00	
Toluene	ND	5.0	ug/Kg	12/15/2000 13:00	
1,1,1-Trichloroethane	ND	5.0	ug/Kg	12/15/2000 13:00	
Trichloroethene	ND	5.0	ug/Kg	12/15/2000 13:00	
1,1,1,2-Tetrachloroethane	ND	5.0	ug/Kg	12/15/2000 13:00	
Vinyl acetate	ND	50	ug/Kg	12/15/2000 13:00	
Vinyl chloride	ND	5.0	ug/Kg	12/15/2000 13:00	

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Telephone (925) 484-1919 \* Facsimile (925) 484-1095

To: Chow Engineering, Inc

Test Method: 8260A

Attn.: Lisa Kimura

Prep Method: 5030

**Batch QC Report**  
Volatile Organic Compounds by 8260A

<b>Method Blank</b>	<b>Soil</b>	<b>QC Batch # 2000/12/15-01.06</b>
MB: 2000/12/15-01.06-004		Date Extracted: 12/15/2000 13:00

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Total xylenes	ND	10	ug/Kg	12/15/2000 13:00	
Trichlorotrifluoroethane	ND	5.0	ug/Kg	12/15/2000 13:00	
Carbon disulfide	ND	5.0	ug/Kg	12/15/2000 13:00	
Isopropylbenzene	ND	5.0	ug/Kg	12/15/2000 13:00	
Bromobenzene	ND	5.0	ug/Kg	12/15/2000 13:00	
Bromochloromethane	ND	20	ug/Kg	12/15/2000 13:00	
Trichlorofluoromethane	ND	5.0	ug/Kg	12/15/2000 13:00	
MTBE	ND	5.0	ug/Kg	12/15/2000 13:00	
<b>Surrogate(s)</b>					
4-Bromofluorobenzene	110.8	74-121	ug/Kg	12/15/2000 13:00	
1,2-Dichloroethane-d4	95.9	70-121	ug/Kg	12/15/2000 13:00	
Toluene-d8	98.3	81-117	ug/Kg	12/15/2000 13:00	

To: **Chow Engineering, Inc**

Test Method: 8260A

Attn: Lisa Kimura

Prep Method: 5030

## Batch QC Report

### Volatile Organic Compounds by 8260A

Laboratory Control Spike (LCS/LCSD)		Soil		QC Batch # 2000/12/15-01.06	
LCS:	2000/12/15-01.06-002	Extracted:	12/15/2000 11:43	Analyzed	12/15/2000 11:43
LCSD:	2000/12/15-01.06-003	Extracted:	12/15/2000 12:24	Analyzed	12/15/2000 12:24

Compound	Conc. [ug/Kg]		Exp. Conc. [ug/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Benzene	102	101	100.0	100.0	102.0	101.0	1.0	69-129	20		
Chlorobenzene	94.2	93.0	100.0	100.0	94.2	93.0	1.3	61-121	20		
1,1-Dichloroethene	105	101	100.0	100.0	105.0	101.0	3.9	65-125	20		
Toluene	99.3	96.3	100.0	100.0	99.3	96.3	3.1	70-130	20		
Trichloroethene	95.1	93.9	100.0	100.0	95.1	93.9	1.3	74-134	20		
<b>Surrogate(s)</b>											
4-Bromofluorobenzene	551	542	500	500	110.2	108.4		74-121			
1,2-Dichloroethane-d4	479	463	500	500	95.8	92.6		70-121			
Toluene-d8	489	481	500	500	97.8	96.2		81-117			



Gas/BTEX and MTBE

<b>Chow Engineering, Inc</b>	✉ 7700 Edgewater Dr # 729 Oakland, CA 94621
Attn: Lisa Kimura	Phone: (510) 636-8500 Fax: (510) 636-8544
Project #: 2R-1121	Project: Housewives Market

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
SB5,3,1,2@5	Soil	12/08/2000 05:45	17

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: Chow Engineering, Inc

Test Method: 8020  
8015M

Attn.: Lisa Kimura

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID: SB5,3,1,2@5	Lab Sample ID: 2000-12-0188-017
Project: 2R-1121 Housewives Market	Received: 12/08/2000 18:30
Sampled: 12/08/2000 05:45	Extracted: 12/12/2000 13:15
Matrix: Soil	QC-Batch: 2000/12/12-01.04

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	1.00	12/12/2000 13:15	
Benzene	ND	0.0050	mg/Kg	1.00	12/12/2000 13:15	
Toluene	ND	0.0050	mg/Kg	1.00	12/12/2000 13:15	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	12/12/2000 13:15	
Xylene(s)	ND	0.0050	mg/Kg	1.00	12/12/2000 13:15	
MTBE	ND	0.0050	mg/Kg	1.00	12/12/2000 13:15	
<b>Surrogate(s)</b>						
Trifluorotoluene	72.4	53-125	%	1.00	12/12/2000 13:15	
4-Bromofluorobenzene-FID	63.5	58-124	%	1.00	12/12/2000 13:15	

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: Chow Engineering, Inc

Test Method: 8015M

8020

Attn.: Lisa Kimura

Prep Method: 5030

**Batch QC Report**  
Gas/BTEX and MTBE

<b>Method Blank</b>	<b>Soil</b>	<b>QC Batch # 2000/12/12-01.04</b>
MB: 2000/12/12-01.04-001		Date Extracted: 12/12/2000 06:34

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	12/12/2000 06:34	
Benzene	ND	0.0050	mg/Kg	12/12/2000 06:34	
Toluene	ND	0.0050	mg/Kg	12/12/2000 06:34	
Ethyl benzene	ND	0.0050	mg/Kg	12/12/2000 06:34	
Xylene(s)	ND	0.0050	mg/Kg	12/12/2000 06:34	
MTBE	ND	0.0050	mg/Kg	12/12/2000 06:34	
<b>Surrogate(s)</b>					
Trifluorotoluene	97.0	53-125	%	12/12/2000 06:34	
4-Bromofluorobenzene-FID	104.6	58-124	%	12/12/2000 06:34	

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: Chow Engineering, Inc

Test Method: 8015M  
8020

Attn: Lisa Kimura

Prep Method: 5030

## Batch QC Report

Gas/BTEX and MTBE

Laboratory Control Spike (LCS/LCSD)		Soil		QC Batch # 2000/12/12-01.04	
LCS:	2000/12/12-01.04-002	Extracted:	12/12/2000 07:01	Analyzed	12/12/2000 07:01
LCSD:	2000/12/12-01.04-003	Extracted:	12/12/2000 07:29	Analyzed	12/12/2000 07:29

Compound	Conc. [ mg/Kg ]		Exp. Conc. [ mg/Kg ]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Gasoline	0.452	0.447	0.500	0.500	90.4	89.4	1.1	75-125	35		
Benzene	0.100	0.0962	0.1000	0.1000	100.0	96.2	3.9	77-123	35		
Toluene	0.0949	0.0905	0.1000	0.1000	94.9	90.5	4.7	78-122	35		
Ethyl benzene	0.0957	0.0925	0.1000	0.1000	95.7	92.5	3.4	70-130	35		
Xylene(s)	0.293	0.282	0.300	0.300	97.7	94.0	3.9	75-125	35		
<b>Surrogate(s)</b>											
Trifluorotoluene	503	482	500	500	100.6	96.4		53-125			
4-Bromofluorobenzene-FI	594	608	500	500	118.8	121.6		58-124			

1220 Quarry Lane \* Pleasanton, CA 94566-4755  
Telephone (925) 484-1919 \* Facsimile (925) 494-1096

Gas/BTEX

<b>Chow Engineering, Inc</b>	✉ 7700 Edgewater Dr # 729 Oakland, CA 94621
Attn: Lisa Kimura	Phone: (510) 636-8500 Fax: (510) 636-8544
Project #: 2R-1121	Project: Housewives Market

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
SB-1-GW	Water	12/08/2000 09:51	1
SB-2-GW	Water	12/08/2000 12:56	2
SB-3-GW	Water	12/08/2000 07:50	3
SB-4-GW	Water	12/08/2000 15:00	4

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: Chow Engineering, Inc

Test Method: 8020  
8015M

Attn.: Lisa Kimura

Prep Method: 5030

Gas/BTEX

Sample ID: <b>SB-1-GW</b>	Lab Sample ID: <b>2000-12-0188-001</b>
Project: 2R-1121 Housewives Market	Received: 12/08/2000 18:30
Sampled: 12/08/2000 09:51	Extracted: 12/11/2000 23:32
Matrix: Water	QC-Batch: 2000/12/11-01.01

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	12/11/2000 23:32	
Benzene	ND	0.50	ug/L	1.00	12/11/2000 23:32	
Toluene	ND	0.50	ug/L	1.00	12/11/2000 23:32	
Ethyl benzene	ND	0.50	ug/L	1.00	12/11/2000 23:32	
Xylene(s)	ND	0.50	ug/L	1.00	12/11/2000 23:32	
<b>Surrogate(s)</b>						
4-Bromofluorobenzene	90.6	50-150	%	1.00	12/11/2000 23:32	
4-Bromofluorobenzene-FID	83.5	50-150	%	1.00	12/11/2000 23:32	

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# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: Chow Engineering, Inc

Test Method: 8020  
8015M

Attn.: Lisa Kimura

Prep Method: 5030

Gas/BTEX

Sample ID: SB-2-GW	Lab Sample ID: 2000-12-0188-002
Project: 2R-1121 Housewives Market	Received: 12/08/2000 18:30
Sampled: 12/08/2000 12:56	Extracted: 12/12/2000 00:05
Matrix: Water	QC-Batch: 2000/12/11-01.01

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	12/12/2000 00:05	
Benzene	ND	0.50	ug/L	1.00	12/12/2000 00:05	
Toluene	ND	0.50	ug/L	1.00	12/12/2000 00:05	
Ethyl benzene	ND	0.50	ug/L	1.00	12/12/2000 00:05	
Xylene(s)	ND	0.50	ug/L	1.00	12/12/2000 00:05	
<b>Surrogate(s)</b>						
4-Bromofluorobenzene	98.3	50-150	%	1.00	12/12/2000 00:05	
4-Bromofluorobenzene-FID	90.4	50-150	%	1.00	12/12/2000 00:05	

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# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: Chow Engineering, Inc

Test Method: 8020  
8015M

Attn.: Lisa Kimura

Prep Method: 5030

Gas/BTEX

Sample ID: <b>SB-3-GW</b>	Lab Sample ID: <b>2000-12-0188-003</b>
Project: 2R-1121 Housewives Market	Received: 12/08/2000 18:30
Sampled: 12/08/2000 07:50	Extracted: 12/15/2000 15:00
Matrix: Water	QC-Batch: 2000/12/15-01.02

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	2900	250	ug/L	5.00	12/15/2000 15:00	
Benzene	670	2.5	ug/L	5.00	12/15/2000 15:00	
Toluene	450	2.5	ug/L	5.00	12/15/2000 15:00	
Ethyl benzene	100	2.5	ug/L	5.00	12/15/2000 15:00	
Xylene(s)	480	2.5	ug/L	5.00	12/15/2000 15:00	
<b>Surrogate(s)</b>						
Trifluorotoluene	98.7	58-124	%	1.00	12/15/2000 15:00	
4-Bromofluorobenzene-FID	97.3	50-150	%	1.00	12/15/2000 15:00	

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Telephone (925) 484-1919 \* Facsimile (925) 484-1096



# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: **Chow Engineering, Inc**

Test Method: 8020  
8015M

Attn.: Lisa Kimura

Prep Method: 5030

Gas/BTEX

Sample ID: <b>SB-4-GW</b>	Lab Sample ID: <b>2000-12-0188-004</b>
Project: 2R-1121 Housewives Market	Received: 12/08/2000 18:30
Sampled: 12/08/2000 15:00	Extracted: 12/13/2000 08:55
Matrix: Water	QC-Batch: 2000/12/12-01.01

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	12/13/2000 08:55	
Benzene	ND	0.50	ug/L	1.00	12/13/2000 08:55	
Toluene	ND	0.50	ug/L	1.00	12/13/2000 08:55	
Ethyl benzene	ND	0.50	ug/L	1.00	12/13/2000 08:55	
Xylene(s)	ND	0.50	ug/L	1.00	12/13/2000 08:55	
<b>Surrogate(s)</b>						
Trifluorotoluene	83.0	58-124	%	1.00	12/13/2000 08:55	
4-Bromofluorobenzene-FID	81.6	50-150	%	1.00	12/13/2000 08:55	

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Telephone (925) 484-1919 \* Facsimile (925) 484-1096

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: Chow Engineering, Inc

Test Method: 8015M

Attn.: Lisa Kimura

8020

Prep Method: 5030

## Batch QC Report Gas/BTEX

Method Blank	Water	QC Batch # 2000/12/11-01.01
MB: 2000/12/11-01.01-010		Date Extracted: 12/11/2000 11:59

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	50	ug/L	12/11/2000 11:59	
Benzene	ND	0.5	ug/L	12/11/2000 11:59	
Toluene	ND	0.5	ug/L	12/11/2000 11:59	
Ethyl benzene	ND	0.5	ug/L	12/11/2000 11:59	
Xylene(s)	ND	0.5	ug/L	12/11/2000 11:59	
<b>Surrogate(s)</b>					
Trifluorotoluene	99.6	58-124	ug/L	12/11/2000 11:59	
4-Bromofluorobenzene-FID	89.4	50-150	ug/L	12/11/2000 11:59	

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: Chow Engineering, Inc

Test Method: 8015M  
8020

Attn.: Lisa Kimura

Prep Method: 5030

## Batch QC Report Gas/BTEX

<b>Method Blank</b>	<b>Water</b>	<b>QC Batch # 2000/12/12-01.01</b>
MB: 2000/12/12-01.01-001		Date Extracted: 12/12/2000 06:35

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	50	ug/L	12/12/2000 06:35	
Benzene	ND	0.5	ug/L	12/12/2000 06:35	
Toluene	ND	0.5	ug/L	12/12/2000 06:35	
Ethyl benzene	ND	0.5	ug/L	12/12/2000 06:35	
Xylene(s)	ND	0.5	ug/L	12/12/2000 06:35	
<b>Surrogate(s)</b>					
Trifluorotoluene	94.4	58-124	%	12/12/2000 06:35	
4-Bromofluorobenzene-FID	88.4	50-150	%	12/12/2000 06:35	

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: Chow Engineering, Inc

Test Method: 8015M

8020

Attn.: Lisa Kimura

Prep Method: 5030

## Batch QC Report Gas/BTEX

Method Blank	Water	QC Batch # 2000/12/15-01.02
MB: 2000/12/15-01.02-003		Date Extracted: 12/15/2000 06:07

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	50	ug/L	12/15/2000 06:07	
Benzene	ND	0.5	ug/L	12/15/2000 06:07	
Toluene	ND	0.5	ug/L	12/15/2000 06:07	
Ethyl benzene	ND	0.5	ug/L	12/15/2000 06:07	
Xylene(s)	ND	0.5	ug/L	12/15/2000 06:07	
<b>Surrogate(s)</b>					
Trifluorotoluene	84.6	58-124	%	12/15/2000 06:07	
4-Bromofluorobenzene-FID	90.7	50-150	ug/L	12/15/2000 06:07	

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: **Chow Engineering, Inc**

Test Method: 8020

Attn: Lisa Kimura

Prep Method: 5030

## Batch QC Report

Gas/BTEX

Laboratory Control Spike (LCS/LCSD)	Water	QC Batch # 2000/12/11-01.01
LCS: 2000/12/11-01.01-006	Extracted: 12/11/2000 09:49	Analyzed 12/11/2000 09:49
LCSD: 2000/12/11-01.01-007	Extracted: 12/11/2000 10:21	Analyzed 12/11/2000 10:21

Compound	Conc. [ug/L]		Exp. Conc. [ug/L]		Recovery [%] RPD			Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	RPD [%]	Recovery	RPD	LCS	LCSD
Benzene	105	106	100.0	100.0	105.0	106.0	0.9	77-123	20		
Toluene	94.6	97.2	100.0	100.0	94.6	97.2	2.7	78-122	20		
Ethyl benzene	102	102	100.0	100.0	102.0	102.0	0.0	70-130	20		
Xylene(s)	303	309	300	300	101.0	103.0	2.0	75-125	20		
<b>Surrogate(s)</b>											
Trifluorotoluene	498	513	500	500	99.6	102.6		58-124			

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Telephone (925) 484-919 \* Facsimile (925) 484-1096

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: Chow Engineering, Inc

Test Method: 8015M  
8020

Attn: Lisa Kimura

Prep Method: 5030

## Batch QC Report

Gas/BTEX

Laboratory Control Spike (LCS/LCSD)	Water	QC Batch # 2000/12/11-01.01
LCS: 2000/12/11-01.01-008	Extracted: 12/11/2000 10:54	Analyzed 12/11/2000 10:54
LCSD: 2000/12/11-01.01-009	Extracted: 12/11/2000 11:27	Analyzed 12/11/2000 11:27

Compound	Conc. [ug/L]		Exp. Conc. [ug/L]		Recovery [%] RPD			Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	RPD [%]	Recovery	RPD	LCS	LCSD
Gasoline	448	503	500	500	89.6	100.6	11.6	75-125	20		
<b>Surrogate(s)</b>											
4-Bromofluorobenzene-FI	357	420	500	500	71.4	84.0		50-150			

To: **Chow Engineering, Inc**

Test Method: 8015M  
8020

Attn: Lisa Kimura

Prep Method: 5030

**Batch QC Report**

Gas/BTEX

<b>Laboratory Control Spike (LCS/LCSD)</b>	<b>Water</b>		<b>QC Batch # 2000/12/12-01.01</b>	
LCS: 2000/12/12-01.01-002	Extracted: 12/12/2000 07:07	Analyzed: 12/12/2000 07:07		
LCSD: 2000/12/12-01.01-003	Extracted: 12/12/2000 07:40	Analyzed: 12/12/2000 07:40		

Compound	Conc. [ug/L]		Exp. Conc. [ug/L]		Recovery [%]		RPD [%]	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Gasoline	446	453	500	500	89.2	90.6	1.6	75-125	20		
Benzene	94.4	94.3	100.0	100.0	94.4	94.3	0.1	77-123	20		
Toluene	85.6	85.1	100.0	100.0	85.6	85.1	0.6	78-122	20		
Ethyl benzene	93.4	92.4	100.0	100.0	93.4	92.4	1.1	70-130	20		
Xylene(s)	275	275	300	300	91.7	91.7	0.0	75-125	20		
<b>Surrogate(s)</b>											
Trifluorotoluene	444	456	500	500	88.8	91.2		58-124			
4-Bromofluorobenzene-FI	447	424	500	500	89.4	84.8		50-150			

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: Chow Engineering, Inc

Test Method: 8020

Attn: Lisa Kimura

Prep Method: 5030

## Batch QC Report

Gas/BTEX

### Laboratory Control Spike (LCS/LCSD)

Water

QC Batch # 2000/12/15-01.02

LCS: 2000/12/15-01.02-004

Extracted: 12/15/2000 06:43

Analyzed 12/15/2000 06:43

LCSD: 2000/12/15-01.02-005

Extracted: 12/15/2000 07:18

Analyzed 12/15/2000 07:18

Compound	Conc. [ug/L]		Exp. Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Benzene	101	97.4	100.0	100.0	101.0	97.4	3.6	77-123	20		
Toluene	98.3	96.4	100.0	100.0	98.3	96.4	2.0	78-122	20		
Ethyl benzene	88.4	87.4	100.0	100.0	88.4	87.4	1.1	70-130	20		
Xylene(s)	257	255	300	300	85.7	85.0	0.8	75-125	20		
<b>Surrogate(s)</b>											
Trifluorotoluene	426	422	500	500	85.2	84.4		58-124			

1220 Quarry Lane \* Pleasanton, CA 94566-4755  
Telephone (925) 484-1919 \* Facs n. file (925) 484-1096



# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: Chow Engineering, Inc

Test Method: 8015M  
8020

Attn: Lisa Kimura

Prep Method: 5030

## Batch QC Report

Gas/BTEX

Laboratory Control Spike (LCS/LCSD)	Water	QC Batch # 2000/12/15-01.02
LCS: 2000/12/15-01.02-006	Extracted: 12/15/2000 07:54	Analyzed 12/15/2000 07:54
LCSD: 2000/12/15-01.02-007	Extracted: 12/15/2000 08:29	Analyzed 12/15/2000 08:29

Compound	Conc. [ug/L]		Exp. Conc. [ug/L]		Recovery [%] RPD			Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	RPD [%]	Recovery	RPD	LCS	LCSD
Gasoline	459	457	500	500	91.8	91.4	0.4	75-125	20		
<b>Surrogate(s)</b>											
4-Bromofluorobenzene-FI	478	483	500	500	95.6	96.6		50-150			

Total Extractable Petroleum Hydrocarbons (TEPH)

<b>Chow Engineering, Inc</b>	✉ 7700 Edgewater Dr # 729 Oakland, CA 94621
Attn: Lisa Kimura	Phone: (510) 636-8500 Fax: (510) 636-8544
Project #: 2R-1121	Project: Housewives Market

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
SB-1-GW	Water	12/08/2000 09:51	1
SB-2-GW	Water	12/08/2000 12:56	2
SB-3-GW	Water	12/08/2000 07:50	3
SB-4-GW	Water	12/08/2000 15:00	4
SB5,3,1,2@5	Soil	12/08/2000 05:45	17

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: **Chow Engineering, Inc**

Attn.: Lisa Kimura

Test Method: 8015M

Prep Method: 3510/8015M  
3550/8015M

## Total Extractable Petroleum Hydrocarbons (TEPH)

Sample ID: <b>SB-1-GW</b>	Lab Sample ID: <b>2000-12-0188-001</b>
Project: 2R-1121 Housewives Market	Received: 12/08/2000 18:30
Sampled: 12/08/2000 09:51	Extracted: 12/11/2000 13:09
Matrix: Water	QC-Batch: 2000/12/11-02.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Mineral spirits	88	50	ug/L	1.00	12/12/2000 15:43	nhc
<b>Surrogate(s)</b> o-Terphenyl	80.1	60-130	%	1.00	12/12/2000 15:43	

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: Chow Engineering, Inc

Test Method: 8015M

Attn.: Lisa Kimura

Prep Method: 3510/8015M

3550/8015M

## Total Extractable Petroleum Hydrocarbons (TEPH)

Sample ID:	SB-2-GW	Lab Sample ID:	2000-12-0188-002
Project:	2R-1121 Housewives Market	Received:	12/08/2000 18:30
Sampled:	12/08/2000 12:56	Extracted:	12/11/2000 13:09
Matrix:	Water	QC-Batch:	2000/12/11-02.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Mineral spirits	ND	50	ug/L	1.00	12/12/2000 15:04	
<i>Surrogate(s)</i> o-Terphenyl	109.7	60-130	%	1.00	12/12/2000 15:04	

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: **Chow Engineering, Inc**

Attn.: Lisa Kimura

Test Method: 8015M

Prep Method: 3510/8015M

3550/8015M

## Total Extractable Petroleum Hydrocarbons (TEPH)

Sample ID: <b>SB-3-GW</b>	Lab Sample ID: <b>2000-12-0188-003</b>
Project: 2R-1121 Housewives Market	Received: 12/08/2000 18:30
Sampled: 12/08/2000 07:50	Extracted: 12/11/2000 13:09
Matrix: Water	QC-Batch: 2000/12/11-02.10
Sample/Analysis Flag r l ( See Legend & Note section )	

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Mineral spirits	290	58	ug/L	1.16	12/12/2000 16:21	,nmsp
<b>Surrogate(s)</b> o-Terphenyl	82.8	60-130	%	1.16	12/12/2000 16:21	

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: **Chow Engineering, Inc**  
Attn.: Lisa Kimura

Test Method: 8015M  
Prep Method: 3510/8015M  
3550/8015M

## Total Extractable Petroleum Hydrocarbons (TEPH)

Sample ID: <b>SB-4-GW</b>	Lab Sample ID: <b>2000-12-0188-004</b>
Project: 2R-1121 Housewives Market	Received: 12/08/2000 18:30
Sampled: 12/08/2000 15:00	Extracted: 12/11/2000 13:09
Matrix: Water	QC-Batch: 2000/12/11-02.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Motor Oil	ND	500	ug/L	1.00	12/12/2000 14:26	
Mineral spirits	100	50	ug/L	1.00	12/12/2000 14:26	nhc
<b>Surrogate(s)</b> o-Terphenyl	17.3906	60-130	ug/L	1.00	12/12/2000 14:26	

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: Chow Engineering, Inc

Test Method: 8015M

Attn.: Lisa Kimura

Prep Method: 3510/8015M  
3550/8015M

## Total Extractable Petroleum Hydrocarbons (TEPH)

Sample ID:	SB5,3,1,2@5	Lab Sample ID:	2000-12-0188-017
Project:	2R-1121 Housewives Market	Received:	12/08/2000 18:30
Sampled:	12/08/2000 05:45	Extracted:	12/12/2000 11:06
Matrix:	Soil	QC-Batch:	2000/12/12-03.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Mineral spirits	ND	10	mg/Kg	1.00	12/12/2000 22:46	
<i>Surrogate(s)</i> o-Terphenyl	102.6	60-130	%	1.00	12/12/2000 22:46	

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: **Chow Engineering, Inc**  
Attn.: Lisa Kimura

Test Method: 8015M  
Prep Method: 3550/8015M

**Batch QC Report**  
Total Extractable Petroleum Hydrocarbons (TEPH)

<b>Method Blank</b>	<b>Soil</b>	<b>QC Batch # 2000/12/12-03.10</b>
MB: 2000/12/12-03.10-001		Date Extracted: 12/12/2000 11:06

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Diesel	ND	1	mg/Kg	12/12/2000 20:51	
Motor Oil	ND	50	mg/Kg	12/12/2000 20:51	
Mineral spirits	ND	10	mg/Kg	12/12/2000 20:51	
<b>Surrogate(s)</b> o-Terphenyl	107.5	60-130	%	12/12/2000 20:51	



# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: Chow Engineering, Inc  
Attn.: Lisa Kimura

Test Method: 8015M  
Prep Method: 3510/8015M

**Batch QC Report**  
Total Extractable Petroleum Hydrocarbons (TEPH)

<b>Method Blank</b>	<b>Water</b>	<b>QC Batch # 2000/12/11-02.10</b>
MB: 2000/12/11-02.10-003		Date Extracted: 12/11/2000 13:09

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Diesel	ND	50	ug/L	12/13/2000 15:52	
Motor Oil	ND	500	ug/L	12/13/2000 15:52	
Mineral spirits	ND	50	ug/L	12/13/2000 15:52	
<b>Surrogate(s)</b> o-Terphenyl	91.0	60-130	%	12/13/2000 15:52	

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: **Chow Engineering, Inc**

Test Method: 8015M

Attn: Lisa Kimura

Prep Method: 3550/8015M

## Batch QC Report

### Total Extractable Petroleum Hydrocarbons (TEPH)

Laboratory Control Spike (LCS/LCSD)	Soil	QC Batch # 2000/12/12-03.10
LCS: 2000/12/12-03.10-002	Extracted: 12/12/2000 11:06	Analyzed 12/12/2000 23:12
LCSD: 2000/12/12-03.10-003	Extracted: 12/12/2000 11:06	Analyzed 12/12/2000 23:58

Compound	Conc. [mg/Kg]		Exp. Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Diesel	40.0	38.6	41.7	41.7	95.9	92.6	3.5	60-130	25		
<b>Surrogate(s)</b> o-Terphenyl	24.8	24.4	20.0	20.0	124.0	122.0		60-130			

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: Chow Engineering, Inc

Test Method: 8015M

Attn: Lisa Kimura

Prep Method: 3510/8015M

## Batch QC Report

Total Extractable Petroleum Hydrocarbons (TEPH)

Laboratory Control Spike (LCS/LCSD)	Water	QC Batch # 2000/12/11-02.10
LCS: 2000/12/11-02.10-001	Extracted: 12/11/2000 13:09	Analyzed 12/12/2000 11:15
LCSD: 2000/12/11-02.10-002	Extracted: 12/11/2000 13:09	Analyzed 12/12/2000 11:53

Compound	Conc. [ug/L]		Exp. Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Diesel	1200	1120	1250	1250	96.0	89.6	6.9	60-130	25		
<b>Surrogate(s)</b> o-Terphenyl	22.8	22.1	20.0	20.0	114.0	110.5		60-130			

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: **Chow Engineering, Inc**

Test Method: 8015M

Attn.: Lisa Kimura

Prep Method: 3550/8015M

## Batch QC Report

Total Extractable Petroleum Hydrocarbons (TEPH)

<b>Matrix Spike ( MS / MSD )</b>	<b>Soil</b>	<b>QC Batch # 2000/12/12-03.10</b>
Sample ID: <b>SB5,3,1,2@5</b>		Lab Sample ID: 2000-12-0188-017
MS: 2000/12/12-03.10-004	Extracted: 12/12/2000 11:06	Analyzed: 12/12/2000 23:24 Dilution: 1.0
MSD: 2000/12/12-03.10-005	Extracted: 12/12/2000 11:06	Analyzed: 12/13/2000 00:02 Dilution: 1.0

Compound	Conc. [ mg/Kg ]			Exp. Conc. [ mg/Kg ]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	MS	MSD	Sample	MS	MSD	MS	MSD		Recovery	RPD	MS	MSD
Diesel	48.9	45.6	11	41.4	41.3	91.5	83.8	8.8	60-130	25		
<b>Surrogate(s)</b>												
o-Terphenyl	23.5	21.7		20.0	20.0	117.5	108.5		60-130			

1220 Quarry Lane \* Pleasanton, CA 94566-4756  
Telephone (925) 484-1919 \* Facsimile (925) 484-1096

To: **Chow Engineering, Inc**  
Attn: Lisa Kimura

Test Method: 8015M  
Prep Method: 3510/8015M  
3550/8015M

## Legend & Notes

### Total Extractable Petroleum Hydrocarbons (TEPH)

#### Analysis Notes

SB-3-GW ( Lab# 2000-12-0188-003 )

nmsp= compounds reported are in this range and do not match our Mineral Spirits standard.

#### Analysis Flags

rl

Reporting limits raised due to reduced sample size.

#### Analyte Flags

nhc

Compounds reported are in this range but they do not exhibit a pattern characteristic of petroleum hydrocarbon.

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

Volatile OrganicCompounds by 8260B

**Chow Engineering, Inc**

✉ 7700 Edgewater Dr # 729  
Oakland, CA 94621

Attn: Lisa Kimura

Phone: (510) 636-8500 Fax: (510) 636-8544

Project #: 2R-1121

Project: Housewives Market

## Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
SB-1-GW	Water	12/08/2000 09:51	1
SB-2-GW	Water	12/08/2000 12:56	2
SB-3-GW	Water	12/08/2000 07:50	3
SB-4-GW	Water	12/08/2000 15:00	4

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# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: Chow Engineering, Inc

Test Method: 8260B

Attn.: Lisa Kimura

Prep Method: 5030B

## Volatile Organic Compounds by 8260B

Sample ID: <b>SB-1-GW</b>	Lab Sample ID: <b>2000-12-0188-001</b>
Project: 2R-1121 Housewives Market	Received: 12/08/2000 18:30
Sampled: 12/08/2000 09:51	Extracted: 12/19/2000 13:21
Matrix: Water	QC-Batch: 2000/12/19-01.07

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
MTBE	ND	5.0	ug/L	1.00	12/19/2000 13:21	
Acetone	ND	50	ug/L	1.00	12/19/2000 13:21	
Benzene	ND	1.0	ug/L	1.00	12/19/2000 13:21	
Bromodichloromethane	ND	1.0	ug/L	1.00	12/19/2000 13:21	
Bromobenzene	ND	1.0	ug/L	1.00	12/19/2000 13:21	
Bromochloromethane	ND	1.0	ug/L	1.00	12/19/2000 13:21	
Bromoform	ND	1.0	ug/L	1.00	12/19/2000 13:21	
Bromomethane	ND	5.0	ug/L	1.00	12/19/2000 13:21	
2-Butanone(MEK)	ND	50	ug/L	1.00	12/19/2000 13:21	
n-Butylbenzene	ND	1.0	ug/L	1.00	12/19/2000 13:21	
sec-Butylbenzene	ND	1.0	ug/L	1.00	12/19/2000 13:21	
tert-Butylbenzene	ND	1.0	ug/L	1.00	12/19/2000 13:21	
Carbon disulfide	ND	5.0	ug/L	1.00	12/19/2000 13:21	
Carbon tetrachloride	ND	1.0	ug/L	1.00	12/19/2000 13:21	
Chlorobenzene	ND	1.0	ug/L	1.00	12/19/2000 13:21	
Chloroethane	ND	1.0	ug/L	1.00	12/19/2000 13:21	
2-Chloroethylvinyl ether	ND	5.0	ug/L	1.00	12/19/2000 13:21	
Chloroform	ND	1.0	ug/L	1.00	12/19/2000 13:21	
Chloromethane	ND	1.0	ug/L	1.00	12/19/2000 13:21	
2-Chlorotoluene	ND	1.0	ug/L	1.00	12/19/2000 13:21	
4-Chlorotoluene	ND	1.0	ug/L	1.00	12/19/2000 13:21	
Dibromochloromethane	ND	1.0	ug/L	1.00	12/19/2000 13:21	
1,2-Dichlorobenzene	ND	1.0	ug/L	1.00	12/19/2000 13:21	
1,3-Dichlorobenzene	ND	1.0	ug/L	1.00	12/19/2000 13:21	
1,4-Dichlorobenzene	ND	1.0	ug/L	1.00	12/19/2000 13:21	
1,3-Dichloropropane	ND	1.0	ug/L	1.00	12/19/2000 13:21	
2,2-Dichloropropane	ND	1.0	ug/L	1.00	12/19/2000 13:21	
1,1-Dichloropropene	ND	1.0	ug/L	1.00	12/19/2000 13:21	
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	1.00	12/19/2000 13:21	
1,2-Dibromoethane	ND	1.0	ug/L	1.00	12/19/2000 13:21	
Dibromomethane	ND	1.0	ug/L	1.00	12/19/2000 13:21	
Dichlorodifluoromethane	ND	1.0	ug/L	1.00	12/19/2000 13:21	
1,1-Dichloroethane	ND	1.0	ug/L	1.00	12/19/2000 13:21	
1,2-Dichloroethane	ND	1.0	ug/L	1.00	12/19/2000 13:21	
1,1-Dichloroethene	ND	1.0	ug/L	1.00	12/19/2000 13:21	
cis-1,2-Dichloroethene	ND	1.0	ug/L	1.00	12/19/2000 13:21	

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# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: Chow Engineering, Inc

Test Method: 8260B

Attn.: Lisa Kimura

Prep Method: 5030B

## Volatile Organic Compounds by 8260B

Sample ID: SB-1-GW	Lab Sample ID: 2000-12-0188-001
Project: 2R-1121 Housewives Market	Received: 12/08/2000 18:30
Sampled: 12/08/2000 09:51	Extracted: 12/19/2000 13:21
Matrix: Water	QC-Batch: 2000/12/19-01.07

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
trans-1,2-Dichloroethene	ND	1.0	ug/L	1.00	12/19/2000 13:21	
1,2-Dichloropropane	ND	1.0	ug/L	1.00	12/19/2000 13:21	
cis-1,3-Dichloropropene	ND	1.0	ug/L	1.00	12/19/2000 13:21	
trans-1,3-Dichloropropene	ND	1.0	ug/L	1.00	12/19/2000 13:21	
Ethylbenzene	ND	1.0	ug/L	1.00	12/19/2000 13:21	
Hexachlorobutadiene	ND	1.0	ug/L	1.00	12/19/2000 13:21	
2-Hexanone	ND	50	ug/L	1.00	12/19/2000 13:21	
Isopropylbenzene	ND	1.0	ug/L	1.00	12/19/2000 13:21	
p-Isopropyltoluene	ND	1.0	ug/L	1.00	12/19/2000 13:21	
Methylene chloride	ND	5.0	ug/L	1.00	12/19/2000 13:21	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/L	1.00	12/19/2000 13:21	
Naphthalene	ND	1.0	ug/L	1.00	12/19/2000 13:21	
n-Propylbenzene	ND	1.0	ug/L	1.00	12/19/2000 13:21	
Styrene	ND	1.0	ug/L	1.00	12/19/2000 13:21	
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1.00	12/19/2000 13:21	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1.00	12/19/2000 13:21	
Tetrachloroethene	ND	1.0	ug/L	1.00	12/19/2000 13:21	
Toluene	ND	1.0	ug/L	1.00	12/19/2000 13:21	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	1.00	12/19/2000 13:21	
1,2,4-Trichlorobenzene	ND	1.0	ug/L	1.00	12/19/2000 13:21	
1,1,1-Trichloroethane	ND	1.0	ug/L	1.00	12/19/2000 13:21	
1,1,2-Trichloroethane	ND	1.0	ug/L	1.00	12/19/2000 13:21	
Trichloroethene	68	1.0	ug/L	1.00	12/19/2000 13:21	
Trichlorofluoromethane	ND	1.0	ug/L	1.00	12/19/2000 13:21	
1,2,3-Trichloropropane	ND	1.0	ug/L	1.00	12/19/2000 13:21	
Trichlorotrifluoroethane	ND	5.0	ug/L	1.00	12/19/2000 13:21	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	1.00	12/19/2000 13:21	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	1.00	12/19/2000 13:21	
Vinyl acetate	ND	25	ug/L	1.00	12/19/2000 13:21	
Vinyl chloride	ND	1.0	ug/L	1.00	12/19/2000 13:21	
Total xylenes	ND	1.0	ug/L	1.00	12/19/2000 13:21	
Surrogate(s)						
4-Bromofluorobenzene	100.0	86-115	%	1.00	12/19/2000 13:21	
1,2-Dichloroethane-c4	106.0	76-114	%	1.00	12/19/2000 13:21	
Toluene-c8	99.0	88-110	%	1.00	12/19/2000 13:21	

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# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: Chow Engineering, Inc

Test Method: 8260B

Attn.: Lisa Kimura

Prep Method: 5030B

Volatile OrganicCompounds by 8260B

Sample ID: SB-2-GW	Lab Sample ID: 2000-12-0188-002
Project: 2R-1121 Housewives Market	Received: 12/08/2000 18:30
Sampled: 12/08/2000 12:56	Extracted: 12/19/2000 14:00
Matrix: Water	QC-Batch: 2000/12/19-01.07

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
MTBE	ND	5.0	ug/L	1.00	12/19/2000 14:00	
Acetone	ND	50	ug/L	1.00	12/19/2000 14:00	
Benzene	ND	1.0	ug/L	1.00	12/19/2000 14:00	
Bromodichloromethane	ND	1.0	ug/L	1.00	12/19/2000 14:00	
Bromobenzene	ND	1.0	ug/L	1.00	12/19/2000 14:00	
Bromochloromethane	ND	1.0	ug/L	1.00	12/19/2000 14:00	
Bromoform	ND	1.0	ug/L	1.00	12/19/2000 14:00	
Bromomethane	ND	5.0	ug/L	1.00	12/19/2000 14:00	
2-Butanone(MEK)	ND	50	ug/L	1.00	12/19/2000 14:00	
n-Butylbenzene	ND	1.0	ug/L	1.00	12/19/2000 14:00	
sec-Butylbenzene	ND	1.0	ug/L	1.00	12/19/2000 14:00	
tert-Butylbenzene	ND	1.0	ug/L	1.00	12/19/2000 14:00	
Carbon disulfide	ND	5.0	ug/L	1.00	12/19/2000 14:00	
Carbon tetrachloride	ND	1.0	ug/L	1.00	12/19/2000 14:00	
Chlorobenzene	ND	1.0	ug/L	1.00	12/19/2000 14:00	
Chloroethane	ND	1.0	ug/L	1.00	12/19/2000 14:00	
2-Chloroethylvinyl ether	ND	5.0	ug/L	1.00	12/19/2000 14:00	
Chloroform	ND	1.0	ug/L	1.00	12/19/2000 14:00	
Chloromethane	ND	1.0	ug/L	1.00	12/19/2000 14:00	
2-Chlorotoluene	ND	1.0	ug/L	1.00	12/19/2000 14:00	
4-Chlorotoluene	ND	1.0	ug/L	1.00	12/19/2000 14:00	
Dibromochloromethane	ND	1.0	ug/L	1.00	12/19/2000 14:00	
1,2-Dichlorobenzene	ND	1.0	ug/L	1.00	12/19/2000 14:00	
1,3-Dichlorobenzene	ND	1.0	ug/L	1.00	12/19/2000 14:00	
1,4-Dichlorobenzene	ND	1.0	ug/L	1.00	12/19/2000 14:00	
1,3-Dichloropropane	ND	1.0	ug/L	1.00	12/19/2000 14:00	
2,2-Dichloropropane	ND	1.0	ug/L	1.00	12/19/2000 14:00	
1,1-Dichloropropane	ND	1.0	ug/L	1.00	12/19/2000 14:00	
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	1.00	12/19/2000 14:00	
1,2-Dibromoethane	ND	1.0	ug/L	1.00	12/19/2000 14:00	
Dibromomethane	ND	1.0	ug/L	1.00	12/19/2000 14:00	
Dichlorodifluoromethane	ND	1.0	ug/L	1.00	12/19/2000 14:00	
1,1-Dichloroethane	ND	1.0	ug/L	1.00	12/19/2000 14:00	
1,2-Dichloroethane	ND	1.0	ug/L	1.00	12/19/2000 14:00	
1,1-Dichloroethene	ND	1.0	ug/L	1.00	12/19/2000 14:00	
cis-1,2-Dichloroethene	ND	1.0	ug/L	1.00	12/19/2000 14:00	

Telephone (925) 484-1919 \* Facsimile (925) 484-1096

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: **Chow Engineering, Inc**

Test Method: 8260B

Attn.: Lisa Kimura

Prep Method: 5030B

## Volatile Organic Compounds by 8260B

Sample ID: <b>SB-2-GW</b>	Lab Sample ID: <b>2000-12-0188-002</b>
Project: 2R-1121 Housewives Market	Received: 12/08/2000 18:30
Sampled: 12/08/2000 12:56	Extracted: 12/19/2000 14:00
Matrix: Water	QC-Batch: 2000/12/19-01.07

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
trans-1,2-Dichloroethene	ND	1.0	ug/L	1.00	12/19/2000 14:00	
1,2-Dichloropropane	ND	1.0	ug/L	1.00	12/19/2000 14:00	
cis-1,3-Dichloropropene	ND	1.0	ug/L	1.00	12/19/2000 14:00	
trans-1,3-Dichloropropene	ND	1.0	ug/L	1.00	12/19/2000 14:00	
Ethylbenzene	ND	1.0	ug/L	1.00	12/19/2000 14:00	
Hexachlorobutadiene	ND	1.0	ug/L	1.00	12/19/2000 14:00	
2-Hexanone	ND	50	ug/L	1.00	12/19/2000 14:00	
Isopropylbenzene	ND	1.0	ug/L	1.00	12/19/2000 14:00	
p-Isopropyltoluene	ND	1.0	ug/L	1.00	12/19/2000 14:00	
Methylene chloride	ND	5.0	ug/L	1.00	12/19/2000 14:00	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/L	1.00	12/19/2000 14:00	
Naphthalene	ND	1.0	ug/L	1.00	12/19/2000 14:00	
n-Propylbenzene	ND	1.0	ug/L	1.00	12/19/2000 14:00	
Styrene	ND	1.0	ug/L	1.00	12/19/2000 14:00	
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1.00	12/19/2000 14:00	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1.00	12/19/2000 14:00	
Tetrachloroethene	ND	1.0	ug/L	1.00	12/19/2000 14:00	
Toluene	ND	1.0	ug/L	1.00	12/19/2000 14:00	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	1.00	12/19/2000 14:00	
1,2,4-Trichlorobenzene	ND	1.0	ug/L	1.00	12/19/2000 14:00	
1,1,1-Trichloroethane	ND	1.0	ug/L	1.00	12/19/2000 14:00	
1,1,2-Trichloroethane	ND	1.0	ug/L	1.00	12/19/2000 14:00	
Trichloroethene	23	1.0	ug/L	1.00	12/19/2000 14:00	
Trichlorofluoromethane	ND	1.0	ug/L	1.00	12/19/2000 14:00	
1,2,3-Trichloropropane	ND	1.0	ug/L	1.00	12/19/2000 14:00	
Trichlorotrifluoroethane	ND	5.0	ug/L	1.00	12/19/2000 14:00	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	1.00	12/19/2000 14:00	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	1.00	12/19/2000 14:00	
Vinyl acetate	ND	25	ug/L	1.00	12/19/2000 14:00	
Vinyl chloride	ND	1.0	ug/L	1.00	12/19/2000 14:00	
Total xylenes	ND	1.0	ug/L	1.00	12/19/2000 14:00	
<i>Surrogate(s)</i>						
4-Bromofluorobenzene	102.4	86-115	%	1.00	12/19/2000 14:00	
1,2-Dichloroethane-d4	105.7	76-114	%	1.00	12/19/2000 14:00	
Toluene-d8	99.9	88-110	%	1.00	12/19/2000 14:00	

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# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: Chow Engineering, Inc

Test Method: 8260B

Attn.: Lisa Kimura

Prep Method: 5030B

Volatile Organic Compounds by 8260B

Sample ID: SB-3-GW	Lab Sample ID: 2000-12-0188-003
Project: 2R-1121 Housewives Market	Received: 12/08/2000 18:30
Sampled: 12/08/2000 07:50	Extracted: 12/19/2000 17:02
Matrix: Water	QC-Batch: 2000/12/19-01.07

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
MTBE	ND	25	ug/L	5.00	12/19/2000 17:02	
Acetone	ND	250	ug/L	5.00	12/19/2000 17:02	
Benzene	510	5.0	ug/L	5.00	12/19/2000 17:02	
Bromodichloromethane	ND	5.0	ug/L	5.00	12/19/2000 17:02	
Bromobenzene	ND	5.0	ug/L	5.00	12/19/2000 17:02	
Bromochloromethane	ND	5.0	ug/L	5.00	12/19/2000 17:02	
Bromoform	ND	5.0	ug/L	5.00	12/19/2000 17:02	
Bromomethane	ND	25	ug/L	5.00	12/19/2000 17:02	
2-Butanone(MEK)	ND	250	ug/L	5.00	12/19/2000 17:02	
n-Butylbenzene	ND	5.0	ug/L	5.00	12/19/2000 17:02	
sec-Butylbenzene	ND	5.0	ug/L	5.00	12/19/2000 17:02	
tert-Butylbenzene	ND	5.0	ug/L	5.00	12/19/2000 17:02	
Carbon disulfide	ND	25	ug/L	5.00	12/19/2000 17:02	
Carbon tetrachloride	ND	5.0	ug/L	5.00	12/19/2000 17:02	
Chlorobenzene	ND	5.0	ug/L	5.00	12/19/2000 17:02	
Chloroethane	ND	5.0	ug/L	5.00	12/19/2000 17:02	
2-Chloroethylvinyl ether	ND	25	ug/L	5.00	12/19/2000 17:02	
Chloroform	ND	5.0	ug/L	5.00	12/19/2000 17:02	
Chloromethane	ND	5.0	ug/L	5.00	12/19/2000 17:02	
2-Chlorotoluene	ND	5.0	ug/L	5.00	12/19/2000 17:02	
4-Chlorotoluene	ND	5.0	ug/L	5.00	12/19/2000 17:02	
Dibromochloromethane	ND	5.0	ug/L	5.00	12/19/2000 17:02	
1,2-Dichlorobenzene	ND	5.0	ug/L	5.00	12/19/2000 17:02	
1,3-Dichlorobenzene	ND	5.0	ug/L	5.00	12/19/2000 17:02	
1,4-Dichlorobenzene	ND	5.0	ug/L	5.00	12/19/2000 17:02	
1,3-Dichloropropane	ND	5.0	ug/L	5.00	12/19/2000 17:02	
2,2-Dichloropropane	ND	5.0	ug/L	5.00	12/19/2000 17:02	
1,1-Dichloropropane	ND	5.0	ug/L	5.00	12/19/2000 17:02	
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	5.00	12/19/2000 17:02	
1,2-Dibromoethane	ND	5.0	ug/L	5.00	12/19/2000 17:02	
Dibromomethane	ND	5.0	ug/L	5.00	12/19/2000 17:02	
Dichlorodifluoromethane	ND	5.0	ug/L	5.00	12/19/2000 17:02	
1,1-Dichloroethane	ND	5.0	ug/L	5.00	12/19/2000 17:02	
1,2-Dichloroethane	9.0	5.0	ug/L	5.00	12/19/2000 17:02	
1,1-Dichloroethene	ND	5.0	ug/L	5.00	12/19/2000 17:02	
cis-1,2-Dichloroethene	ND	5.0	ug/L	5.00	12/19/2000 17:02	

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# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: **Chow Engineering, Inc**  
Attn.: Lisa Kimura

Test Method: 8260B  
Prep Method: 5030B

## Volatile Organic Compounds by 8260B

Sample ID: SB-3-GW	Lab Sample ID: 2000-12-0188-003
Project: 2R-1121 Housewives Market	Received: 12/08/2000 18:30
Sampled: 12/08/2000 07:50	Extracted: 12/19/2000 17:02
Matrix: Water	QC-Batch: 2000/12/19-01.07

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
trans-1,2-Dichloroethene	ND	5.0	ug/L	5.00	12/19/2000 17:02	
1,2-Dichloropropane	ND	5.0	ug/L	5.00	12/19/2000 17:02	
cis-1,3-Dichloropropene	ND	5.0	ug/L	5.00	12/19/2000 17:02	
trans-1,3-Dichloropropene	ND	5.0	ug/L	5.00	12/19/2000 17:02	
Ethylbenzene	99	5.0	ug/L	5.00	12/19/2000 17:02	
Hexachlorobutadiene	ND	25	ug/L	5.00	12/19/2000 17:02	
2-Hexanone	ND	250	ug/L	5.00	12/19/2000 17:02	
Isopropylbenzene	6.4	5.0	ug/L	5.00	12/19/2000 17:02	
p-Isopropyltoluene	ND	5.0	ug/L	5.00	12/19/2000 17:02	
Methylene chloride	ND	25	ug/L	5.00	12/19/2000 17:02	
4-Methyl-2-pentanone (MIBK)	ND	250	ug/L	5.00	12/19/2000 17:02	
Naphthalene	8.9	5.0	ug/L	5.00	12/19/2000 17:02	
n-Propylbenzene	14	5.0	ug/L	5.00	12/19/2000 17:02	
Styrene	ND	5.0	ug/L	5.00	12/19/2000 17:02	
1,1,1,2-Tetrachloroethane	ND	5.0	ug/L	5.00	12/19/2000 17:02	
1,1,1,2,2-Tetrachloroethane	ND	5.0	ug/L	5.00	12/19/2000 17:02	
Tetrachloroethene	ND	5.0	ug/L	5.00	12/19/2000 17:02	
Toluene	350	5.0	ug/L	5.00	12/19/2000 17:02	
1,2,3-Trichlorobenzene	ND	5.0	ug/L	5.00	12/19/2000 17:02	
1,2,4-Trichlorobenzene	ND	5.0	ug/L	5.00	12/19/2000 17:02	
1,1,1-Trichloroethane	ND	5.0	ug/L	5.00	12/19/2000 17:02	
1,1,2-Trichloroethane	ND	5.0	ug/L	5.00	12/19/2000 17:02	
Trichloroethene	30	5.0	ug/L	5.00	12/19/2000 17:02	
Trichlorofluoromethane	ND	5.0	ug/L	5.00	12/19/2000 17:02	
1,2,3-Trichloropropane	ND	5.0	ug/L	5.00	12/19/2000 17:02	
Trichlorotrifluoroethane	ND	25	ug/L	5.00	12/19/2000 17:02	
1,2,4-Trimethylbenzene	82	5.0	ug/L	5.00	12/19/2000 17:02	
1,3,5-Trimethylbenzene	19	5.0	ug/L	5.00	12/19/2000 17:02	
Vinyl acetate	ND	130	ug/L	5.00	12/19/2000 17:02	
Vinyl chloride	ND	5.0	ug/L	5.00	12/19/2000 17:02	
Total xylenes	370	5.0	ug/L	5.00	12/19/2000 17:02	
<i>Surrogate(s)</i>						
4-Bromofluorobenzene	97.5	86-115	%	5.00	12/19/2000 17:02	
1,2-Dichloroethane-c4	103.3	76-114	%	5.00	12/19/2000 17:02	
Toluene-c3	95.3	88-110	%	5.00	12/19/2000 17:02	

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# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: Chow Engineering, Inc

Test Method: 8260B

Attn.: Lisa Kimura

Prep Method: 5030B

Volatile Organic Compounds by 8260B

Sample ID: SB-4-GW	Lab Sample ID: 2000-12-0188-004
Project: 2R-1121 Housewives Market	Received: 12/08/2000 18:30
Sampled: 12/08/2000 15:00	Extracted: 12/19/2000 15:17
Matrix: Water	QC-Batch: 2000/12/19-01.07

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
MTBE	ND	5.0	ug/L	1.00	12/19/2000 15:17	
Acetone	ND	50	ug/L	1.00	12/19/2000 15:17	
Benzene	ND	1.0	ug/L	1.00	12/19/2000 15:17	
Bromodichloromethane	ND	1.0	ug/L	1.00	12/19/2000 15:17	
Bromobenzene	ND	1.0	ug/L	1.00	12/19/2000 15:17	
Bromochloromethane	ND	1.0	ug/L	1.00	12/19/2000 15:17	
Bromoform	ND	1.0	ug/L	1.00	12/19/2000 15:17	
Bromomethane	ND	5.0	ug/L	1.00	12/19/2000 15:17	
2-Butanone(MEK)	ND	50	ug/L	1.00	12/19/2000 15:17	
n-Butylbenzene	ND	1.0	ug/L	1.00	12/19/2000 15:17	
sec-Butylbenzene	ND	1.0	ug/L	1.00	12/19/2000 15:17	
tert-Butylbenzene	ND	1.0	ug/L	1.00	12/19/2000 15:17	
Carbon disulfide	ND	5.0	ug/L	1.00	12/19/2000 15:17	
Carbon tetrachloride	ND	1.0	ug/L	1.00	12/19/2000 15:17	
Chlorobenzene	ND	1.0	ug/L	1.00	12/19/2000 15:17	
Chloroethane	ND	1.0	ug/L	1.00	12/19/2000 15:17	
2-Chloroethylvinyl ether	ND	5.0	ug/L	1.00	12/19/2000 15:17	
Chloroform	ND	1.0	ug/L	1.00	12/19/2000 15:17	
Chloromethane	ND	1.0	ug/L	1.00	12/19/2000 15:17	
2-Chlorotoluene	ND	1.0	ug/L	1.00	12/19/2000 15:17	
4-Chlorotoluene	ND	1.0	ug/L	1.00	12/19/2000 15:17	
Dibromochloromethane	ND	1.0	ug/L	1.00	12/19/2000 15:17	
1,2-Dichlorobenzene	ND	1.0	ug/L	1.00	12/19/2000 15:17	
1,3-Dichlorobenzene	ND	1.0	ug/L	1.00	12/19/2000 15:17	
1,4-Dichlorobenzene	ND	1.0	ug/L	1.00	12/19/2000 15:17	
1,3-Dichloropropane	ND	1.0	ug/L	1.00	12/19/2000 15:17	
2,2-Dichloropropane	ND	1.0	ug/L	1.00	12/19/2000 15:17	
1,1-Dichloropropene	ND	1.0	ug/L	1.00	12/19/2000 15:17	
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	1.00	12/19/2000 15:17	
1,2-Dibromoethane	ND	1.0	ug/L	1.00	12/19/2000 15:17	
Dibromomethane	ND	1.0	ug/L	1.00	12/19/2000 15:17	
Dichlorodifluoromethane	ND	1.0	ug/L	1.00	12/19/2000 15:17	
1,1-Dichloroethane	ND	1.0	ug/L	1.00	12/19/2000 15:17	
1,2-Dichloroethane	ND	1.0	ug/L	1.00	12/19/2000 15:17	
1,1-Dichloroethene	ND	1.0	ug/L	1.00	12/19/2000 15:17	
cis-1,2-Dichloroethene	ND	1.0	ug/L	1.00	12/19/2000 15:17	

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# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: **Chow Engineering, Inc**

Test Method: 8260B

Attn.: Lisa Kimura

Prep Method: 5030B

Volatile Organic Compounds by 8260B

Sample ID: <b>SB-4-GW</b>	Lab Sample ID: <b>2000-12-0188-004</b>
Project: 2R-1121 Housewives Market	Received: 12/08/2000 18:30
Sampled: 12/08/2000 15:00	Extracted: 12/19/2000 15:17
Matrix: Water	QC-Batch: 2000/12/19-01.07

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
trans-1,2-Dichloroethene	ND	1.0	ug/L	1.00	12/19/2000 15:17	
1,2-Dichloropropane	ND	1.0	ug/L	1.00	12/19/2000 15:17	
cis-1,3-Dichloropropene	ND	1.0	ug/L	1.00	12/19/2000 15:17	
trans-1,3-Dichloropropene	ND	1.0	ug/L	1.00	12/19/2000 15:17	
Ethylbenzene	ND	1.0	ug/L	1.00	12/19/2000 15:17	
Hexachlorobutadiene	ND	1.0	ug/L	1.00	12/19/2000 15:17	
2-Hexanone	ND	50	ug/L	1.00	12/19/2000 15:17	
Isopropylbenzene	ND	1.0	ug/L	1.00	12/19/2000 15:17	
p-Isopropyltoluene	ND	1.0	ug/L	1.00	12/19/2000 15:17	
Methylene chloride	ND	5.0	ug/L	1.00	12/19/2000 15:17	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/L	1.00	12/19/2000 15:17	
Naphthalene	ND	1.0	ug/L	1.00	12/19/2000 15:17	
n-Propylbenzene	ND	1.0	ug/L	1.00	12/19/2000 15:17	
Styrene	ND	1.0	ug/L	1.00	12/19/2000 15:17	
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	1.00	12/19/2000 15:17	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	1.00	12/19/2000 15:17	
Tetrachloroethene	ND	1.0	ug/L	1.00	12/19/2000 15:17	
Toluene	ND	1.0	ug/L	1.00	12/19/2000 15:17	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	1.00	12/19/2000 15:17	
1,2,4-Trichlorobenzene	ND	1.0	ug/L	1.00	12/19/2000 15:17	
1,1,1-Trichloroethane	ND	1.0	ug/L	1.00	12/19/2000 15:17	
1,1,2-Trichloroethane	ND	1.0	ug/L	1.00	12/19/2000 15:17	
Trichloroethene	ND	1.0	ug/L	1.00	12/19/2000 15:17	
Trichlorofluoromethane	ND	1.0	ug/L	1.00	12/19/2000 15:17	
1,2,3-Trichloropropane	ND	1.0	ug/L	1.00	12/19/2000 15:17	
Trichlorotrifluoroethane	ND	5.0	ug/L	1.00	12/19/2000 15:17	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	1.00	12/19/2000 15:17	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	1.00	12/19/2000 15:17	
Vinyl acetate	ND	25	ug/L	1.00	12/19/2000 15:17	
Vinyl chloride	ND	1.0	ug/L	1.00	12/19/2000 15:17	
Total xylenes	ND	1.0	ug/L	1.00	12/19/2000 15:17	
<i>Surrogate(s)</i>						
4-Bromofluorobenzene	99.8	86-115	%	1.00	12/19/2000 15:17	
1,2-Dichloroethane-d4	106.5	76-114	%	1.00	12/19/2000 15:17	
Toluene-d8	99.8	88-110	%	1.00	12/19/2000 15:17	

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# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: Chow Engineering, Inc  
Attn.: Lisa Kimura

Test Method: 8260B  
Prep Method: 5030B

## Batch QC Report Volatile Organic Compounds by 8260B

Method Blank	Water	QC Batch # 2000/12/19-01.07
MB: 2000/12/19-01.07-004		Date Extracted: 12/19/2000 10:45

Compound	Result	Rep.Limit	Units	Analyzed	Flag
MTBE	ND	5.0	ug/L	12/19/2000 10:45	
Acetone	ND	50	ug/L	12/19/2000 10:45	
Benzene	ND	1.0	ug/L	12/19/2000 10:45	
Bromodichloromethane	ND	1.0	ug/L	12/19/2000 10:45	
Bromobenzene	ND	1.0	ug/L	12/19/2000 10:45	
Bromochloromethane	ND	1.0	ug/L	12/19/2000 10:45	
Bromoform	ND	1.0	ug/L	12/19/2000 10:45	
Bromomethane	ND	5.0	ug/L	12/19/2000 10:45	
2-Butanone(MEK)	ND	50	ug/L	12/19/2000 10:45	
n-Butylbenzene	ND	1.0	ug/L	12/19/2000 10:45	
sec-Butylbenzene	ND	1.0	ug/L	12/19/2000 10:45	
tert-Butylbenzene	ND	1.0	ug/L	12/19/2000 10:45	
Carbon disulfide	ND	5.0	ug/L	12/19/2000 10:45	
Carbon tetrachloride	ND	1.0	ug/L	12/19/2000 10:45	
Chlorobenzene	ND	1.0	ug/L	12/19/2000 10:45	
Chloroethane	ND	1.0	ug/L	12/19/2000 10:45	
2-Chloroethylvinyl ether	ND	5.0	ug/L	12/19/2000 10:45	
Chloroform	ND	1.0	ug/L	12/19/2000 10:45	
Chloromethane	ND	1.0	ug/L	12/19/2000 10:45	
2-Chlorotoluene	ND	1.0	ug/L	12/19/2000 10:45	
4-Chlorotoluene	ND	1.0	ug/L	12/19/2000 10:45	
Dibromochloromethane	ND	1.0	ug/L	12/19/2000 10:45	
1,2-Dichlorobenzene	ND	1.0	ug/L	12/19/2000 10:45	
1,3-Dichlorobenzene	ND	1.0	ug/L	12/19/2000 10:45	
1,4-Dichlorobenzene	ND	1.0	ug/L	12/19/2000 10:45	
1,3-Dichloropropane	ND	1.0	ug/L	12/19/2000 10:45	
2,2-Dichloropropane	ND	1.0	ug/L	12/19/2000 10:45	
1,1-Dichloropropene	ND	1.0	ug/L	12/19/2000 10:45	
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	12/19/2000 10:45	
1,2-Dibromoethane	ND	1.0	ug/L	12/19/2000 10:45	
Dibromomethane	ND	1.0	ug/L	12/19/2000 10:45	
Dichlorodifluoromethane	ND	1.0	ug/L	12/19/2000 10:45	
1,1-Dichloroethane	ND	1.0	ug/L	12/19/2000 10:45	
1,2-Dichloroethane	ND	1.0	ug/L	12/19/2000 10:45	
1,1-Dichloroethene	ND	1.0	ug/L	12/19/2000 10:45	
cis-1,2-Dichloroethene	ND	1.0	ug/L	12/19/2000 10:45	
trans-1,2-Dichloroethene	ND	1.0	ug/L	12/19/2000 10:45	
1,2-Dichloropropane	ND	1.0	ug/L	12/19/2000 10:45	
cis-1,3-Dichloropropene	ND	1.0	ug/L	12/19/2000 10:45	
trans-1,3-Dichloropropene	ND	1.0	ug/L	12/19/2000 10:45	
Ethylbenzene	ND	1.0	ug/L	12/19/2000 10:45	
Hexachlorobutadiene	ND	1.0	ug/L	12/19/2000 10:45	
2-Hexanone	ND	50	ug/L	12/19/2000 10:45	

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# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: **Chow Engineering, Inc**  
Attn.: Lisa Kimura

Test Method: 8260B  
Prep Method: 5030B

**Batch QC Report**  
Volatile OrganicCompounds by 8260B

<b>Method Blank</b>	<b>Water</b>	<b>QC Batch # 2000/12/19-01.07</b>
MB: 2000/12/19-01.07-004		Date Extracted: 12/19/2000 10:45

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Isopropylbenzene	ND	1.0	ug/L	12/19/2000 10:45	
p-Isopropyltoluene	ND	1.0	ug/L	12/19/2000 10:45	
Methylene chloride	ND	5.0	ug/L	12/19/2000 10:45	
4-Methyl-2-pentanone (MIBK)	ND	50	ug/L	12/19/2000 10:45	
Naphthalene	ND	1.0	ug/L	12/19/2000 10:45	
n-Propylbenzene	ND	1.0	ug/L	12/19/2000 10:45	
Styrene	ND	1.0	ug/L	12/19/2000 10:45	
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	12/19/2000 10:45	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	12/19/2000 10:45	
Tetrachloroethene	ND	1.0	ug/L	12/19/2000 10:45	
Toluene	ND	1.0	ug/L	12/19/2000 10:45	
1,2,3-Trichlorobenzene	ND	1.0	ug/L	12/19/2000 10:45	
1,2,4-Trichlorobenzene	ND	1.0	ug/L	12/19/2000 10:45	
1,1,1-Trichloroethane	ND	1.0	ug/L	12/19/2000 10:45	
1,1,2-Trichloroethane	ND	1.0	ug/L	12/19/2000 10:45	
Trichloroethene	ND	1.0	ug/L	12/19/2000 10:45	
Trichlorofluoromethane	ND	1.0	ug/L	12/19/2000 10:45	
1,2,3-Trichloropropane	ND	1.0	ug/L	12/19/2000 10:45	
Trichlorotrifluoroethane	ND	5.0	ug/L	12/19/2000 10:45	
1,2,4-Trimethylbenzene	ND	1.0	ug/L	12/19/2000 10:45	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	12/19/2000 10:45	
Vinyl acetate	ND	25	ug/L	12/19/2000 10:45	
Vinyl chloride	ND	1.0	ug/L	12/19/2000 10:45	
Total xylenes	ND	1.0	ug/L	12/19/2000 10:45	
<b>Surrogate(s)</b>					
4-Bromofluorobenzene	101.4	86-115	ug/L	12/19/2000 10:45	
1,2-Dichloroethane-d4	104.7	76-114	ug/L	12/19/2000 10:45	
Toluene-d8	101.7	88-110	ug/L	12/19/2000 10:45	

1220 Quarry Lane \* Pleasanton, CA 94566-4755  
Telephone (925) 484-1919 \* Facsimile (925) 484-1096



# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: Chow Engineering, Inc

Test Method: 8260B

Attn: Lisa Kimura

Prep Method: 5030B

## Batch QC Report

Volatile Organic Compounds by 8260B

Laboratory Control Spike (LCS/LCSD)		Water		QC Batch # 2000/12/19-01.07	
LCS:	2000/12/19-01.07-002	Extracted:	12/19/2000 09:33	Analyzed	12/19/2000 09:33
LCSD:	2000/12/19-01.07-003	Extracted:	12/19/2000 10:12	Analyzed	12/19/2000 10:12

Compound	Conc. [ug/L]		Exp. Conc. [ug/L]		Recovery [%]			RPD		Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	RPD	Recovery	RPD	LCS	LCSD		
Benzene	43.0	41.6	50.0	50.0	86.0	83.2	3.3	69-129	20				
Chlorobenzene	44.2	41.7	50.0	50.0	88.4	83.4	5.8	61-121	20				
1,1-Dichloroethene	40.8	39.5	50.0	50.0	81.6	79.0	3.2	65-125	20				
Toluene	44.2	42.8	50.0	50.0	88.4	85.6	3.2	70-130	20				
Trichloroethene	43.0	41.4	50.0	50.0	86.0	82.8	3.8	74-134	20				
<b>Surrogate(s)</b>													
4-Bromofluorobenzene	495	505	500	500	99.0	101.0		86-115					
1,2-Dichloroethane-d4	531	515	500	500	106.2	103.0		76-114					
Toluene-d8	498	512	500	500	99.6	102.4		88-110					

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 Telephone (925) 484-1919 \* Facsimile (925) 464-1096

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

Gas/BTEX

**Chow Engineering, Inc**

✉ 7700 Edgewater Dr # 729  
Oakland, CA 94621

Attn: Lisa Kimura

Phone: (510) 636-8500 Fax: (510) 636-8544

Project #: 2R-1121

Project: Housewives Market

## Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
TRIP BLANK	Water	12/08/2000	5

1220 Quarry Lane \* Pleasanton, CA 94566-4756  
Telephone: (925) 484-1919 \* Facsimile: (925) 484-1096

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: Chow Engineering, Inc

Test Method: 8020  
8015M

Attn.: Lisa Kimura

Prep Method: 5030

Gas/BTEX

Sample ID: TRIP BLANK	Lab Sample ID: 2000-12-0188-005
Project: 2R-1121 Housewives Market	Received: 12/08/2000 18:30
Sampled: 12/08/2000	Extracted: 12/12/2000 00:38
Matrix: Water	QC-Batch: 2000/12/11-01.01

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	12/12/2000 00:38	
Benzene	ND	0.50	ug/L	1.00	12/12/2000 00:38	
Toluene	ND	0.50	ug/L	1.00	12/12/2000 00:38	
Ethyl benzene	ND	0.50	ug/L	1.00	12/12/2000 00:38	
Xylene(s)	ND	0.50	ug/L	1.00	12/12/2000 00:38	
<b>Surrogate(s)</b>						
Trifluorotoluene	87.1	58-124	%	1.00	12/12/2000 00:38	
4-Bromofluorobenzene-FID	89.8	50-150	%	1.00	12/12/2000 00:38	

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: Chow Engineering, Inc

Test Method: 8015M

8020

Attn.: Lisa Kimura

Prep Method: 5030

## Batch QC Report Gas/BTEX

Method Blank	Water	QC Batch # 2000/12/11-01.01
MB: 2000/12/11-01.01-010		Date Extracted: 12/11/2000 11:59

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	50	ug/L	12/11/2000 11:59	
Benzene	ND	0.5	ug/L	12/11/2000 11:59	
Toluene	ND	0.5	ug/L	12/11/2000 11:59	
Ethyl benzene	ND	0.5	ug/L	12/11/2000 11:59	
Xylene(s)	ND	0.5	ug/L	12/11/2000 11:59	
<b>Surrogate(s)</b>					
Trifluorotoluene	99.6	58-124	ug/L	12/11/2000 11:59	
4-Bromofluorobenzene-FID	89.4	50-150	ug/L	12/11/2000 11:59	

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: Chow Engineering, Inc

Test Method: 8020

Attn: Lisa Kimura

Prep Method: 5030

## Batch QC Report

Gas/BTEX

Laboratory Control Spike (LCS/LCSD)		Water		QC Batch # 2000/12/11-01.01	
LCS:	2000/12/11-01.01-006	Extracted:	12/11/2000 09:49	Analyzed	12/11/2000 09:49
LCSD:	2000/12/11-01.01-007	Extracted:	12/11/2000 10:21	Analyzed	12/11/2000 10:21

Compound	Conc. [ug/L]		Exp. Conc. [ug/L]		Recovery [%]		RPD [%]	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Benzene	105	106	100.0	100.0	105.0	106.0	0.9	77-123	20		
Toluene	94.6	97.2	100.0	100.0	94.6	97.2	2.7	78-122	20		
Ethyl benzene	102	102	100.0	100.0	102.0	102.0	0.0	70-130	20		
Xylene(s)	303	309	300	300	101.0	103.0	2.0	75-125	20		
<b>Surrogate(s)</b>											
Trifluorotoluene	498	513	500	500	99.6	102.6		58-124			

1220 Quarry Lane \* Pleasanton, CA 94566-4776  
 Telephone (925) 484-1919 \* Facsimile (925) 484-1996

# CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-12-0188

To: Chow Engineering, Inc

Test Method: 8015M  
8020

Attn: Lisa Kimura

Prep Method: 5030

## Batch QC Report

Gas/BTEX

Laboratory Control Spike (LCS/LCSD)	Water	QC Batch # 2000/12/11-01.01
LCS: 2000/12/11-01.01-008	Extracted: 12/11/2000 10:54	Analyzed 12/11/2000 10:54
LCSD: 2000/12/11-01.01-009	Extracted: 12/11/2000 11:27	Analyzed 12/11/2000 11:27

Compound	Conc. [ug/L]		Exp. Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Gasoline	448	503	500	500	89.6	100.6	11.6	75-125	20		
<b>Surrogate(s)</b>											
4-Bromofluorobenzene-FI	357	420	500	500	71.4	84.0		50-150			

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Telephone (925) 484-1919 \* Facsimile (925) 484-1096

# CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

1220 Quarry Lane • Pleasanton, California 94566-4756

(925) 484-1919 • Fax (925) 484-1096

Reference #: 52276  
**Chain of Custody**

DATE 12/1/00 PAGE 1 OF 1

FROM : CHOW ENGINEERING, INC.

FAX NO. : 510 636-8544

Dec. 08 2000 01:58PM P2

SAMPLE ID		RATE	TIME	MATRIX	PRESERV.	TPH-EPA 8015, 8020	PURGEABLE AROMATICS BTEX (EPA 8020)	TPH-Diesel (EPA 8015M)	TPH (EPA 8015M)	Diesel C.M.O. Other	PURGEABLE HALOCARBONS (BVOCs) (EPA 8010)	VOLATILE ORGANICS (VOCs) (EPA 8260)	SEMI-VOLATILES (EPA 8270)	Oil & Grease	Petrol Total (EPA 1664)	TPH as Manganese Sulfide	PESTICIDES (EPA 8080)	PCB'S (EPA 8080)	PNA by E 8270	E 8310	Spec Cond	DISS	DISS	LUFT METALS: Cd, Cr, Pb, Ni, Zn	CAM 17 METALS (EPA 6010, 7470, 7471)	TOTAL LEAD	D.V.L.T. (STIC) STCP	Beryllium Chromium	PH (24 hr hold time for 820)	TPH	NUMBER OF CONTAINERS	
B-1 @ 1'	12/7/00	8916	Soil	Coal																												
B-2 @ 1'	12/7/00	1103																														
B-3 @ 1'	12/7/00	1309																														
B-3 @ 20'	12/7/00	1429																														
B-3 @ 25'	12/7/00	1455										X																				
B-3 @ 30'	12/7/00																															
B-3 @ 35'	12/7/00																															
B-3 @ 40'	12/7/00																															
B-3 @ 45'	12/7/00																															
B-3 @ 50'	12/7/00																															
B-3 @ 55'	12/7/00																															
B-3 @ 60'	12/7/00																															
B-3 @ 65'	12/7/00																															
B-3 @ 70'	12/7/00																															
B-3 @ 75'	12/7/00																															
B-3 @ 80'	12/7/00																															
B-3 @ 85'	12/7/00																															
B-3 @ 90'	12/7/00																															
B-3 @ 95'	12/7/00																															
B-3 @ 100'	12/7/00																															

PREPARED INFORMATION		SAMPLE RECEIPT		1		2		3	
DIRECTOR		TOTAL NO OF CONTAINERS		REQUISITIONED BY		REQUISITIONED BY		REQUISITIONED BY	
035000's MARIAGE		HEAD SPACE		M. W. Brown Jr.					
030000's MARIAGE		TEMPERATURE		(SIGNATURE) (DATE)		(SIGNATURE) (DATE)		(SIGNATURE) (DATE)	
030000's MARIAGE		CONTENTS TO RECORD		MARIAGE W. D. BROWN					
030000's MARIAGE		24 48 72 OTHER		(PRINTED NAME) (DATE)		(PRINTED NAME) (DATE)		(PRINTED NAME) (DATE)	
030000's MARIAGE				C. S. S. ENTER. 01/28/00					
030000's MARIAGE				(COMPANY)		(COMPANY)		(COMPANY)	
030000's MARIAGE				RECEIVED BY		RECEIVED BY		RECEIVED BY	
030000's MARIAGE				J. F. Kim				Chris Rowley 12/1/00	
030000's MARIAGE				(SIGNATURE) (DATE)		(SIGNATURE) (DATE)		(SIGNATURE) (DATE)	
030000's MARIAGE				Lisa Kimura				Chris Rowley 12/1/00	
030000's MARIAGE				(PRINTED NAME) (DATE)		(PRINTED NAME) (DATE)		(PRINTED NAME) (DATE)	
030000's MARIAGE				C. S. S. ENTER. 12/1/00				Chris Rowley 12/1/00	
030000's MARIAGE				(COMPANY)		(COMPANY)		(COMPANY)	

# CHROMALAB, INC.

1220 Quarry Lane • Pleasanton, California 94566-4756

Reference #: 56700

## Chain of Custody

Environmental Services (SDB) (DOLIS 1094)

(925) 484-1919 • Fax (925) 484-2005  
**2000-12-0188**

DATE 12/8/00 PAGE 1 OF 3

PROJECT INFORMATION					ANALYSIS REPORT													NUMBER OF CONTAINERS							
PROJ MGR	COMPANY	ADDRESS	SAMPLERS (SIGNATURE)	(PHONE NO)	TPH (EPA 8015, 8020) <input checked="" type="checkbox"/> Gas w/ BTEX <input type="checkbox"/> DMTBE	PURGEABLE AROMATICS BTEX (EPA 8020)	TPH-Diesel (EPA 8015M)	TEPH (EPA 8015M) <input type="checkbox"/> Diesel <input checked="" type="checkbox"/> M.O. <input type="checkbox"/> Other	PURGEABLE HALOCARBONS (HVOCs) (EPA 8010)	VOLATILE ORGANICS (VOCs) (EPA 8260)	SEMI-VOLATILES (EPA 8270)	Oil & Grease <input type="checkbox"/> Petrol <input type="checkbox"/> Total <input type="checkbox"/> 1664	TPH as Murex Spins	<input type="checkbox"/> PESTICIDES (EPA 8080) <input type="checkbox"/> PCB'S (EPA 8080)	PNA's by <input type="checkbox"/> 8270 <input type="checkbox"/> 8310	<input type="checkbox"/> Spec. Comb. <input type="checkbox"/> TDS	LUFT METALS: Cd, Cr, Pb, Ni, Zn		CAM 17 METALS (EPA 6010/7470/7471)	TOTAL LEAD	D.W.E.T. (STLC) <input type="checkbox"/> TCLP	<input type="checkbox"/> Hexavalent Chromium <input type="checkbox"/> pH (24 hr hold time for H2O)	EPA 8260B PAHs		
SAMPLE ID	DATE	TIME	MATRIX	PRESERV.																					
SB-1-GW	12/8/00	0951	WATER	HCL CON	<input checked="" type="checkbox"/>									<input checked="" type="checkbox"/>											5
SB-2-GW	12/8/00	1156			<input checked="" type="checkbox"/>									<input checked="" type="checkbox"/>											5
SB-3-GW	12/8/00	0750			<input checked="" type="checkbox"/>									<input checked="" type="checkbox"/>											5
SB-4-GW	12/8/00	1500			<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>											5
SB-5-GW	12/8/00				<input checked="" type="checkbox"/>									<input checked="" type="checkbox"/>				DELETED	MB	12/8/00					
SB-6-GW	12/8/00				<input checked="" type="checkbox"/>									<input checked="" type="checkbox"/>				DELETED	MB	12/8/00					
SB-7-GW	12/8/00				<input checked="" type="checkbox"/>									<input checked="" type="checkbox"/>				DELETED	MB	12/8/00					
SB-8-GW	12/8/00				<input checked="" type="checkbox"/>									<input checked="" type="checkbox"/>				DELETED	MB	12/8/00					
SUBP TRIP Blank				HCL CON	<input checked="" type="checkbox"/>									<input checked="" type="checkbox"/>											1

PROJECT INFORMATION					SAMPLE RECEIPT				RELINQUISHED BY 1		RELINQUISHED BY 2		RELINQUISHED BY 3		
PROJECT NAME	Hessman Max				TOTAL NO. OF CONTAINERS	25			SIGNATURE	(TIME)	SIGNATURE	(TIME)	SIGNATURE	(TIME)	
PROJECT NUMBER	2R-1121				HEAD SPACE				(SIGNATURE)	(TIME)	(SIGNATURE)	(TIME)	(SIGNATURE)	(TIME)	
P.O.#	2-1185				TEMPERATURE	4.0			(PRINTED NAME)	(DATE)	(PRINTED NAME)	(DATE)	(PRINTED NAME)	(DATE)	
TAT	STANDARD	5 DAY		<input checked="" type="checkbox"/>	CONFORMS TO RECORD	24	48	72	OTHER	(COMPANY)	(COMPANY)	(COMPANY)	(COMPANY)	(DATE)	
SPECIAL INSTRUCTIONS/COMMENTS									RECEIVED BY 1	RECEIVED BY 2	RECEIVED BY (LABORATORY) 3				
Report: <input type="checkbox"/> Routine <input type="checkbox"/> Level 2 <input type="checkbox"/> Level 3 <input type="checkbox"/> Level 4 <input type="checkbox"/> Electronic Report									SIGNATURE	(TIME)	SIGNATURE	(TIME)	SIGNATURE	(TIME)	(DATE)
Fax results to Mr. ABOVE									(PRINTED NAME)	(DATE)	(PRINTED NAME)	(DATE)	(PRINTED NAME)	(DATE)	
									(COMPANY)	(COMPANY)	(COMPANY)	(COMPANY)	(DATE)		



# CHROMALAB, INC.

1220 Quarry Lane • Pleasanton, California 94566-4756

Reference #: \_\_\_\_\_

## Chain of Custody

Environmental Services (SDB) (DOHS 1094)

(925) 484-1919 • Fax (925) 484-1995  
**2000-12-0188**

DATE 12/5/00 PAGE 2 OF 3

PROJECT INFORMATION					ANALYSIS REPORT												NUMBER OF CONTAINERS					
PROJ MGR <u>Maurice W Brown</u> COMPANY <u>Chow Eng Co</u> ADDRESS <u>1700 Housensin Drive, W 729</u> <u>Channah CA 94621</u> SAMPLERS (SIGNATURE) <u>Murphy</u> (PHONE NO.) <u>510-636-8500</u> (FAX NO.) <u>510-636-8544</u>					TPH-EPA 8015,8020 <input checked="" type="checkbox"/> Gas w/ <input checked="" type="checkbox"/> BTEX DMTE	PURGEABLE AROMATICS BTEX (EPA 8020)	TPH-Diesel (EPA 8015M)	TEPH (EPA 8015M) <input type="checkbox"/> Diesel <input type="checkbox"/> M.O. <input type="checkbox"/> Other	PURGEABLE HALOCARBONS (BVOCs) (EPA 8010)	VOLATILE ORGANICS (VOCs) (EPA 8260)	SEMIVOLATILES (EPA 8270)	Oil & Grease Petrol <input type="checkbox"/> Total <input type="checkbox"/> 1664	<u>MH AS MEXICAL SPIRITS</u> <input type="checkbox"/> PESTICIDES (EPA 8080) <input type="checkbox"/> PCB'S (EPA 8080)	PNA's by <input type="checkbox"/> 8270 <input type="checkbox"/> 8310	<input type="checkbox"/> Spec. Cond. <input type="checkbox"/> TSS <input type="checkbox"/> TDS	LUFT METALS: Cd, Cr, Pb, Ni, Zn	CAM 17 METALS (EPA 6010/7470/7471)	TOTAL LEAD	<input type="checkbox"/> W.E.I. (SILC) <input type="checkbox"/> TCLP	<input type="checkbox"/> Hexavalent Chromium <input type="checkbox"/> pH (24 hr hold time for H2O)	EPA 8260B For Scan TEST	NUMBER OF CONTAINERS
SAMPLE ID	DATE	TIME	MATRIX	PRESERV.																		
B-1 @ 14'	12/5/00	1119	Soil	Cond	✓																	
B-2 @ 14' 15'	12/5/00	1153			✓																	
B-3 @ 14'	12/5/00	1200			✓																	
B-4 @ 3'	12/5/00	1300			✓																	
B-5 @ 0.5'	12/5/00	1500			✓																	
B-4 @ 25'	12/8/00	1410			✓																	
B-2 @ 25'	12/8/00	1022			✓																	
B-1 @ 25'	12/8/00	0910			✓																	

PROJECT INFORMATION				SAMPLE RECEIPT				RELINQUISHED BY 1		RELINQUISHED BY 2		RELINQUISHED BY 3	
PROJECT NAME <u>Housensin Market</u> PROJECT NUMBER <u>2R-1121</u> PO # <u>2-1185</u> TAT <input type="checkbox"/> STANDARD 5 DAY <input checked="" type="checkbox"/>				TOTAL NO. OF CONTAINERS _____ HEAD SPACE _____ TEMPERATURE _____ CONFORMS TO RECORD <input type="checkbox"/>				SIGNATURE <u>Murphy</u> (TIME) _____ MAURICE W BROWN JR (DATE) _____ CHOW ENGR (COMPANY) _____		SIGNATURE <u>Lisa Kimura</u> (TIME) <u>6:30</u> LISA KIMURA (DATE) _____ CHOW ENGR (COMPANY) _____		SIGNATURE _____ (TIME) _____ (PRINTED NAME) _____ (DATE) _____ (COMPANY) _____	
SPECIAL INSTRUCTIONS/COMMENTS Report <input type="checkbox"/> Routine <input type="checkbox"/> Level 2 <input type="checkbox"/> Level 3 <input type="checkbox"/> Level 4 <input type="checkbox"/> Electronic Report Fax results to No 1100JE Hold samples, 6-8 until notified.				RECEIVED BY 1 SIGNATURE <u>Lisa Kimura</u> (TIME) _____ LISA KIMURA (DATE) _____ CHOW ENGR (COMPANY) _____		RECEIVED BY 2 SIGNATURE _____ (TIME) _____ (PRINTED NAME) _____ (DATE) _____ (COMPANY) _____		RECEIVED BY (LABORATORY) 3 SIGNATURE <u>Denise Harrington</u> (TIME) <u>1830</u> D. Harrington (DATE) _____ Chromalab (COMPANY) _____					



**Chow Engineering, Inc**  
7700 Edgewater Dr # 729  
Oakland, CA 94621

Attn.: Lisa Kimura

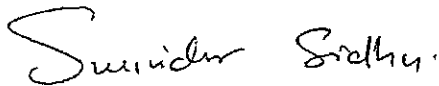
Project: 2R-1121  
Housewives Market

Dear Lisa

Attached is our report for your samples received on Friday December 8, 2000  
This report has been reviewed and approved for release. Reproduction of this report  
is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after January 22, 2001  
unless you have requested otherwise. We appreciate the opportunity to be of service to you.  
If you have any questions, please call me at (925) 484-1919. You can also contact me via email.  
My email address is: [ssidhu@chromalab.com](mailto:ssidhu@chromalab.com)

Sincerely,



Surinder Sidhu

To: **Chow Engineering, Inc**

Attn: Lisa Kimura

Test Method: 8015M

Prep Method: 3510/8015M  
3550/8015M

## Legend & Notes

### Total Extractable Petroleum Hydrocarbons (TEPH)

#### Analysis Notes

SB-3-GW ( Lab# 2000-12-0188-003 )

nmsp= compounds reported are in this range and do not match our Mineral Spirits standard.

#### Analysis Flags

rl

Reporting limits raised due to reduced sample size.

#### Analyte Flags

nhc

Compounds reported are in this range but they do not exhibit a pattern characteristic of petroleum hydrocarbon.



CHOW ENGINEERING, INC.

**F A X**

**Date:** December 08, 2000

**Number of pages including cover sheet** 2

**TO:** ChromaLab  
Attn: Vincent

**FROM:** Lisa Kimura  
Chow Engineering, Inc.  
7700 Edgewater Dr. # 729  
Oakland, CA 94621

**Phone:** 925-484-1919  
**Fax Phone:** 925-484-1096

**Phone:** (510) 636-8500 Ext.  
**Fax Phone:** (510) 636-8544

**CC:** \_\_\_\_\_

**REMARKS:**  Urgent  For your review  Reply ASAP  Please Comment

Reference Chain of Custody: 56276

For sample SB-3 @ 25', please change the analyses to TPH-gas, TPH-mineral spirits, and VOCs 8260.

Please let me know if there are any questions.

Lisa Kimura  
Project Manager

**SAMPLE STATUS CHANGE FORM**

Submission#	Client Samp.ID	Old Status Description	Description of Changes
2010-12-0170 #4	SB-3@20'	Run <u>C19S/BT2/</u> <u>TEPH</u>	Hold
			Done Extra <sup>n</sup>

Requested by  
(Client's name)  
LISA - KIMM...

Changes were done in lims by(login): Salhu On: 12/11/10

CC:  Lab.Director  Dept.manager  Analyst  Proj.Manager

SAMPLE STATUS CHANGE FORM

Submission#	Client Samp.ID	Old Status Description	Description of Changes
2010-12-0170 #4	SB-3@20 <sup>1</sup>	Run Gas/BTEX/ TEPH	Hold
			gas/BTEX Done too

Requested by  
(Client's name)  
Lisa - Kimmerly

Changes were done in lims by(login): Saha On: 12/11/10

CC:  Lab. Director  Dept. manager  Analyst  Proj. Manager

SAMPLE STATUS CHANGE FORM

Requested by  
(Client's name)

Lisa - Kranley

Submission#	Client Samp.ID	Old Status Description	Description of Changes
<u>2010-12-0170</u> <u>#4</u>	<u>SB-3@20'</u>	<u>Run <u>Cms/1512/</u> <u>TEPH</u></u>	<u>Hold</u>
<u>No change was made on this sample</u>			
<u>SS</u>			
<u>12/11/10</u>			

Changes were done in lims by(login): Salhu On: 12/11/10

CC:  Lab.Director  Dept.manager  Analyst  Proj.Manager



**SAMPLE STATUS CHANGE FORM**

Requested by  
(Client's name)

Submission#	Client Samp.ID	Old Status Description	Description of Changes
2000-12-0188	Trip Blank	G/B	On Hold
↓	SB525 SB325 SB125 SB225	Hold	Composite & run for GAS/BTEX/MTBE TEPH as Mineral Spirits
2000-12-0170	SB3220	G/B TEPH	On Hold

(how

↓

Changes were done in lms by(login):

Menares

On:

12/1/00

CC:  Lab. Director  Dept. manager  Analyst  Proj. Manager

# CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

1220 Quarry Lane • Pleasanton, California 94566-4756

(925) 484-1919 • Fax (925) 484-1096

**2000-12-0170**

Reference No. *06110*

## Chain of Custody

DATE 12/1/00 PAGE 1 OF 1

PROJ. MGR					ANALYSIS REPORT												NUMBER OF CONTAINERS					
COMPANY					TPH (EPA 8015, 8020) <input type="checkbox"/> Gas w/ <input checked="" type="checkbox"/> BTEX DMTE	PURGEABLE AROMATICS BTEX (EPA 8020)	TPH-Diesel (EPA 8015M)	TEPB (EPA 8015M) <input type="checkbox"/> Diesel <input type="checkbox"/> M.O. <input type="checkbox"/> Other	PURGEABLE HALOCARBONS, (HVOCS) (EPA 8010)	VOLATILE ORGANICS (VOCs) (EPA 8260)	SEMI-VOLATILES (EPA 8270)	Oil & Grease Petrol <input type="checkbox"/> Total <input type="checkbox"/> 1,664	TPH AS MINERAL SPIRITS	<input type="checkbox"/> PESTICIDES (EPA 8080) <input type="checkbox"/> PCB'S (EPA 8080)	PNA's by <input type="checkbox"/> 8270 <input type="checkbox"/> 8310	<input type="checkbox"/> Spec. Cond. <input type="checkbox"/> TSS <input type="checkbox"/> TDS		LUFT METALS: Cd, Cr, Pb, Ni, Zn	CAM 17 METALS (EPA 8010/7470/7471)	TOTAL LEAD	EW L.I. (STLC) ETCLP	<input type="checkbox"/> Resonant Caronum <input type="checkbox"/> pH (24 hr hold time for 120)
ADDRESS																						
PROJ. MGR <u>Maurice W. Basso Jr.</u>					ADDRESS <u>7700 EDGEWATER DR, #729</u>					ADDRESS <u>OAKLAND, CA 94621</u>												
SAMPLERS (SIGNATURE) <u>MW Basso Jr.</u>					(PHONE NO.) <u>510) 476-8500</u>					(FAX NO.) <u>510) 476-8500</u>												
SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.																		
SB-1 @ 1'	12/7/00	0916	Soil	Cool																		
SB-2 @ 1'	12/7/00	1103																				
SB-3 @ 1'	12/7/00	1309																				
SB-3 @ 20'	12/7/00	1429																				
SB-3 @ 25'	12/7/00	1455																				
<del>SB-4 @ 1'</del>	<del>12/7/00</del>				DELETED MB 12/8/00																	
<del>SB-4 @ 20'</del>	<del>12/7/00</del>				DELETED MB 12/8/00																	
<del>SB-4 @ 25'</del>	<del>12/7/00</del>				DELETED MB 12/8/00																	
<del>SB-4 @ 30'</del>	<del>12/7/00</del>				DELETED MB 12/8/00																	

PROJECT INFORMATION				SAMPLE RECEIPT				RELINQUISHED BY 1		RELINQUISHED BY 2		RELINQUISHED BY 3	
PROJECT NAME: <u>Housewife's Market</u>				TOTAL NO. OF CONTAINERS				SIGNATURE <u>MW Basso Jr.</u>		SIGNATURE		SIGNATURE	
PROJECT NUMBER <u>ZR-1121</u>				HEAD SPACE				(TIME)		(TIME)		(TIME)	
P.O. #				TEMPERATURE <u>3.4</u>				(DATE)		(DATE)		(DATE)	
CONFORMS TO RECORD				OTHER				PRINTED NAME <u>Maurice W. Basso Jr.</u>		PRINTED NAME		PRINTED NAME	
TAT				STANDARD 5-DAY <input checked="" type="checkbox"/>				COMPANY <u>Chromalab, Inc.</u>		COMPANY		COMPANY	
SPECIAL INSTRUCTIONS/COMMENTS: <u>Report: <input type="checkbox"/> Routine <input type="checkbox"/> Level 2 <input type="checkbox"/> Level 3 <input type="checkbox"/> Level 4 <input type="checkbox"/> Electronic Report</u>				RECEIVED BY 1 <u>Lisa Kimura</u>				RECEIVED BY 2 <u>Chris Rowley</u>		RECEIVED BY 3 <u>Chris Rowley</u>		RECEIVED BY 4 <u>Chris Rowley</u>	
<u>Fix results to No. ABOVE</u>				SIGNATURE <u>Lisa Kimura</u>				SIGNATURE <u>Chris Rowley</u>		SIGNATURE <u>Chris Rowley</u>		SIGNATURE <u>Chris Rowley</u>	
				PRINTED NAME <u>Lisa Kimura</u>				PRINTED NAME <u>Chris Rowley</u>		PRINTED NAME <u>Chris Rowley</u>		PRINTED NAME <u>Chris Rowley</u>	
				COMPANY <u>Chromalab, Inc.</u>				COMPANY <u>Chromalab, Inc.</u>		COMPANY <u>Chromalab, Inc.</u>		COMPANY <u>Chromalab, Inc.</u>	

**SAMPLE STATUS CHANGE FORM**

Submission#	Client Samp.ID	Old Status Description	Description of Changes
2005-12-0184	Trip Blank	G/B	ON Hold
↓	SB525 SB325 SB125 SB225	Hold	Composite & run for GAS/BTEX/MTBE TEPH as Mineral spirits
200-12-0170	SB3220	G/B TEPH	On Hold

Requested by  
(Client's name)

(how



Changes were done in lims by(login): Amara On: 12/1/11

CC:  Lab.Director  Dept.manager  Analyst  Proj.Manager

**SAMPLE STATUS CHANGE FORM**

Submission#	Client Samp.ID	Old Status Description	Description of Changes
200 - 2-0188	SB-1-GW	gas + BTRep	only Gasoline
	SB-2-GW	↓	Report only gasoline
	SB-3-GW		↓
	SB-4-GW		

Requested by  
(Client's name)  
Lisa Powell

↓

Changes were done in lms by(login): S Selva On: 12/1/20

CC:  Lab.Director  Dept.manager  Analyst  Proj.Manager



CHOW ENGINEERING, INC.

**F A X**Date: 19 DEC 00

Number of pages including cover sheet \_\_\_\_\_

TO: Chroma Lab  
Attn: Surinder Sidhu

Phone: 925-484-1919  
Fax Phone: 925-484-1096

FROM: MAURICE BARON  
Chow Engineering, Inc.  
7700 Edgewater Dr. # 729  
Oakland, CA 94621

Phone: (510) 636-8500 Ext.  
Fax Phone: (510) 636-8544

CC: \_\_\_\_\_

REMARKS:  Urgent  For your review  Reply ASAP  Please Comment

Re: Reports 2000-12-0188 and 2000-12-0170

Samples SB-1-GW, SB-2-GW, SB-3-GW, and SB-4-GW were run for BTEX, however they were supposed to be run for VOCs 8260 (and appear on our invoice as VOCs). Please fax the 8260 results ASAP.

The trip blank should be run for TPH-gas and BTEX on a 48-hour turnaround

**CHROMALAB, INC.**

Environmental Service (SES)

**Sample Receipt Checklist**

Client Name: Chow Eng. Date Time Received: 12/08/00 1830  
Date Time

Reference, Supp #: 563.00/2000-12-008 Received by: DH

Checklist completed by: Rowley 12/11/00 Reviewed By: \_\_\_\_\_  
Signature Date Initial/Date

Matrix:  Soil  Water  Other \_\_\_\_\_ Carrier name: Client C.L. \_\_\_\_\_

- Shipping container, cooler in good condition? Yes  No \_\_\_\_\_ Not Present \_\_\_\_\_
- Custody seals intact on shipping container/cooler? Yes \_\_\_\_\_ No \_\_\_\_\_ Not Present
- Custody seals intact on sample bottles? Yes \_\_\_\_\_ No \_\_\_\_\_ Not Present
- Chain of custody present? Yes  No \_\_\_\_\_
- Chain of custody signed when relinquished and received? Yes  No \_\_\_\_\_
- Chain of custody agrees with sample labels? Yes \_\_\_\_\_ No
- Samples in proper container/bottle? Yes  No \_\_\_\_\_
- Sample containers intact? Yes  No \_\_\_\_\_
- Sufficient sample volume for indicated test? Yes  No \_\_\_\_\_
- All samples received within holding time? Yes  No \_\_\_\_\_
- Container/Temp Blank temperature in compliance? Temp: 4.0 °C Yes  No \_\_\_\_\_
- Water - VOA vials have zero headspace? No VOA vials submitted \_\_\_\_\_ Yes  No \_\_\_\_\_
- Water - pH acceptable upon receipt?  Yes  No  Checked by Voa chemist
- pH adjusted- Preservative used:  
 HNO<sub>3</sub>  HCl  H<sub>2</sub>SO<sub>4</sub>  NaOH  ZnOAc Lot#(s) \_\_\_\_\_

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted: \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted: \_\_\_\_\_  
Contacted by: \_\_\_\_\_ Regarding: \_\_\_\_\_  
Comments: SAMPLE ID ON CDC: SB-2 @ 15', labeled  
SB-2 @ 20'

