



Report of
Subsurface Investigation

Young's Cleaners
10700 MacArthur Blvd.
Oakland, California

December, 1994

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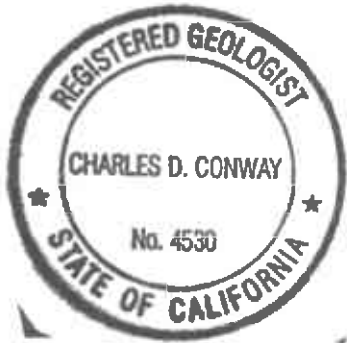
This report was prepared under the supervision of a registered geologist. All statements, conclusions, and recommendations are based solely upon field observations made by Augeas Corporation and upon available analytical results.

Site conditions are subject to change with time; therefore, our recommendations result only from the interpretation of present conditions and available site information. This report was prepared in accordance with accepted professional standards and technical procedures as certified below.

Reviewed by:

Charles D. Conway

Charles D. Conway, R.G. No. 4530



December 15, 1994

Date



TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
1.0 INTRODUCTION	1
1.1 Purpose and Scope of Work	1
2.0 SITE DESCRIPTION AND BACKGROUND	1
2.1 General	1
2.2 Regional Geology and Hydrogeology	2
3.0 FIELD ACTIVITIES	2
3.1 Rationale for Placement of Soil Borings and Wells	3
3.2 Drilling Permits and Utility Clearance	3
3.3 Site Health and Safety Plan	4
3.4 Soil Sampling and Excavation On-Site	4
3.5 Soil Boring and Well Installation	5
3.6 Soil Sampling	5
3.7 Ground Water Sampling	6
4.0 GEOLOGIC AND HYDROGEOLOGIC CONDITIONS	7
5.0 LABORATORY SAMPLE ANALYSIS	8
5.1 Soil Sample Results	8
5.2 Ground Water Sample Results	9
6.0 DISCUSSION OF ANALYTICAL RESULTS	10
6.1 Soil Conditions	10
6.1.2 Petroleum Hydrocarbons	10
6.1.3 Chlorinated Volatile Organic Compounds	10
6.2 Ground Water Conditions	10
6.1.2 Petroleum Hydrocarbons	10
6.2.3 Chlorinated Volatile Organic Compounds	10
7.0 CONCLUSIONS	11
8.0 RECOMMENDATIONS	12

LIST OF TABLES

- Table 1 Summary Soil Results from On-Site Excavation, June and July, 1994
- Table 2 Summary of Soil Analytical Results
- Table 3 Summary of Ground Water Analytical Results
- Table 4 Depths to Ground Water

TABLE OF CONTENTS (Continued)



LIST OF FIGURES

- Figure 1 Site Location Map
- Figure 2 Site and Boring Location Plan
- Figure 3 Site and Boring Location Plan Detail
- Figure 4 Proposed Soil Excavation Areas

LIST OF APPENDICES

- Appendix A Well Permits
Boring Logs
Well Construction Details
- Appendix B Ground Water Sampling Field Logs
Chain of Custody
Certified Analytical Reports



1.0 INTRODUCTION

The subject property (site) is located at 10700 MacArthur Boulevard, Unit #9, Oakland, California. The site location is shown on Figure 1, "Site Location Map". This report describes the activities and results of the field investigation performed at the site from September through November 1994. This work was performed in accordance with the Phase II work plan, prepared by Augeas Corporation, dated August 1994.

1.1 Purpose and Scope of Work

This work was completed by Augeas Corporation on behalf of our client, Richard Gilcrease. The purpose of this investigation was to assess the lateral and vertical extent of soils contaminated by chlorinated volatile organic compounds suspected to have originated from the operation of a dry cleaner located on the shopping center property in accordance with the Alameda County Health Care Services Agency (ACHSA) directives.

2.0 SITE DESCRIPTION AND BACKGROUND

2.1 General

Aerial photographs and site use records indicate that historical use of the site included a former truck manufacturing plant. Development of the property as a shopping center began in 1960.

Youngs Cleaners has operated at the site since 1984. A coin operated dry cleaner, Norge Cleaners, operated at the location between 1962 and 1980. In July 1980 the current owners took over management of the property.

In December 1980 the cleaners was placed on the CALSITES list for further evaluation. On October 1, 1993, Augeas Corporation contacted Mr. Don Cox, Unit Chief, Site Mitigation Branch, Site Evaluation Unit, Department of Toxic Substances Control, Berkeley, California concerning the status of the investigation. Mr. Cox indicated that the original site inspection "checklist" that had been filed showed that the site had been placed on the CALSITES list because of its SIC classification and not because of any identified contamination problems.

In January 1989, Western Geologic Resources (WGR) installed five monitoring wells on the shopping center property to characterize subsurface conditions and to collect soil and ground water samples. Wells WGR MW-2 and WGR MW-3 (Figure 2) are two of the wells they installed. Ground water samples collected from well WGR MW-3, located near the ARCO station, have contained detectable concentrations of benzene and chlorinated solvents. None of the recent ground water samples collected from well WGR MW-2 have contained detectable concentrations of any contaminants (see Section 5.2).



Further investigation at the ARCO station was conducted by RESNA Consultants between 1991 and 1993 to define the extent of gasoline contamination resulting from leakage of petroleum fuels. During their investigation, RESNA detected chlorinated solvents in several soil borings. On March 23, 1993, Alameda County Health Care Services Agency (ACHSA) requested that the vertical and lateral extent of perchloroethylene (PCE) contamination, discovered on the shopping center site by ARCO while investigating its release from adjacent underground tanks, be investigated by the shopping center owners. According to this correspondence from the ACHSA, "data generated by ARCO's investigation suggests that perchloroethylene (PCE) detected in ground water samples from their monitoring wells came from [the shopping center] site."

To verify the source and extent of PCE in the soil and ground water originating from the dry cleaner, Augeas Corporation submitted a Work Plan to the ACHSA in August, 1994, to conduct a site investigation at the subject site.

2.2 Regional Geology and Hydrogeology

The site is located within the East Bay plain, situated in the San Francisco Bay depression. The entire region is part of an irregular downdropped block bordered by northwest-trending faults (Alameda County Flood Control and Water Conservation District [ACFCWCD], 1988). The site is located about 1/2 mile west of the Hayward fault zone, the principal fault in the area. According to recent geologic mapping (USGS, 1991), the subsurface soils in the vicinity consist of permeable Pleistocene alluvium derived from the erosion of bedrock underlying the foothills of the Diablo Range (Oakland Hills) and deposited as coalescing alluvial fans (ACFCWCD, 1988). This alluvium consist of clayey silts with layers of sandy gravels that were deposited in ancient stream channels.

The topography in the area slopes generally westward toward San Francisco Bay, and the direction of ground water flow in the area is generally believed to be westward, although local anomalous northward and eastward ground water flow directions have been documented (RESNA, 1993). These are believed to be related to the presence of recharge areas or ground water flow barriers along the nearby Hayward fault (EMCON, 1994).

3.0 FIELD ACTIVITIES

Augeas Corporation's field work at the subject site consisted of the following:

- Collecting soil samples from an excavation inside the facility;
- Installing seven soil borings B-1, B-2, B-3, B-4, B-5, B-6, and B-7 from 5 feet (B-1) to 21 feet to 25 feet below the ground surface;



- Installing one 2-inch diameter ground water monitoring well near the rear of the dry cleaners, and two 2-inch diameter monitoring well near the front of the dry cleaners;
- Collecting and testing soil samples from the borings;
- Collecting and testing ground water samples from the two wells.

The locations of the soil borings are shown on Figure 2, "Site and Boring Location Plan". The field locations of the borings and wells with respect to the footprint of the buildings and the property line were established by a licensed land surveyor. The MSL elevations of the well casings were also established by a licensed land surveyor, and they were referenced to a local benchmark.

3.1 Rationale for Placement of Soil Borings and Wells

Soil borings B-1 and B-2 were located to assess the presence of contamination at and above the water table at the rear of the dry cleaners. Soil borings B-3, B-4, and B-5 through B-7 were located to further assess the lateral extent of contamination at and above the water table at the front of the dry cleaners, after PCE was detected in soil samples previously collected during the drilling of well AMW-2.

Well AMW-1 was located at the rear of the store to assess the presence of soil and ground water contamination in the first encountered aquifer.

Well AMW-2 was located near the front of the store to assess the presence of soil and ground water contamination near the existing sewer line in the assumed downgradient direction and in the first encountered aquifer. Well AMW-3 was installed into the first encountered zone of saturation about 45 feet northeast of AMW-2 after detectable concentrations of PCE were discovered in soil and water samples collected from AMW-2.

3.2 Drilling Permits and Utility Clearance

In accordance with the Alameda County Zone 7 Water Agency regulations, Augeas Corporation obtained soil boring installation permits for wells AMW-1 through AMW-3, and for borings B-1 through B-7. Copies of the permits are enclosed in Appendix A.

About one week prior to drilling, Augeas Corporation personnel visited the site and marked the boring locations on the ground. Underground Service Alert was notified prior to drilling to help identify and locate public utilities in the areas to be investigated.



3.3 Site Health and Safety Plan

Field work performed by Augeas Corporation personnel at the subject site was conducted in accordance with Augeas Corporation's Health and Safety Plan (HSP) for contaminant investigations involving chlorinated volatile organic compounds. This plan describes the basic safety requirements for subsurface environmental investigations, which includes safety considerations for drilling soil borings and for installing, developing, and sampling monitoring wells. The site HSP was applicable to personnel of Augeas Corporation performing work at the site. The Augeas Corporation on-site geologist acted as the Site Safety Officer.

3.4 Soil Sampling and Excavation On-Site

Prior to the commencement of field work by Augeas Corporation, approximately 11 cubic yards of soil were excavated from inside the Youngs Cleaners premises by agents of the owner. This excavation was performed in the former location of coin operated dry cleaning machines and a floor drain associated with the use of those machines. Figure 3, "Site and Boring Location Plan", shows the locations of the former drain and of the existing excavation.

The excavation was performed in two stages. The first was completed to a depth of approximately 1.5 feet below the existing concrete floor, in a six-foot by eight-foot area adjacent to the south wall of the building. On June 3, 1994, just after the initial excavation, an Augeas Corporation geologist collected four shallow soil samples (SB-1 through SB-4) with a hand sampler from the sidewalls and floor (Figure 3). These samples were submitted to a California certified analytical laboratory for analysis for the EPA 8240 compounds. These analytical results are summarized in Table 1, "Summary Soil Results From On-Site Excavation, June and July, 1994".

The analytical results for PCE ranged from a high of 9,100 parts per million (ppm) by weight from the sample point SB-2, located about three feet directly below the floor drain (Figure 3), to a low of 890 ppm from sample point SB-1, collected from about 1.5 feet into the sidewall below the existing eight-inch slab in the location shown (Figure 3).

During July, 1994, the existing excavation was extended about four feet to the west and deepened to about four feet below the existing slab. On July 29, an Augeas Corporation geologist collected soil samples from the sidewalls and floor of the excavation to determine if the extent of contamination had been reached. These soil samples were labeled as H-1 through H-8. PCE and other chlorinated solvents were detected in each sample. The results for PCE ranged from 1.4 ppm (H-2) to 5,000 ppm (H-3). The locations of the excavation and the soil samples are shown in Figure 3. The analytical results for the hand samples are presented in Table 1.



3.5 Soil Boring and Well Installation

Drilling of soil boring B-1 was initially attempted on September 2, 1994. However, the drill ruptured an eight-inch diameter water main about five feet below our boring location. The local water utility had not properly located the water main before we began to drill, although we had performed the prior required notification of the utilities through Underground Service Alert. Further drilling was canceled until the proper location of the water line could be established. We selected a new location for the boring after clearing the entire area for all utilities, and we installed this boring (B-2) on September 12, 1994 to a depth of 25 feet.

Ground water monitoring wells AMW-1 and AMW-2 were installed on September 12 and September 30, 1994, respectively. The wells were completed to depths of 29 and 34 feet, respectively. Monitoring well AMW-3 was installed on November 18, 1994 to a depth of 29 feet. Logs and construction details for the monitoring wells are presented in Appendix A.

Augeas Corporation installed borings B-3 and B-4 on October 7, 1994, to 21-1/2 feet. Borings B-5 and B-6 were installed on November 3, 1994 to 25 feet. Boring B-7 was installed on November 23, 1994 to 25 feet. Logs for the soil borings are presented in Appendix A.

All borings and wells were installed by West Hazmat Drilling, Inc., of Newark, California. An Augeas Corporation geologist was present during drilling to assist in obtaining relatively undisturbed samples of the subsurface materials, to maintain a log of borings, to field screen samples with a device capable of detecting volatile organic hydrocarbons as a trace gas, and to make observations of the site conditions.

3.6 Soil Sampling

Drilling soil borings and wells were performed utilizing a limited access mounted drill rig equipped with continuous flight hollow-stem augers. The augers were steam-cleaned prior to drilling each borehole to reduce the possibility of introducing down-hole or cross-hole contamination. The cuttings generated from the drilling and water generated from the steam cleaning operation were placed in DOT approved 55-gallon drums and left at the site pending permanent disposal.

Soils were sampled at approximately 5-foot vertical intervals commencing at an approximate depth of five feet below the existing grade. Samples were obtained by means of a California Modified sampler which was lined with stainless steel sleeves or tubes. The samples were advanced by blows from a 140 pound hammer falling 30 inches.

The samples were promptly sealed in their stainless steel sleeves with Teflon(TM) sheeting and covered with plastic end caps. The end caps were secured to the sleeves with adhesive tape. The samples were labeled and placed in a cooled ice chest for transport to a California-certified analytical laboratory for chemical testing. A chain of custody record, initiated in the field, accompanied each shipment of samples to the laboratory. Copies of the completed chain of custody records for the samples are presented in Appendix C.



A U G E A S

*describe PID
+ standardize
instrument*

Soils encountered during drilling were logged and classified according to the Unified Soil Classification System. Samples were inspected for visual or olfactory evidence of contamination, including product discoloration and/or noticeable product odor. Descriptions of soil encountered in the borings are presented in the Boring Logs included in Appendix B.

A hand-held photo ionization detector (PID) was used to measure the organic vapor concentrations in soil samples from each sample interval as a pre-screening device to assist in selecting samples for analysis. The PID readings and olfactory evidence at each depth are summarized in the right-hand columns of the boring logs. The detector was calibrated prior to use at the site using a 100 parts per million by volume isobutylene standard.

The procedure used to measure the organic vapor concentrations in air involved removing at least 50 grams of soil from the center of the sample sleeve located adjacent to the sleeve selected for laboratory analysis, placing the soil in a plastic ziplock bag, sealing the bag, and allowing the sample to sit in the sunlight for at least 15 minutes. The bag was then punctured with the probe tip of the PID detector to assess potential relative concentrations of volatile constituents. This procedure is commonly known as "head space analysis". Samples for analysis were also selected on the basis of professional judgment and site knowledge.

The following methodology was specified for the some of the ground water chemical analyses:

- EPA Method 8010 for Volatile Organic Compounds
- EPA Method 8015 for total petroleum hydrocarbons as stoddard solvent.
- EPA Method 8020 for benzene, toluene, xylenes, ethylbenzene, and EPA Method 8015 for total petroleum hydrocarbons as referenced to gasoline.

The initial analytical results indicated that the only contaminants in significant concentrations at this site were the chlorinated volatile organic compounds associated with dry cleaning solvents. Thus, most of the analyses were for the EPA 8010 compounds.

3.7 Ground Water Sampling

One "grab" sample was collected during the drilling of soil boring B-4 on October 7, 1994. Grab ground water samples were collected from borings B-5 and B-6 when these borings were installed on November 3, 1994; and one grab ground water sample was collected from boring B-7 when it was installed on November 23, 1994.

All of the wells installed by Augeas Corporation were initially developed by surging them with a 1.5-inch-diameter stainless steel bailer to loosen sediment that had accumulated during installation, in order to improve ground water production. They were then purged until the water quality parameters of temperature, electrical conductance, and pH had stabilized. This procedure helps ensure that the samples



represent water freshly derived from the formation. All purge water was secured on site in DOE-approved, labeled storage drums pending proper disposal.

Well development and sampling of wells AMW-1 and AMW-2, installed by Augeas Corporation, were performed on October 4, 1994. Well AMW-1 was surged and then purged of about 0.7 well volume of water (6.5 liters) before it was sampled. This well dewatered after about 6.5 liters of water were removed from it; however, the water quality parameters of temperature, electrical conductance, and pH had stabilized before the well was sampled. Well AMW-2 was surged with the stainless steel bailer, and then it was purged of about one well volume (8 liters) of water before it was sampled. Ground water sampling field logs for all of the Augeas Corporation wells are presented in Appendix B.

Well AMW-2 was re-purged of about 298 liters and sampled on October 18, 1994. It was purged again on November 3, 1994 of about 210 liters; and on November 8, it was purged of about 620 liters, and it was sampled.

The following methodology was specified for the chemical analyses:

- EPA Method 8010 for Volatile Organic Compounds
- EPA Method 8015 for total petroleum hydrocarbons as stoddard solvent.
- EPA Method 8020 for benzene, toluene, xylenes, ethylbenzene, and EPA Method 8015 for total petroleum hydrocarbons as referenced to gasoline.

Most of the analyses were restricted to EPA Method 8010. This was because initial analytical results indicated that the only contaminants detected in the ground water (in significant concentrations) at this site were chlorinated volatile organic compounds associated with dry cleaning solvents.

4.0 GEOLOGIC AND HYDROGEOLOGIC CONDITIONS

The logs of the wells and soil borings (Appendix A) indicate that the site is underlain primarily by silty clay with some sand and fine gravel. The subsurface lithology is generally composed of silty clay at the surface, which grades to sandy and more gravelly clays at depth.

During installation of the wells, the Augeas Corporation geologist measured the depths of the first appearance of ground water, as well as the stabilized depths to ground water after the wells were completed. The stable ground water depths in wells AMW-2 and AMW-3 were noted to be about 4 feet to 5 feet higher than the depth of the first appearance of ground water in these wells. However, the first appearance of ground water in well AMW-1 was approximately one foot below its stabilized depth after completion.

Augeas Corporation personnel have recently visited the site and measured the depths to ground water in all of the wells in the vicinity of the dry cleaners, including wells WGR-MW2, AMW-1, AMW-2, and AMW-3, in order to estimate the ground water gradient beneath the site. These data are presented in Table 4, "Depths to Ground



Water", with the dates of these measurements. The data show an elevation difference in the stable ground water levels between wells AMW-3 and WGR-MW-2 of about 13 feet. However, the difference in the tops of the PVC elevations between wells AMW-3 (MSL elev. = 65.09 ft) and WGR MW-2 (MSL elev. = 63.18 ft) is less than two feet. There are similar differences in ground water surface elevations between wells AMW-2 and WGR MW-2 and between wells AMW-2 and AMW-1 in comparison with the elevations of their PVC casings (Table 4).

All of these data indicate that wells AMW-2 and AMW-3 are installed in a separate aquifer from wells AMW-1 and WGR MW-2. The lack of contamination in the ground water in the vicinity of wells AMW-1 and WGR MW-2, as discussed in the following sections, is a further indication that the ground water beneath the subject site occurs in two hydraulically disconnected aquifers. For this reason, we have not attempted to plot a ground water gradient map at this site.

Perched and confined ground water zones are typical of depositional environments associated with areas such as this one, located at the base of the foothills of a mountain chain (Diablo Range [see Section 2.2]). Splinters from the nearby Hayward fault zone are also suspected to occur in the area, producing local ground water effects consistent with the observed ground water behavior at the subject site (see Section 2.2).

5.0 LABORATORY SAMPLE ANALYSES

5.1 Soil Sample Results

In the following discussion, we will refer to "high" concentrations of volatile organic compounds as those at or above 1.0 part per million (ppm) by weight, and "low" concentrations as those below 1.0 ppm. The basis for this distinction is the informal guideline developed by the State Regional Water Quality Control Board (RWQCB), in which they will generally allow soil affected with less than 1 ppm of volatile organic compounds to remain in place.

In the hand auger borings, PCE concentrations ranged from a high of 9,100 parts per million (ppm) by weight from the sample point SB-2, located about three feet directly below the floor drain (Figure 3), to a low of 1.4 ppm from sample point SB-1, collected from about 1.5 feet into the sidewall below the existing eight-inch slab in the location shown (Figure 3). These analytical results are summarized in Table 1, "Summary Soil Results From On-Site Excavation, June and July, 1994".

In the soil borings installed outside of the facility, samples collected from borings B4, B-5, B-6, and AMW-2, all of which were installed at the front of the business, contained the highest concentrations of PCE. The soil samples collected from borings B-2, AMW-1, AMW-2 at 10 feet and 15 feet below ground surface contained PCE at 22,000 and 90,000 $\mu\text{g}/\text{kg}$, respectively; at 25 feet, the amount dropped to 30 $\mu\text{g}/\text{kg}$. The soil sample collected from boring B-4 at 5.5 feet below ground surface also contained a large amount of PCE at a concentration of 1,600 $\mu\text{g}/\text{kg}$. Neither gasoline or stoddard solvent has been detected in soil samples



collected during this investigation. Soil sample analyses are summarized in Table 2, "Summary of Soil Boring Analytical Results".

BTEX compounds were detected in only five soil samples. The highest BTEX concentration was found as xylenes at 18 milligrams per kilogram (mg/Kg) in the sample collected from 16-feet below ground surface in boring AMW-1.

5.2 Ground Water Sample Results

Ground water analytical results are summarized in Table 3 "Summary of Ground Water Analytical Results". Copies of certified analytical reports and Chain of Custody documentation are presented in Appendix C.

Augeas Corporation personnel sampled wells WGR MW-2 (Figure 3) and WGR MW-3 (Figure 2) on February 4, 1994. The ground water samples collected from WGR MW-2 and WGR MW-3 were submitted to a California certified analytical laboratory and analyzed for the presence of the EPA 8240 compounds. Samples from well WGR MW-2 were also analyzed for the presence of Total Petroleum Hydrocarbons as stoddard solvent and as gasoline (TPHg) by EPA method 8015. These analyses indicated that these ground water samples contained no detectable concentrations of any of these constituents.

Augeas Corporation personnel developed and sampled Wells AMW-1 and AMW-2 on October 4, 1994. As shown in Table 3, the analyses from AMW-1 did not indicate the presence of any regulated compounds at concentrations at or above State Maximum Contaminant Levels (MCLs). Samples collected from well AMW-2 contained several EPA 8010 compounds at concentrations above their MCLs, as shown on Table 3. However, PCE is the primary contaminant in this sample, occurring at about 5,600 times its MCL (Table 3).

As summarized in Table 3, Augeas Corporation personnel purged and sampled well AMW-2 on three different occasions after its initial sampling on October 4. We did this in order to reduce the relatively high PCE concentrations in the ground water in the vicinity of this well. As seen in Table 3, the purging did not produce a significant, sustained reduction in the PCE concentrations over time in this well. The purging did, however, produce sustained reductions in the concentrations of the other contaminants (1,1-DCE; c-1,2-DCE; t-1,2-DCE; TCE; and c-1,3-DCP) originally detected in this well (Table 3). Well AMW-3 was developed and sampled on November 28, 1994, and the sample was analyzed for the EPA 8010 compounds, only. PCE was detected in AMW-3 at a concentration of 22 µg/L (Table 3).

Grab ground water samples were also collected from borings B-4, B-5, B-6, and B-7 when the borings were installed, and these samples were analyzed by EPA Method 8010. Table 3 shows that these samples contained PCE at concentrations ranging from 4 times (B-7) to 2,200 times (B-4) the MCL for PCE.



6.0 DISCUSSION OF ANALYTICAL RESULTS

6.1 Soil Conditions

6.1.2 Petroleum Hydrocarbons

Table 2 indicates that the soil beneath this area of the shopping center is not significantly affected by petroleum hydrocarbons. Samples B-2-6', B-4-5.5', B-4-16', AMW-1-16', and AMW-1-21' contained concentrations of toluene slightly above its detection limit. Sample AMW-1-16' contained a trace concentration of xylenes. None of the samples from borings B-2, B-3, and B-4, that were analyzed for the presence of stoddard solvent and gasoline, contained detectable concentrations of these constituents.

6.1.3 Chlorinated Volatile Organic Compounds

The distribution of the VOCs in the soil shows that the most significant contamination at the subject site is centered in the vicinity of the sanitary sewer lines and laterals the service the facility (Figure 3). We believe that this is an indication of the history of the waste disposal practices at the site. If waste dry cleaning solutions are disposed of into the facility's sinks, floor drains, and toilets, they will enter the sanitary sewer lines. Because many sewer lines are not impervious to dry cleaning solvents, if solvent compounds are disposed of into the sanitary sewer, they are typically detected in the soil and ground water near those sewer lines.

6.2 Ground Water Conditions

6.1.2 Petroleum Hydrocarbons

Table 3 shows that the ground water beneath this area of the shopping center has not been significantly affected by petroleum hydrocarbons. Stoddard solvent (200µg/L) was detected in one ground water sample collected from AMW-2. However, its concentration was quite low relative to the chlorinated solvent concentrations detected in the other samples collected from this well. None of the ground water samples that were analyzed for the BTEX compounds contained detectable concentrations of these compounds.

6.2.3 Chlorinated Volatile Organic Compounds

Analytical data from the wells and from the grab ground water samples show that the ground water is most affected in the vicinity of the sanitary sewer line in the front of the facility (well AMW-2, boring B-4). In downstream locations away from the main sewer lines (B-3), and in locations along the sewer lines but upstream from the facility (AMW-3, B-7), the aqueous PCE concentrations are significantly lower (Table 3).



It is significant that neither the soil nor the ground water at the rear of the facility, as shown in samples collected from boring B-2, well AMW-1, and well WGR MW-2 (Tables 2 and 3), have shown significant effects from the PCE contamination at the dry cleaners. The ground water sample collected from well AMW-1 on October 4, 1994 contained 0.5 µg/L of cis-1,2-DCE, but this concentration is marginally higher than the laboratory detection limit (0.2 µg/L [Appendix B]) for this analyte. We believe that this supports our premise that the ground water aquifer in which wells AMW-2 and AMW-3 have been installed at the front of the dry cleaners is separated from the aquifer in which wells AMW-1 and WGR MW-2 are installed at the rear. If the shallow ground water beneath the site occurred in one continuous aquifer, we would expect to see measurable contamination in the soil and ground water in the lot west of the business, reflecting the relatively high concentrations of PCE observed in the soil just below the slab inside the dry cleaners and in the ground water at the front. We provide the following three reasons to support this conclusion:

- The hydraulic head in well AMW-2 is about 9 feet to about 11 feet higher than those in wells AMW-1 and WGR MW-2, respectively;
- The proximity of well AMW-2 to well AMW-1 (about 120 feet) and to well WGR MW-2 (about 170 feet);
- The business has been in operation as a dry cleaner since 1962, and the existence of a continuous aquifer between the front and the rear of the business over this amount of time would be expected to carry significant concentrations of contaminant downgradient from the source.

gradient unclear

7.0 CONCLUSIONS

Our conclusions, based upon this site investigation, are summarized as follows:

- The soil and ground water beneath the site has been impacted with PCE at concentrations in excess of State action levels.
- The vertical and horizontal distribution of PCE in soil and ground water at the subject site suggests that much of the contamination originated from disposal of PCE into the sanitary sewer system through the floor drain during operation of the coin operated dry cleaning units. Some of the contamination could also have entered the sewer lateral which connects to toilets at the facility.
- The lateral and vertical extent of PCE contamination in the soil and the ground water have been approximately defined, and they appear to be limited to the areas outlined in Figure 4, "Proposed Soil Excavation Area". *no!*
What about Area?
- The solvents detected in the soil and ground water beneath the dry cleaner have not migrated significantly beyond the outline of contamination shown in Figure 4. Soil and ground water have been affected, by dry cleaning solvents in a very restricted area, because of a localized perched ground water zone that is geologically isolated from the regional ground water system. *?*



These conclusions are supported by correlation of laboratory data and field data obtained from soil and ground water samples collected during this and other site investigations at the shopping center.

8.0 RECOMMENDATIONS

Augeas Corporation's recommendations are summarized below as follows:

- Remove the shallow contaminated soil by excavation;
- Conduct confirmatory soil sampling while the excavation work is in progress to verify that the lateral and vertical extents of contamination have been defined;
- Destroy well AMW-2 and replace it after excavation is complete. The well should be replaced by drilling a new well west of the excavation limits, approximately where existing well AMW-2 is now located;
- Continue quarterly monitoring of replacement well AMW-2; and wells AMW-1, AMW-3, and WGR MW-2 for a period of one year. Ground water samples collected from these wells will document ground water conditions after the contaminated soils have been removed.

Augeas Corporation will provide a work plan for remediation of soil at the subject site in a separate document.

Table 1
Summary Soil Results from On-Site Excavation
June and July, 1994

Youngs Cleaners
 10700 MacArthur Boulevard
 Oakland, CA

(all results expressed in mg/Kg, except where noted)

Sample ID	Date	Depth, ft	PCE ⁽¹⁾	1,1-DCE ⁽²⁾	1,2-DCE total ⁽³⁾	Chloro-benzene	Chloro-methane	Bromo-methane	TCE ⁽⁴⁾	Toluene
SB-1	6-3-94	3.5	890	ND	0.550	ND	ND	ND	0.260	ND
SB-2	"	3.5	9,100	ND	<.005	1.400	ND	ND	79	ND
SB-3	"	5.5	2,200	ND	.370	.420	5.1	2.6	5.2	ND
SB-4	"	4.5	4,700	0.34	4.62	.840	7.7	ND	60	ND
H-1	<u>7-29-94</u>	6	2	ND	ND	ND	ND	ND	10	ND
H-2	"	6	1.4	ND	ND	ND	ND	ND	17	ND
H-3	"	6	5	ND	ND	ND	ND	ND	<10	ND
H-4	"	5.5	.16	ND	ND	ND	ND	ND	<10	ND
H-5	"	5	.730	ND	.240	ND	ND	ND	.060	ND
H-6	"	5	.310	ND	ND	ND	ND	ND	3	ND
H-7	"	6	.540	ND	2.31	ND	ND	ND	.920	.037
H-8	"	5.8	.030	ND	.011	ND	ND	ND	.034	ND

ND Not Detected

- (1) Tetrachloroethene
- (2) 1,1-Dichloroethene
- (3) Total 1,2-Dichloroethene
- (4) Trichloroethene

Table 2

Summary of Soil Analytical Results

Young's Cleaners
10700 MacArthur Boulevard
Oakland, CA

(all results expressed in $\mu\text{g}/\text{Kg}$ except where noted)

Sample Identification	Sample Matrix	Sample Date	Analysis Date	Gasoline ⁽¹⁾	Stoddard Solvent ⁽²⁾	Tetra-Chloroethene (PCE) ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethyl-Benzene ⁽⁴⁾	Xylenes ⁽⁵⁾
B-2 - 6'	Soil	9-12-94	9-16-94	ND	ND	ND	ND	6	ND	ND
B-2 - 11'	Soil	9-12-94	9-16-94	ND	ND	ND	ND	ND	ND	ND
B-2 - 16'	Soil	9-12-94	9-16-94	ND	ND	ND	ND	ND	ND	ND
B-2 - 21'	Soil	9-12-94	9-16-94	ND	ND	ND	ND	ND	ND	ND
B-2 - 24'	Soil	9-12-94	9-19-94	ND	ND	ND	ND	ND	ND	ND
B-3 - 6'	Soil	10-7-94	10-13-94	NA	ND	15	ND	ND	ND	ND
B-3 - 13'	Soil	10-7-94	10-13-94	NA	ND	ND	ND	ND	ND	ND
B-3 - 16'	Soil	10-7-94	10-13-94	NA	ND	12	ND	ND	ND	ND
B-3 - 21'	Soil	10-7-94	10-13-94	NA	ND	27	ND	ND	ND	ND
B-4 - 5.5'	Soil	10-7-94	10-13-94	NA	ND	1,600	ND	7	ND	ND
B-4 - 11'	Soil	10-7-94	10-13-94	NA	ND	70	ND	ND	ND	ND
B-4 - 16'	Soil	10-7-94	10-13-94	NA	ND	100	ND	10	ND	ND
B-4 - 21'	Soil	10-7-94	10-13-94	NA	ND	30	ND	ND	ND	ND
B-5 - 6'	Soil	11-3-94	11-10-94	NA	NA	1600	NA	NA	NA	NA
B5 - 10.5'	Soil	11-3-94	11-9-94	NA	NA	450	NA	NA	NA	NA
B5 - 15.5'	Soil	11-3-94	11-9-94	NA	NA	440	NA	NA	NA	NA
B5 - 20.5'	Soil	11-3-94	11-9-94	NA	NA	ND	NA	NA	NA	NA
B5 - 25.5'	Soil	11-3-94	11-10-94	NA	NA	ND	NA	NA	NA	NA

Continued

(1): Gasoline by EPA method 8015/5030. Sample Quantification Limit (SQL) of 0.5 mg/Kg.

(2): Stoddard Solvent by EPA method 8015 modified. SQL of 1.0 mg/Kg.

(3): Tetrachloroethene by EPA SW-846 methods 5030 /8010. SQL of 5 $\mu\text{g}/\text{Kg}$.(4): By method 8020. SQL of 5 $\mu\text{g}/\text{Kg}$.(5): By method 8020. SQL of 10 $\mu\text{g}/\text{Kg}$.

ND: Not detected at the Sample Quantification Limit.

NA: Not analyzed for this parameter.

Table 2

Summary of Soil Analytical Results

Young's Cleaners
10700 MacArthur Boulevard
Oakland, CA

(all results expressed in $\mu\text{g}/\text{Kg}$ except where noted)

Sample Identification	Sample Matrix	Sample Date	Analysis Date	Gasoline ⁽¹⁾	Stoddard Solvent ⁽²⁾	Tetra-Chloroethene (PCE) ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethyl-Benzene ⁽⁴⁾	Xylenes ⁽⁵⁾
B6 - 10.5'	Soil	11-3-94	11-10-94	NA	NA	5000	NA	NA	NA	NA
B6 - 15'	Soil	11-3-94	11-10-94	NA	NA	590	NA	NA	NA	NA
B6 - 20.5'	Soil	11-3-94	11-10-94	NA	NA	ND	NA	NA	NA	NA
B6 - 25.5'	Soil	11-3-94	11-10-94	NA	NA	ND	NA	NA	NA	NA
B7 - 10.5'	Soil	11-30-94	11-30-94	NA	NA	38	NA	NA	NA	NA
B7 - 15.5'	Soil	11-30-94	11-30-94	NA	NA	60	NA	NA	NA	NA
B7 - 20.5'	Soil	11-30-94	11-30-94	NA	NA	ND	NA	NA	NA	NA
B7 - 25.5'	Soil	11-30-94	11-30-94	NA	NA	ND	NA	NA	NA	NA
AMW-1-4'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	ND	ND	ND
AMW-1-6'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	ND	ND	ND
AMW-1-11'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	ND	ND	ND
AMW-1-16'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	6	ND	18
AMW-1-21'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	6	ND	ND
AMW-1-26'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	ND	ND	ND
AMW-1-31'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	ND	ND	ND
AMW-1-34'	Soil	9-12-94	9-15-94	ND	ND	ND	ND	ND	ND	ND
AMW-2-10'	Soil	9-30-94	10-6-94	NA	ND	22,000	ND	ND	ND	ND
AMW-2-15'	Soil	9-30-94	10-6-94	NA	ND	90,000	ND	ND	ND	ND
AMW-2-20'	Soil	9-30-94	10-6-94	NA	ND	400	ND	ND	ND	ND
AMW-2-25'	Soil	9-30-94	10-6-94	NA	ND	30	ND	ND	ND	ND

(1): Gasoline by EPA method 8015/5030. Sample Quantification Limit (SQL) of 0.5 mg/Kg.

(2): Stoddard Solvent by EPA method 8015 modified SQL of 1.0 mg/Kg.

(3): Tetrachloroethene by EPA SW-846 methods 5030 /8010. SQL of 5 $\mu\text{g}/\text{Kg}$.(4): By method 8020. SQL of 5 $\mu\text{g}/\text{Kg}$.(5): By method 8020. SQL of 10 $\mu\text{g}/\text{Kg}$.

ND: Not detected at the Sample Quantification Limit.

NA: Not analyzed for this parameter.

Table 2
Summary of Soil Analytical Results

Young's Cleaners
 10700 MacArthur Boulevard
 Oakland, CA

(all results expressed in $\mu\text{g}/\text{Kg}$ except where noted)

Sample Identification	Sample Matrix	Sample Date	Analysis Date	Gasoline ⁽¹⁾	Stoddard Solvent ⁽²⁾	Tetra-Chloroethene (PCE) ⁽³⁾	Benzene ⁽⁴⁾	Toluene ⁽⁴⁾	Ethyl-Benzene ⁽⁴⁾	Xylenes ⁽⁵⁾
AMW-3-5.5'	Soil	11-18-94	11-21-94	NA	NA	6	NA	NA	NA	NA
AMW-3-10'	Soil	11-18-94	11-21-94	NA	NA	390	NA	NA	NA	NA
AMW-3-15.5'	Soil	11-18-94	11-21-94	NA	NA	59	NA	NA	NA	NA
AMW-3-20.5'	Soil	11-18-94	11-21-94	NA	NA	820	NA	NA	NA	NA
AMW-3-25.5'	Soil	11-18-94	11-21-94	NA	NA	1400	NA	NA	NA	NA

(1): Gasoline by EPA method 8015/5030. Sample Quantification Limit (SQL) of 0.5 mg/Kg.

(2): Stoddard Solvent by EPA method 8015 modified. SQL of 1.0 mg/Kg.

(3): Tetrachloroethene by EPA SW-846 methods 5030 /8010. SQL of 5 $\mu\text{g}/\text{Kg}$.

(4): By method 8020. SQL of 5 $\mu\text{g}/\text{Kg}$.

(5): By method 8020. SQL of 10 $\mu\text{g}/\text{Kg}$.

ND: Not detected at the Sample Quantification Limit.

NA: Not analyzed for this parameter.

**Table 3
Summary of Groundwater Analytical Results**

Youngs Cleaners
10700 MacArthur Boulevard
Oakland, CA

(all results expressed in µg/L except where noted)

Sample ID	Date	TPHs ⁽²⁾ No MCL listed	1,1-DCE ⁽³⁾ MCL= 6 µg/L	c-1,2-DCE MCL= 6 µg/L	t-1,2-DCE MCL= 10 µg/L	TCE ⁽⁵⁾ MCL= 5 µg/L	c-1,3-DCP ⁽⁶⁾ No MCL listed	1,1,2-TCA ⁽⁷⁾ MCL= 32 µg/L	PCE ⁽⁸⁾ MCL= 5 µg/L
WGR MW-2 (1)	2/10/94	<50	ND ⁽¹⁰⁾	ND	ND	ND	ND	ND	ND
WGR MW3 (1)	"	NA ⁽⁹⁾	ND	ND	ND	ND	ND	ND	ND
AMW-1	10/04/94	<50	ND	0.5	ND	ND	ND	ND	ND
AMW-2	10/04/94	200	8	110	50	320	4.2	ND	ND
	10/18/94	<50	ND		ND	ND	ND	ND	ND
	11/08/94	NA	ND		ND	ND	ND	ND	ND
AMW-3	11/28/94	NA	ND		ND	ND	ND	ND	22
B-4	10/07/94	NA	4.2	130	19	180	11	14	13,000
B-5	11/03/94	NA	ND		ND	ND	ND	ND	1,000
B-6	11/03/94	NA	ND		ND	ND	ND	ND	370

Note: Shaded areas indicate water above listed Maximum Contaminant Levels (MCLs) for those compounds

(1) Wells WGR MW-2 and WGR MW-3 were analyzed for EPA 8240 compounds; none were detected

(2) TPHs =Total Petroleum Hydrocarbons as stoddard solvent

(3) 1,1-Dichloroethene

(4) total 1,2-Dichloroethene

(5) Trichloroethene

(6) cis 1,2-Dichloropropene

(7) 1,1,2-Trichloroethane

(8) Tetrachloroethene

(9) Not Analyzed

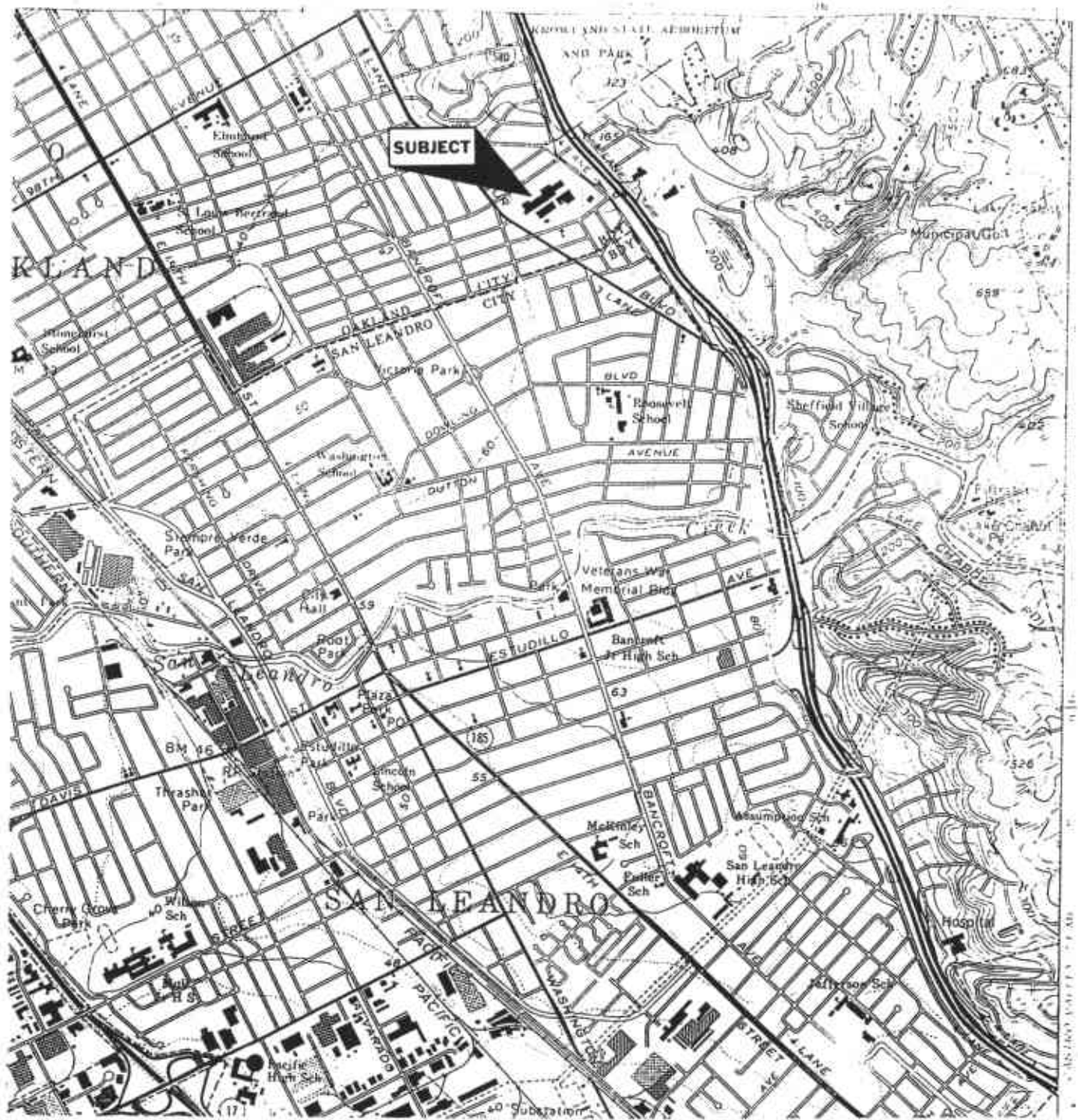
(10) Not Detected above laboratory detection limit; detection limits vary with analyses and concentrations of analytes

3

Table 4: Depths to Ground Water

Youngs Cleaners
10700 MacArthur Boulevard
Oakland, CA

Well ID	Date	Depth to Water, ft	Depth of Well, ft	MSL El. of Casing, ft	MSL El. of G'water , ft
WGR MW-2	11/03/94	25.70	28	63.18	37.48
AMW-1	11/03/94	25.08	29	64.51	39.53
AMW-2	11/03/94	16.83	29	65.33	48.50
AMW-3	11/28/94	14.84	29	65.03	50.75



SCALE 1:24 000



SAN LEANDRO, CALIF.

NW 4 HAYWARD 15 QUADRANGLE
N3737 5—W12207 5 7 5

1959
PHOTOREVISED 1980
DMA 1559 II NW—SERIES V895



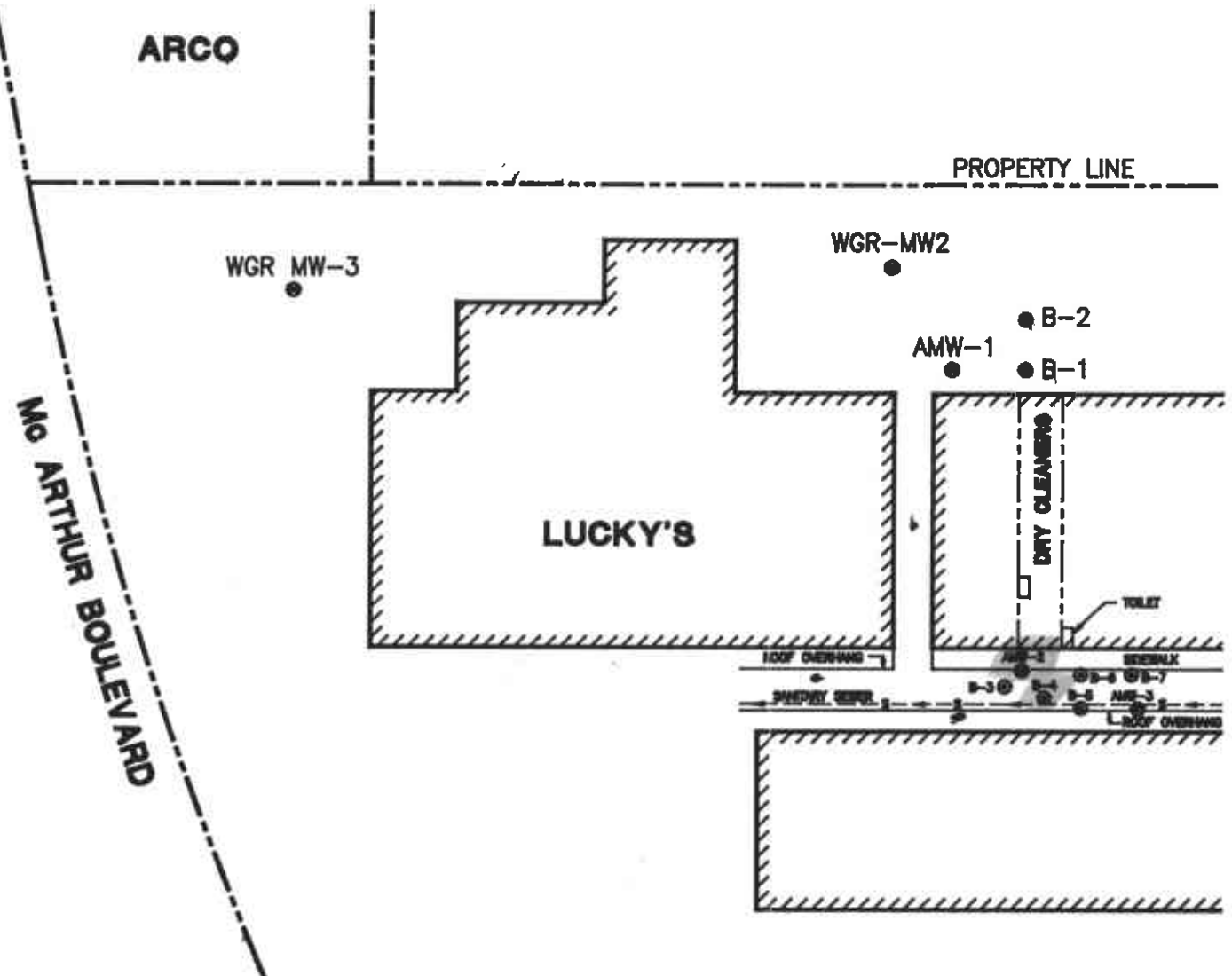
QUADRANGLE LOCATION

AUGEAS CORPORATION	Figure 1- Site Location Map	jl
	10700 MacArthur Boulevard, Oakland, CA	09/16/93

BENCHMARK


CUT SQUARE IN CURB RETURN AT THE SOUTHEAST CORNER OF 107th AVE AND McARTHUR BLVD.

ELEV = 55.172' MSL (USGS 1929)
TO OBTAIN ELEVATION PER CITY DATUM,
SUBTRACT 300 FEET FROM USGS ELEVATION.



LEGEND

- ⊙ AUGEAS SOIL BORING
- AMW-2 AUGEAS MONITORING WELL
- WGR-MW2 WESTERN GEOLOGIC RESOURCES MONITORING WELL
- MW-3 APPLIED GEOSYSTEMS MONITORING WELL

 AUGEAS CORPORATION HALF MOON BAY	SITE AND BORING LOCATION PLAN	
	FOOTHILL SQUARE SHOPPING CENTER OAKLAND ALAMEDA, CA	
	December 12, 1994	Figure 2

BENCHMARK

CUT SQUARE IN CURB RETURN AT THE SOUTHEAST CORNER OF 107th AVE AND McARTHUR BLVD.

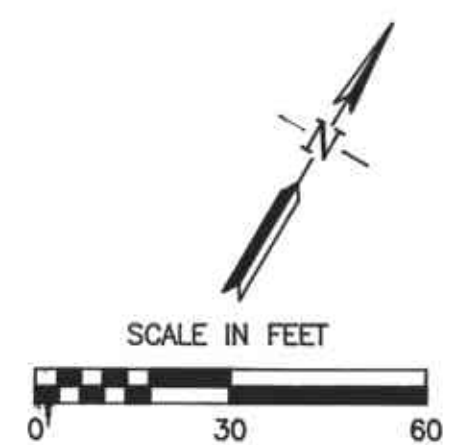
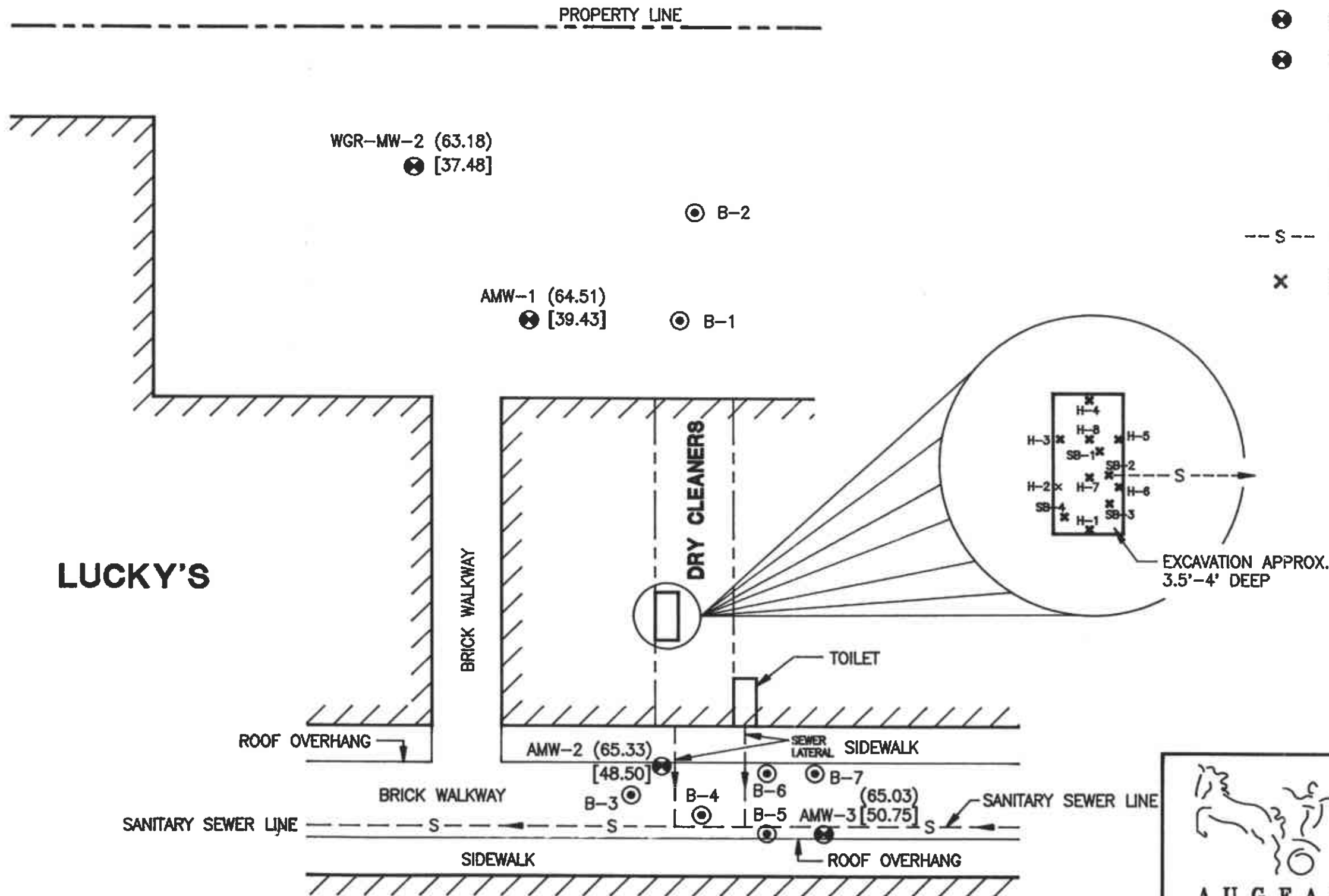
ELEV = 55.172' MSL (USGS 1929)
TO OBTAIN ELEVATION PER CITY DATUM.
SUBTRACT 300 FEET FROM USGS ELEVATION.


NOTE

ALL ELEVATIONS ARE AT MARK AT TOP OF PVC CASING.

LEGEND

- ⊙ AUGIAS SOIL BORING
- ⊕ AMW-2 AUGIAS MONITORING WELL
- ⊕ WGR-MW-2 WESTERN GEOLOGIC RESOURCES MONITORING WELL
- (65.33) MSL ELEVATION OF TOP OF PVC CASING
- [48.50] MSL ELEVATION OF GROUNDWATER SURFACE
- S --- SANITARY SEWER
- X H-8 HAND AUGER SAMPLE



	SITE AND BORING LOCATION PLAN DETAIL	
	FOOTHILL SQUARE SHOPPING CENTER OAKLAND ALAMEDA, CA	
	December 12, 1994	Figure 3

BENCHMARK

CUT SQUARE IN CURB RETURN AT THE SOUTHEAST CORNER OF 107th AVE AND McARTHUR BLVD.

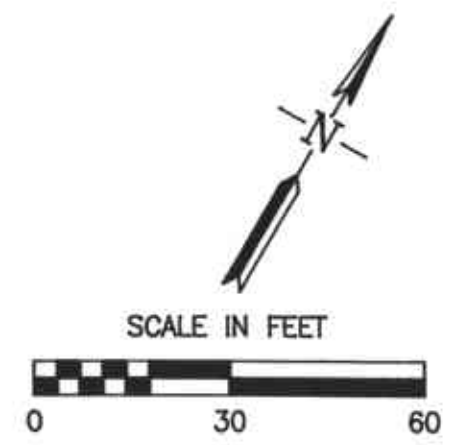
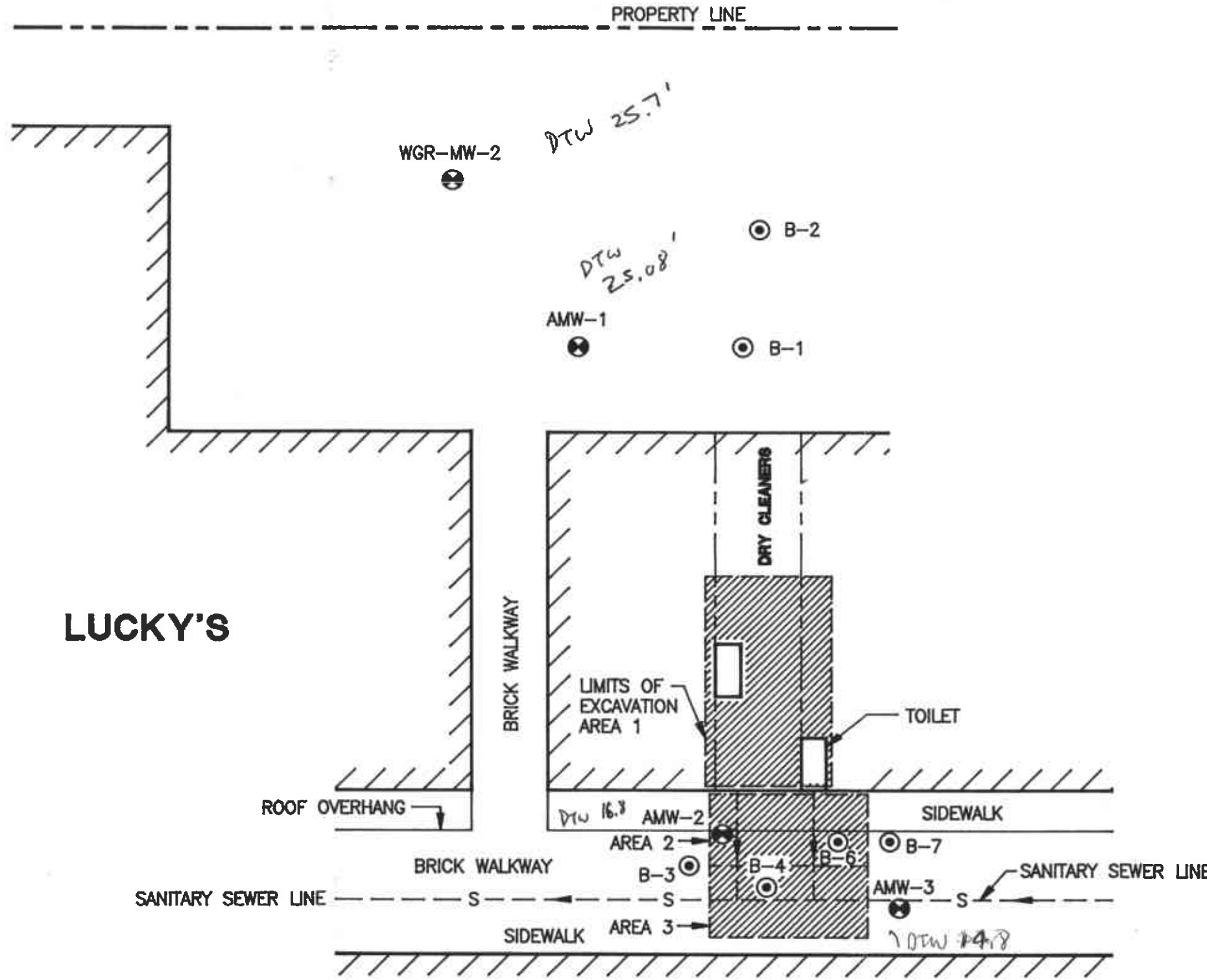
ELEV = 55.172' MSL (USGS 1929)
TO OBTAIN ELEVATION PER CITY DATUM,
SUBTRACT 300 FEET FROM USGS ELEVATION.


NOTE

ALL ELEVATIONS ARE AT MARK AT TOP OF PVC CASING.

LEGEND

- ⊙ AUGEAS SOIL BORING
- ⊗ AMW-2 AUGEAS MONITORING WELL
- ⊗ WGR-MW-2 WESTERN GEOLOGIC RESOURCES MONITORING WELL
- S --- SANITARY SEWER
- X H-8 HAND AUGER SAMPLE



 AUGEAS CORPORATION HALF MOON BAY	PROPOSED SOIL EXCAVATION AREAS	
	FOOTHILL SQUARE SHOPPING CENTER OAKLAND ALAMEDA, CA	
	December 12, 1994	Figure 4

AUGEAS CORPORATION

Project: Young's Cleaners

Boring I.D.: B-2

Page: 1 of 1

Address: 10700 MacArthur Boulevard, Oakland, CA

Date: 9/12/94

Sampler Type: 2" Cal Mod

Hammer (lbs): 140#

Logged by: W. Dittman

DEPTH, FEET	SAMPLES Recovery	BLOWS FT.	RD (PPM)	SOIL CLASSIF.	MATERIAL DESCRIPTION	COMMENTS
0 - 5				FILL	2" of AC over 2" of Baserock, clay (CH) stiff; moist; very dark grayish brown; high plasticity; fill to 5' (?)	Hand augered to 5'.
5 - 10		20	3	CL	Very stiff.	Down time changing cable from 9:15 to 9:30
10 - 15		42	3.7	SC	Clayey Sand (SC); dense; dry; medium greenish brown; some clay; fine to coarse sand.	
15 - 20		30	0	CL	Reddish brown; moist; approximately 50% clay.	
20 - 25		43	0		Silty clay (CL) hard; dry to damp; medium yellowish brown; low plasticity; trace of fine sand.	
25 - 30		32	61	CL	Minor 6" thick layer of wet silty sand at approximately 23.5 to 24 feet. Bottom of Boring at 25 feet	No measurable water level.

Augeas Corporation

Project: Young's Cleaners

Boring I.D.: B-3

Page: 1 of 1

Address: 10700 MaCarthur Boulevard, Oakland, CA

Date: 10/7/94

Sampler Type: 2" Cal Mod

Hammer (lbs): 140#

Logged by: W. Dittman

DEPTH FEET	SAMPLES Recovery	BLOWS FT.	PRO(PPM)	SOIL CLASSN	MATERIAL DESCRIPTION	COMMENTS
					3" of brick work and concrete	
				CL Fill?	Silty clay (CL); damp; reddish brown; medium plasticity (possibly fill to approximately 3 ft. deep.)	
5	1	11	2	CL	↓ Moist; dark brown; medium to high plasticity.	
10	0	20	3		↓ Moist; medium brown; medium to high plasticity.	
	1	36			↓ As above; some fine to coarse sand.	
15	1	25	7		↓ Moist; medium brown	
20	1	20	7	CL	↓ Wet; medium brown; low plasticity; trace silt and fine sand.	No product odor noted.
					Base of boring at 21.5 feet.	

AUGEAS CORPORATION

Project: Young's Cleaners

Boring I.D.: B-4

Page: 1 of 1

Address: 10700 MacArthur Boulevard, Oakland, CA

Date: 10-7-94

Sampler Type: 2" Cal Mod

Hammer (lbs): 140#

Logged by: C. Conway

DEPTH FEET	SAMPLES Recovery	BLOWS FT.	PIU/PPM	SOIL CLASSN	MATERIAL DESCRIPTION	COMMENTS
0 - 3					About 3 inches brick and concrete overlying moderately compacted fill to 3 to 4 feet.	
5	.5	37	3	CL	moist dark brown (native), medium to high plasticity	
10	1	60	6	CL	moist, medium brown, medium plasticity, gray mottling	
15	1	36	30	CL	damp, medium brown, low plasticity, trace fine sand	
20	1		6	CL	wet, medium brown, lo to medium plasticity, trace fine sand	Water at 20.4 ft
Bottom of Boring at 21.5 feet						
25						
30						

AUGEAS CORPORATION

Project: Young's Cleaners

Boring I.D.: B-5

Page: 1 of 1

Address: 10700 MacArthur Boulevard, Oakland, CA

Date: 11-3-94

Sampler Type: 2" Cal Mod

Hammer (lbs): 140#

Logged by: C. Conway

DEPTH, FEET	SAMPLES Recovery	BLOWS FT.	PRO (PPM)	SOIL CLASSIN	MATERIAL DESCRIPTION	COMMENTS
0 - 3					About 3 inches brick and concrete; dark brown silty clay; slightly moist; hard; trace gravel; possible fill to 3 to 4 feet.	B-5 located across sidewalk away from cleaners.
5	1.4'	88	4.2	CL	Probable clay fill, trace gravel, moderately compacted	6' to 6.5' to lab
					↑ Approximate, fill-native interface.	
10	1.5'	88	5.6	CL	Medium brown silty clay at 10 feet; slightly moist; hard; grading to yellowish brown silty clay; hard; trace coarse sand.	10' to 11.5' to lab
15	1.5'	65	7.0	CL	Dark brown silty clay; slightly moist; hard; sticky; changing at 15.2' to yellowish brown silty clay; increased silt; moist.	15.5' to 16' to lab
20	1.5'	68	4.2	CL	Light brown silty clay; wet; hard; low plasticity to 21 feet; grades to sandy silt at 21.5 feet.	20.5' to 21' to lab
				ML		Water at about 21 ft.
25	1.5'	77	4.2	CL	Yellow to olive brown silt to silty clay; very wet; hard; low plasticity; homogenous but soft in a few places.	25.5' to 26' to lab
					Bottom of Boring at 26.5 feet, 11-3-94	
30						

AUGEAS CORPORATION

Project: Young's Cleaners

Boring I.D.: B-6

Page: 1 of 1

Address: 10700 MacArthur Boulevard, Oakland, CA

Date: 11-3-94

Sampler Type: 2" Cal Mod

Hammer (lbs): 140#

Logged by: C. Conway

DEPTH, FEET	SAMPLES Recovery	BLOWS FT.	PIU (PPM)	SOIL CLASSIF.	MATERIAL DESCRIPTION	COMMENTS
5	0.5'	50 for 4"	9.8	CL	About 3 inches brick and concrete overlying moderately compacted fill to 3 to 4 feet.	No sample to lab - poor recovery
10	1.4'	40	15	CL	Dark brown sandy to gravelly clay; moist; sticky; stiff to 10.5 feet; light brown silty clay; moist; low plasticity; homogeneous to 11.5 feet.	10.5' to 11' to lab
15	1.3'	51	18.2	CL	At 15', dark to medium brown silty clay; slightly moist; very stiff; trace fine to medium gravel; trace plant matter below 15 feet; homogeneous silty clay.	15.5' to 16' to lab
20	1.5'	41	5.6	CL	Dark brown silty clay; moist; stiff; some coarse sand; sticky to 21 feet; increased silt; moist to wet; low plasticity to 21.5 feet.	20.5' to 21' to lab Water at about 21 feet.
25	1.5'	38	2.8	ML-CL	Dark brown silty clay; wet; stiff; medium plasticity to 25.1 feet; grades to light olive brown clayey silt to silty clay; wet; low plasticity.	25.5' to 26' to lab
30					Bottom of Boring at 26.5 feet, 11-3-94	Driller lost hammer down hole - stopped to retrieve.

AUGEAS CORPORATION

Project: Young's Cleaners

Boring I.D.: B-7

Page: 1 of 1

Address: 10700 MacArthur Boulevard, Oakland, CA

Date: 11-23-94

Sampler Type: 2" Cal Mod

Hammer (lbs): 140#

Logged by: C. Conway

DEPTH, FEET	SAMPLES Recovery	BLOWS FT.	POI (PPM)	SOIL CLASS	MATERIAL DESCRIPTION	COMMENTS
5					Brick and concrete pavement over clay back-fill; 6" concrete slab about 4.5' below grade.	No sample
					Backfill - native interface	
10	0.7'	50 for 5"	3	CL	Medium brown silty clay; dry; hard; some fine gravel.	10.5' to 11' to lab
15	1.5'	44	3	CL	Light brown silty clay; moist; stiff; some coarse gravel.	15' to 15.5' to lab
20	1.5'	19	1	CL	Increasing silt; wet; firm; no gravel.	20.5' to 21' to lab Water at about 21 feet.
25	1.5'	34	1	CL	Light brown silty clay; wet; stiff.	25.5' to 26' to lab
					Bottom of Boring at 26.5 feet, 11-23-94	
30						

Project: Young's Cleaners		Well I.D.: AMW-1	Page: 1 of 2
Drilling Agency: West Hazmat	Driller: De Jesus	Date Started: 9-12-94	Date Finished: 9-12-94
Drilling Equipment: CME-75	Logged by: W. Dittman	Completion Depth: 34'	Hammer: 140 lb.
Drilling Method: Hollow Stem Auger	Drill Bit (Dia.): 8 in.	No. of Samples: 8	Sampler: 2" Cal. mod.
Size/Type of Casing: 2" PVC		(Water Depth) First: 32.3' at Compl.:	
Type of Perforation: 0.20 in. slots	From: 24' to 34'	Annular Seal: from 21 ft. to 0 ft.	
Size/Type of Pack: 2/12 Lonestar	From: 23' to 24'	Bentonite Seal: from 21ft to 23 ft.	

Depth (feet)	Lithologic Description	Soil Classif.	Well Graphic	PID/(PPM)	Water Level	Depth (feet)	Recovery (ft.)	Sample	Remarks
								Blows/ft.	
5	2" AC over 2-3" base Rock Clay (CH) (fill) very stiff, moist, medium dark brown to black, high plasticity, product odor at 3'								Hand Augered to 5' grab sample collected from soils 3'-5' in depth.
	Dark grayish black; pieces of fill material			0	5		20		
10	Silty clay (CL); hard; dry, very dark brown, medium plasticity, trace fine sand	CL		0	10		39		
15	Clayey Sand (SC) dense, moist, reddish brown, fine to coarse sand	SC		0	15		38		
20	Silty clay (CL) hard, damp, medium yellowish brown, low plasticity, trace fine sand	CL		0	20		36		

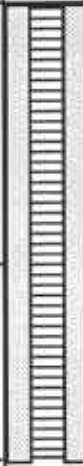
Project: Young's Cleaners		Well I.D.: AMW-1	Page: 2 of 2
Drilling Agency: West Hazmat	Driller: De Jesus	Date Started: 9/12/94	Date Finished: 9/12/94
Drilling Equipment: CME-75	Logged by: W. Dittman	Completion Depth: '	Hammer: 140 lb.
Drilling Method: Hollow Stem Auger	Drill Bit (Dia.): 8 in.	No. of Samples: 8	Sampler: 2" Cal. mod.
Size/Type of Casing: 2" PVC		(Water Depth) First: 32.3' at Compl.: 31.1'	
Type of Perforation: 0.20 in. slots	From: 24 to 34'	Annular Seal: from 1 ft to 24 ft.	
Size/Type of Pack: 2/12 Lonestar	From: 21' to 23'	Bentonite Seal: from 21ft to 23 ft.	

Depth (feet)	Lithologic Description	Soil Classif.	Well Graphic	PID/(PPM)	Water Level	Depth (feet)	Recovery (ft.)	Sample	Remarks
								Blows/ft.	
25	Moist, wet			0	25			41	pulled augers up to 20' from 30' at 12:30 Water level 31.5
	@27' medium plasticity			91				27	
30				22	30			41	
	Becoming sandy (30% to 50% fine to coarse sand.)			66				31	
35					35				
40					40				

Project: Young's Cleaners		Well I.D.: AMW-2	Page: 1 of 2
Drilling Agency: West Hazmat	Driller: George	Date Started: 9-30-94	Date Finished: 9-30-94
Drilling Equipment: CME-75	Logged by: F. Moss	Completion Depth: 29'	Hammer: 140 lb.
Drilling Method: Hollow Stem Auger	Drill Bit (Dia.): 8 in.	No. of Samples: 4	Sampler: 2" Cal. mod.
Size/Type of Casing: 2" PVC		(Water Depth) First: 23' at Compl.:	
Type of Perforation: 0.20 in. slots	From: 19' to 29'	Annular Seal: from 5 ft. to 16 ft.	
Size/Type of Pack: 2/12 Lonestar	From: 17' to 29'	Bentonite Seal: from 16ft to 17 ft.	

Depth (feet)	Lithologic Description	Soil Classif.	Well Graphic	PID/(PPM)	Water Level	Depth (feet)	Recovery (ft.)	Sample	Remarks
								Blows/ft.	
5		CL		0					Previous excavation to a depth of 5 ft.-- no sampling at 5 foot depth.
10	Silty clay (CL); light brown; dense and damp.			300		10		25	9.5 ft to 11 ft. solvent odor.
15	Sandy layer at 14 ft.			20		15		24	
20	Light brown clayey silt (ML); moist; stiff.	ML		4		20		26	


Project: Young's Cleaners		Well I.D.: AMW-2	Page: 2 of 2
Drilling Agency: West Hazmat	Driller: George	Date Started: 9-30-94	Date Finished: 9-30-94
Drilling Equipment: CME-75	Logged by: F. Moss	Completion Depth: 29'	Hammer: 140 lb.
Drilling Method: Hollow Stem Auger	Drill Bit (Dia.): 8 in.	No. of Samples: 4	Sampler: 2" Cal. mod.
Size/Type of Casing: 2" PVC		(Water Depth) First: 23' at Compl.:	
Type of Perforation: 0.20 in. slots	From: 19' to 29'	Annular Seal: from 5 ft. to 16 ft.	
Size/Type of Pack: 2/12 Lonestar	From: 17' to 29'	Bentonite Seal: from 16ft to 17 ft.	

Depth (feet)	Lithologic Description	Soil Classif.	Well Graphic	PID/(PPM)	Water Level	Depth (feet)	Recovery (ft.)	Sample	Remarks
								Blows/ft.	
25	Clayey silt (ML); light brown.	ML		0		25		40	24.5 ft. to 26 ft. no product odor.
30	Base of Boring at 29 ft.					30			
35						35			
40						40			

Project: Young's Cleaners		Well I.D.: AMW-3	Page: 1 of 2
Drilling Agency: West Hazmat Drilling	Driller: George	Date Started: 11-18-94	Date Finished: 11-18-94
Drilling Equipment: CME 75 limited	Logged by: C. Conway	Completion Depth: 29'	Hammer: 140#/30in.
Drilling Method: Hollow Stem Auger	Drill Bit (Dia.): 8"	No. of Samples: 6	Sampler: 2" Cal. mod.
Size/Type of Casing: 2" PVC		(Water Depth) First: 20' at Compl.: 15.7'	
Type of Perforation: 0.02 inch slots	From: 19' to 29'	Annular Seal: from 0 ft. to 16 ft.	
Size/Type of Pack: 2/12 Lonestar	From: 18' to 29'	Bentonite Seal: from 16 ft to 18 ft.	

Depth (feet)	Lithologic Description	Soil Classif.	Well Graphic	PID/(PPM)	Water Level	Depth (feet)	Recovery (ft.)	Sample	Remarks
								Blows/ft.	
5	Brick and concrete pavement over clay fill to about 5 feet.								
5	Dark brown clay with red streaks, moist, sticky, minor weathered fine gravel to coarse sand, trace paper pieces.	CL		3.1		5	1.4	73	5.5' to 6' to lab.
10	Dark brown silty clay; dry; hard; trace coarse weathered sand.	CL		3.1		10	0.5	50 for 5"	10' to 10.5' to lab.
15	Light olive brown silty clay; moist; stiff; low plasticity; high silt content.	CL		3.1		15		31	15.5' to 16' to lab.
20	Light yellowish brown silty clay; slightly moist; hard; high silt; trace coarse sand.	CL				20		53	20.5' to 21' to lab Water about 20 feet.

Project: Young's Cleaners		Well I.D.: AMW-3	Page: 2 of 2
Drilling Agency: West Hazmat Drilling	Driller: George	Date Started: 11-18-94	Date Finished: 11-18-94
Drilling Equipment: CME 75 limited	Logged by: C. Conway	Completion Depth: 29'	Hammer: 140#/30in.
Drilling Method: Hollow Stern Auger	Drill Bit (Dia.): 8"	No. of Samples: 6	Sampler: 2" Cal. mod.
Size/Type of Casing: 2" PVC		(Water Depth) First: 20' at Compl.: 15.7'	
Type of Perforation: 0.02 inch slots	From: 19' to 29'	Annular Seal: from 0 ft. to 16 ft.	
Size/Type of Pack: 2/12 Lonestar	From: 18' to 29'	Bentonite Seal: from 16 ft to 18 ft.	

Depth (feet)	Lithologic Description	Soil Classif.	Well Graphic	PID/(PPM)	Water Level	Depth (feet)	Recovery (ft.)	Sample	Remarks
								Blows/ft.	
	Light olive brown silty clay, moist to wet, homogeneous material.	CL		3			1.5	28	25.5' to 26' to lab.
30	Depth of Well: 29.0 feet.	CL				30	1.5	31	29.5' to 30' to lab.
35						35			
40						40			
45						45			



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CLIENT: Rosanna Garrison
Augeas Corporation
780 Purissima Street, P.O. Box 940
Half Moon Bay, CA 94019

Lab Number : JK-1792-2
Project : Gilcrease, Foothill
Square
Analyzed : 06/14/94
Analyzed by: MM
Method : EPA 8240

REPORT OF ANALYTICAL RESULTS

Page 2 of 3

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED	RECEIVED
SB-2, 1'-1.5'	Soil	Charles Conway	06/03/94 1628	06/06/94
CONSTITUENT	(CAS RN)	*PQL µg/Kg	RESULT µg/Kg	NOTE
1,2-Dichloroethane	(107062)	5.	ND	
1,1-Dichloroethene	(75354)	5.	ND	
cis-1,2-Dichloroethene	(156592)	5.	ND	
trans-1,2-Dichloroethene	(156605)	5.	ND	
1,2-Dichloropropane	(78875)	5.	ND	
cis-1,3-Dichloropropene	(100610105)	5.	ND	
trans-1,3-Dichloropropene	(10061026)	5.	ND	
Ethylbenzene	(100414)	5.	ND	
2-Hexanone	(591786)	30.	ND	
Methyl Isobutyl Ketone (MIBK)	(108101)	30.	ND	
Methylene Chloride	(75092)	30.	ND	
Styrene	(100425)	5.	ND	
1,1,2,2-Tetrachloroethane	(79345)	5.	ND	
Tetrachloroethene	(127184)	5.	9100000.	
Toluene	(108883)	5.	ND	
1,1,1-Trichloroethane	(71556)	5.	ND	
1,1,2-Trichloroethane	(79005)	5.	ND	
Trichloroethene	(79016)	5.	79000.	
Trichlorofluoromethane	(75694)	5.	ND	
Trichlorotrifluoroethane	(76131)	30.	ND	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

06/20/94
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REPORT OF ANALYTICAL RESULTS

Page 1 of 3

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED	RECEIVED
SB-2, 1'-1.5'	Soil	Charles Conway	06/03/94 1628	06/06/94
CONSTITUENT	(CAS RN)	*PQL µg/Kg	RESULT µg/Kg	NOTE
VOLATILE ORGANIC COMPOUNDS				1
Acetone	(67641)	100.	ND	
Benzene	(71432)	5.	ND	
Bromodichloromethane	(75274)	5.	ND	
Bromoform	(75252)	5.	ND	
Bromomethane	(74839)	5.	ND	
2-Butanone (MEK)	(78933)	50.	ND	
Carbon Disulfide	(75150)	10.	ND	
Carbon Tetrachloride	(56235)	5.	ND	
Chlorobenzene	(108907)	5.	1400.	
Chloroethane	(75003)	5.	ND	
2-Chloroethyl Vinyl Ether	(110758)	50.	ND	
Chloroform	(67663)	10.	ND	
Chloromethane	(74873)	5.	ND	
Dibromochloromethane	(124481)	5.	ND	
1,2-Dichlorobenzene	(95501)	5.	ND	
1,3-Dichlorobenzene	(541731)	5.	ND	
1,4-Dichlorobenzene	(106467)	5.	ND	
1,1-Dichloroethane	(75343)	5.	ND	

San Jose Lab Certifications: CAELAP #1204

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(1) EXTRACTED by EPA 5030 (purge-and-trap)

06/20/94
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REPORT OF ANALYTICAL RESULTS

Page 3 of 3

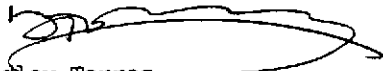
SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED	RECEIVED
SB-2, 1'-1.5'	Soil	Charles Conway	06/03/94 1628	06/06/94
CONSTITUENT	(CAS RN)	*PQL µg/Kg	RESULT µg/Kg	NOTE
Vinyl Acetate	(108054)	30.	ND	
Vinyl Chloride	(75014)	5.	ND	
Xylenes (total)	(1330207)	5.	ND	
D4-DCA (% Surrogate Recovery #1)			63.	
D8-TOL (% Surrogate Recovery #2)			122.	
BFB (% Surrogate Recovery #3)			117.	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

06/20/94
FIN2/061408B/061709A
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FIN2-061494S

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.


Dudley Torres
Organics Manager

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Lab Number : JK-1792-3
Project : Gilcrease, Foothill
Square
Analyzed : 06/14/94
Analyzed by: MM
Method : EPA 8240

REPORT OF ANALYTICAL RESULTS

Page 1 of 3

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED	RECEIVED
SB-3, 2'-2.5'	Soil	Charles Conway	06/03/94 1704	06/06/94

CONSTITUENT	(CAS RN)	*PQL µg/Kg	RESULT µg/Kg	NOTE
VOLATILE ORGANIC COMPOUNDS				
Acetone	(67641)	2000.	ND	1
Benzene	(71432)	100.	ND	
Bromodichloromethane	(75274)	100.	ND	
Bromoform	(75252)	100.	ND	
Bromomethane	(74839)	100.	2600.	
2-Butanone (MEK)	(78933)	1000.	ND	
Carbon Disulfide	(75150)	200.	ND	
Carbon Tetrachloride	(56235)	100.	ND	
Chlorobenzene	(108907)	100.	420.	
Chloroethane	(75003)	100.	ND	
2-Chloroethyl Vinyl Ether	(110758)	1000.	ND	
Chloroform	(67663)	200.	ND	
Chloromethane	(74873)	100.	5100.	
Dibromochloromethane	(124481)	100.	ND	
1,2-Dichlorobenzene	(95501)	100.	ND	
1,3-Dichlorobenzene	(541731)	100.	ND	
1,4-Dichlorobenzene	(106467)	100.	ND	
1,1-Dichloroethane	(75343)	100.	ND	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

(1) EXTRACTED by EPA 5030 (purge-and-trap)

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Lab Number : JK-1792-3
Project : Gilcrease, Foothill
Square
Analyzed : 06/14/94
Analyzed by: MM
Method : EPA 8240

REPORT OF ANALYTICAL RESULTS

Page 2 of 3

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED	RECEIVED
SB-3, 2'-2.5'	Soil	Charles Conway	06/03/94 1704	06/06/94
CONSTITUENT	(CAS RN)	*PQL µg/Kg	RESULT µg/Kg	NOTE
1,2-Dichloroethane	(107062)	100.	ND	
1,1-Dichloroethene	(75354)	100.	ND	
cis-1,2-Dichloroethene	(156592)	100.	370.	
trans-1,2-Dichloroethene	(156605)	100.	ND	
1,2-Dichloropropane	(78875)	100.	ND	
cis-1,3-Dichloropropene	(100610105)	100.	ND	
trans-1,3-Dichloropropene	(10061026)	100.	ND	
Ethylbenzene	(100414)	100.	ND	
2-Hexanone	(591786)	600.	ND	
Methyl Isobutyl Ketone (MIBK)	(108101)	600.	ND	
Methylene Chloride	(75092)	600.	ND	
Styrene	(100425)	100.	ND	
1,1,2,2-Tetrachloroethane	(79345)	100.	ND	
Tetrachloroethene	(127184)	100.	2200000.	
Toluene	(108883)	100.	ND	
1,1,1-Trichloroethane	(71556)	100.	ND	
1,1,2-Trichloroethane	(79005)	100.	ND	
Trichloroethene	(79016)	100.	5200.	
Trichlorofluoromethane	(75694)	100.	ND	
Trichlorotrifluoroethane	(76131)	600.	ND	

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Square
Analyzed : 06/14/94
Analyzed by: MM
Method : EPA 8240

REPORT OF ANALYTICAL RESULTS

Page 3 of 3


SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED	RECEIVED
SB-3, 2'-2.5'	Soil	Charles Conway	06/03/94 1704	06/06/94
CONSTITUENT	(CAS RN)	*PQL µg/Kg	RESULT µg/Kg	NOTE
Vinyl Acetate	(108054)	600.	ND	
Vinyl Chloride	(75014)	100.	ND	
Xylenes (total)	(1330207)	100.	ND	
D4-DCA (% Surrogate Recovery #1)			84.	
D8-TOL (% Surrogate Recovery #2)			107.	
BFB (% Surrogate Recovery #3)			115.	

San Jose Lab Certifications: CAELAP #1204

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06/20/94
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Dudley Torres
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Lab Number : JK-1792-4
Project : Gilcrease, Foothill
Square
Analyzed : 06/14/94
Analyzed by: MM
Method : EPA 8240

REPORT OF ANALYTICAL RESULTS

Page 1 of 3

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED	RECEIVED
SB-4, 1'-1.5'	Soil	Charles Conway	06/03/94 1725	06/06/94
CONSTITUENT	(CAS RN)	*PQL µg/Kg	RESULT µg/Kg	NOTE
VOLATILE ORGANIC COMPOUNDS				1
Acetone	(67641)	2000.	ND	
Benzene	(71432)	100.	ND	
Bromodichloromethane	(75274)	100.	ND	
Bromoform	(75252)	100.	ND	
Bromomethane	(74839)	100.	ND	
2-Butanone (MEK)	(78933)	1000.	ND	
Carbon Disulfide	(75150)	200.	ND	
Carbon Tetrachloride	(56235)	100.	ND	
Chlorobenzene	(108907)	100.	840.	
Chloroethane	(75003)	100.	ND	
2-Chloroethyl Vinyl Ether	(110758)	1000.	ND	
Chloroform	(67663)	200.	ND	
Chloromethane	(74873)	100.	7700.	
Dibromochloromethane	(124481)	100.	ND	
1,2-Dichlorobenzene	(95501)	100.	ND	
1,3-Dichlorobenzene	(541731)	100.	ND	
1,4-Dichlorobenzene	(106467)	100.	ND	
1,1-Dichloroethane	(75343)	100.	ND	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)
(1) EXTRACTED by EPA 5030 (purge-and-trap)

06/20/94
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Lab Number : JK-1792-4
Project : Gilcrease, Foothill
Square
Analyzed : 06/14/94
Analyzed by: MM
Method : EPA 8240

REPORT OF ANALYTICAL RESULTS

Page 2 of 3

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED	RECEIVED
SB-4, 1'-1.5'	Soil	Charles Conway	06/03/94 1725	06/06/94
CONSTITUENT	(CAS RN)	*PQL µg/Kg	RESULT µg/Kg	NOTE
1,2-Dichloroethane	(107062)	100.	ND	
1,1-Dichloroethene	(75354)	100.	340.	
cis-1,2-Dichloroethene	(156592)	100.	3900.	
trans-1,2-Dichloroethene	(156605)	100.	720.	
1,2-Dichloropropane	(78875)	100.	ND	
cis-1,3-Dichloropropene	(100610105)	100.	ND	
trans-1,3-Dichloropropene	(10061026)	100.	ND	
Ethylbenzene	(100414)	100.	ND	
2-Hexanone	(591786)	600.	ND	
Methyl Isobutyl Ketone (MIBK)	(108101)	600.	ND	
Methylene Chloride	(75092)	600.	ND	
Styrene	(100425)	100.	ND	
1,1,2,2-Tetrachloroethane	(79345)	100.	ND	
Tetrachloroethene	(127184)	100.	4700000.	
Toluene	(108883)	100.	ND	
1,1,1-Trichloroethane	(71556)	100.	ND	
1,1,2-Trichloroethane	(79005)	100.	ND	
Trichloroethene	(79016)	100.	60000.	
Trichlorofluoromethane	(75694)	100.	ND	
Trichlorotrifluoroethane	(76131)	600.	ND	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

06/20/94
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Analyzed by: MM
Method : EPA 8240

REPORT OF ANALYTICAL RESULTS

Page 3 of 3

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED	RECEIVED
SB-4, 1'-1.5'	Soil	Charles Conway	06/03/94 1725	06/06/94

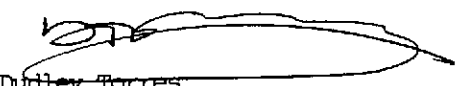
CONSTITUENT	(CAS RN)	*PQL µg/Kg	RESULT µg/Kg	NOTE
Vinyl Acetate	(108054)	600.	ND	
Vinyl Chloride	(75014)	100.	ND	
Xylenes (total)	(1330207)	100.	ND	
D4-DCA (% Surrogate Recovery #1)			92.	
D8-TOL (% Surrogate Recovery #2)			98.	
BFB (% Surrogate Recovery #3)			105.	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

06/20/94
FIN2/061410B/061713A
DT/eta3(dw)/mtm
FIN2-061494S

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.


Dudley Torres
Organics Manager

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Air, Water & Hazardous Waste Sampling, Analysis & Consultation • Certified Hazardous Waste, Chemistry, Bacteriology & Bioassay Laboratories



RUGEAS CORPORATION
 780 PURISSIMA
 HALF MOON BAY, CALIFORNIA 94019
 (415) 726-7700
 (415) 726-1217 (FAX)

Chain of Custody

Page 1 of 1

• PLEASE PRINT IN PEN

Client Gilcrease	Contact R. Gilcrease	Phone # () -	FAX # ()
Address 10700 MacArthur Blvd		City BLVD	State CA
Project Name/Number Foothill Square		Project MGR C. Conway	
Bill (if different than above) Anglas Corp.	Address 780 Purissima St Half Moon Bay, CA 94019		
Sampler (Print and sign) Charles Conway	Charles Conway	Due Date	Circle for RUSH* <input type="checkbox"/>
		Copies To:	Auth. Init.

Sample Description	Date/Time Coll'd	*Matrix	# of Containers	Pres.	Filt. y/n	*Subject to Availability Analysis	Remarks	Lab ID #
SB-1	6-3-94 6-3-94 16:02	S	1	no	no	EPA 8240	side wall sample break glass	JK1792-1
SB-2, 1'-1.5'	6-3-94 6-3-94 16:28	S	1	no	no	EPA 8240		-2
SB-3, 2'-2.5'	6-3-94 6-3-94 17:14	S	1	no	no	EPA 8240		-3
SB-4, 1'-1.5'	6-3-94 6-3-94 17:25	S	1	no	no	EPA 8240		-4

Relinquished By	Date/Time	Received By	Relinquished By	Date/Time	Received By
Charles Conway	6-6-94 6-6-94 12:00	JANU	JANU	6/6/94 6/6/94 13:00	Raymond E. Deder
Raymond E. Deder	6/4/94 1355				

Shipping Method	Shipping #	Received By	Date/Time	Condition (See Remarks)
World Courier		Alison C. Abraham	6/6/94 1355	Cold <input checked="" type="checkbox"/> Sealed <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>

REMARKS

Temp of cooler = 33°F upon receipt

- * Matrix:
- DW - Drinking Water
- WW - Wastewater
- GW - Groundwater
- SW - Surface Water
- IM - Impinger
- FI - Filter
- FP - Free Product
- A/G - Air/Gas
- SL - Sludge/Soil/Solid
- OT - Other

FOR LAB USE ONLY

August 10, 1994

Ms. Rosanna Garrison
Augeas Corporation
780 Purissima St.
P.O. Box 940
Half Moon Bay, CA 94019

RE: PACE Project No. 440804.523
Client Reference: Young's Cleaners, Oakland CA

Dear Ms. Garrison:

Enclosed is the report of laboratory analyses for samples received August 04, 1994.

Footnotes are given at the end of the report.

If you have any questions concerning this report, please feel free to contact us.

Sincerely,


Shellie Hoyt
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

Augeas Corporation
 780 Purissima St.
 P.O. Box 940
 Half Moon Bay, CA 94019

August 10, 1994
 PACE Project Number: 440804523

Attn: Ms. Rosanna Garrison

Client Reference: Young's Cleaners, Oakland CA

PACE Sample Number:
 Date Collected:
 Date Received:
 Client Sample ID:

70 0365716
 07/29/94
 08/04/94
 SS-1-2'

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>		<u>DATE ANALYZED</u>
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ORGANIC ANALYSIS

VOLATILE ORGANICS, EPA METHOD 8240 GC/MS

Chloromethane	ug/kg	1200	ND	08/06/94
Vinyl Chloride	ug/kg	1200	ND	08/06/94
Bromomethane	ug/kg	1200	ND	08/06/94
Chloroethane	ug/kg	1200	ND	08/06/94
Trichlorofluoromethane	ug/kg	620	ND	08/06/94
1,1,2-Trichlor-1,2,2-trifluoroethane	ug/kg	620	ND	08/06/94
2-Butanone (MEK)	ug/kg	6200	ND	08/06/94
1,1-Dichloroethene	ug/kg	620	ND	08/06/94
Carbon Disulfide	ug/kg	620	ND	08/06/94
Acetone	ug/kg	6200	ND	08/06/94
Methylene Chloride	ug/kg	620	ND	08/06/94
trans-1,2-Dichloroethene	ug/kg	620	ND	08/06/94
cis-1,2-Dichloroethene	ug/kg	620	ND	08/06/94
Vinyl Acetate	ug/kg	6200	ND	08/06/94
1,1-Dichloroethane	ug/kg	620	ND	08/06/94
Chloroform	ug/kg	620	ND	08/06/94
1,1,1-Trichloroethane	ug/kg	620	ND	08/06/94
1,2-Dichloroethane	ug/kg	620	ND	08/06/94
Carbon Tetrachloride	ug/kg	620	ND	08/06/94
Benzene	ug/kg	620	ND	08/06/94
1,2-Dichloropropane	ug/kg	620	ND	08/06/94
Trichloroethene	ug/kg	620	ND	08/06/94
Bromodichloromethane	ug/kg	620	ND	08/06/94
2-Chloroethyl Vinyl Ether	ug/kg	1200	ND	08/06/94
trans-1,3-Dichloropropene	ug/kg	620	ND	08/06/94
4-Methyl-2-pentanone (MIBK)	ug/kg	6200	ND	08/06/94
Toluene	ug/kg	620	ND	08/06/94
cis-1,3-Dichloropropene	ug/kg	620	ND	08/06/94

REPORT OF LABORATORY ANALYSIS

Ms. Rosanna Garrison
 Page 2

August 10, 1994
 PACE Project Number: 440804523

Client Reference: Young's Cleaners, Oakland CA

PACE Sample Number: 70 0365716
 Date Collected: 07/29/94
 Date Received: 08/04/94
 Client Sample ID: SS-1-2'

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>		<u>DATE ANALYZED</u>
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ORGANIC ANALYSIS

VOLATILE ORGANICS, EPA METHOD 8240 GC/MS

1,1,2-Trichloroethane	ug/kg	620	ND	08/06/94
Dibromochloromethane	ug/kg	620	ND	08/06/94
2-Hexanone	ug/kg	6200	ND	08/06/94
Tetrachloroethene	ug/kg	620	2000	08/06/94
Chlorobenzene	ug/kg	620	ND	08/06/94
Ethylbenzene	ug/kg	620	ND	08/06/94
Bromoform	ug/kg	620	ND	08/06/94
Xylene(s) Total	ug/kg	620	ND	08/06/94
Styrene	ug/kg	620	ND	08/06/94
1,1,2,2,-Tetrachloroethane	ug/kg	620	ND	08/06/94
1,3-Dichlorobenzene	ug/kg	620	ND	08/06/94
1,4-Dichlorobenzene	ug/kg	620	ND	08/06/94
1,2-Dichlorobenzene	ug/kg	620	ND	08/06/94
1,2-Dichloroethane-d4 (Surrog. Recovery)	%		94	08/06/94
Toluene-d8 (Surrogate Recovery)	%		88	08/06/94
4-Bromofluorobenzene (Surrog. Recovery)	%		104	08/06/94

REPORT OF LABORATORY ANALYSIS

Ms. Rosanna Garrison
Page 3

August 10, 1994
PACE Project Number: 440804523

Client Reference: Young's Cleaners, Oakland CA

PACE Sample Number: 70 0365724
Date Collected: 07/29/94
Date Received: 08/04/94
Client Sample ID: SS-2-2'

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>		<u>DATE ANALYZED</u>
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ORGANIC ANALYSIS

VOLATILE ORGANICS, EPA METHOD 8240 GC/MS

Chloromethane	mg/kg	50	(1) ND	08/06/94
Vinyl Chloride	mg/kg	50	ND	08/06/94
Bromomethane	mg/kg	50	ND	08/06/94
Chloroethane	mg/kg	50	ND	08/06/94
Trichlorofluoromethane	mg/kg	25	ND	08/06/94
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg	25	ND	08/06/94
2-Butanone (MEK)	mg/kg	250	ND	08/06/94
1,1-Dichloroethene	mg/kg	25	ND	08/06/94
Carbon Disulfide	mg/kg	25	ND	08/06/94
Acetone	mg/kg	250	ND	08/06/94
Methylene Chloride	mg/kg	25	ND	08/06/94
trans-1,2-Dichloroethene	mg/kg	25	ND	08/06/94
cis-1,2-Dichloroethene	mg/kg	25	ND	08/06/94
Vinyl Acetate	mg/kg	250	ND	08/06/94
1,1-Dichloroethane	mg/kg	25	ND	08/06/94
Chloroform	mg/kg	25	ND	08/06/94
1,1,1-Trichloroethane	mg/kg	25	ND	08/06/94
1,2-Dichloroethane	mg/kg	25	ND	08/06/94
Carbon Tetrachloride	mg/kg	25	ND	08/06/94
Benzene	mg/kg	25	ND	08/06/94
1,2-Dichloropropane	mg/kg	25	ND	08/06/94
Trichloroethene	mg/kg	25	ND	08/06/94
Bromodichloromethane	mg/kg	25	ND	08/06/94
2-Chloroethyl Vinyl Ether	mg/kg	50	ND	08/06/94
trans-1,3-Dichloropropene	mg/kg	25	ND	08/06/94
4-Methyl-2-pentanone (MIBK)	mg/kg	250	ND	08/06/94
Toluene	mg/kg	25	ND	08/06/94
cis-1,3-Dichloropropene	mg/kg	25	ND	08/06/94
1,1,2-Trichloroethane	mg/kg	25	ND	08/06/94
Dibromochloromethane	mg/kg	25	ND	08/06/94
2-Hexanone	mg/kg	250	ND	08/06/94

REPORT OF LABORATORY ANALYSIS

Ms. Rosanna Garrison
 Page 4

August 10, 1994
 PACE Project Number: 440804523

Client Reference: Young's Cleaners, Oakland CA

PACE Sample Number: 70 0365724
 Date Collected: 07/29/94
 Date Received: 08/04/94
 Client Sample ID: SS-2-2'

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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ORGANIC ANALYSIS

VOLATILE ORGANICS, EPA METHOD 8240 GC/MS

Tetrachloroethene	mg/kg	25	(1) 1400	08/06/94
Chlorobenzene	mg/kg	25	ND	08/06/94
Ethylbenzene	mg/kg	25	ND	08/06/94
Bromoform	mg/kg	25	ND	08/06/94
Xylene(s) Total	mg/kg	25	ND	08/06/94
Styrene	mg/kg	25	ND	08/06/94
1,1,2,2,-Tetrachloroethane	mg/kg	25	ND	08/06/94
1,3-Dichlorobenzene	mg/kg	25	ND	08/06/94
1,4-Dichlorobenzene	mg/kg	25	ND	08/06/94
1,2-Dichlorobenzene	mg/kg	25	ND	08/06/94
1,2-Dichloroethane-d4 (Surrog. Recovery)	%		ND SR	08/06/94
Toluene-d8 (Surrogate Recovery)	%		ND	08/06/94
4-Bromofluorobenzene (Surrog. Recovery)	%		ND	08/06/94

Ms. Rosanna Garrison
 Page 5

August 10, 1994
 PACE Project Number: 440804523

Client Reference: Young's Cleaners, Oakland CA

PACE Sample Number: 70 0365732
 Date Collected: 07/29/94
 Date Received: 08/04/94
 Client Sample ID: SS-3-2'

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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ORGANIC ANALYSIS

VOLATILE ORGANICS, EPA METHOD 8240 GC/MS

			(2)	
Chloromethane	mg/kg	100	ND	08/06/94
Vinyl Chloride	mg/kg	100	ND	08/06/94
Bromomethane	mg/kg	100	ND	08/06/94
Chloroethane	mg/kg	100	ND	08/06/94
Trichlorofluoromethane	mg/kg	50	ND	08/06/94
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg	50	ND	08/06/94
2-Butanone (MEK)	mg/kg	500	ND	08/06/94
1,1-Dichloroethene	mg/kg	50	ND	08/06/94
Carbon Disulfide	mg/kg	50	ND	08/06/94
Acetone	mg/kg	500	ND	08/06/94
Methylene Chloride	mg/kg	50	ND	08/06/94
trans-1,2-Dichloroethene	mg/kg	50	ND	08/06/94
cis-1,2-Dichloroethene	mg/kg	50	ND	08/06/94
Vinyl Acetate	mg/kg	500	ND	08/06/94
1,1-Dichloroethane	mg/kg	50	ND	08/06/94
Chloroform	mg/kg	50	ND	08/06/94
1,1,1-Trichloroethane	mg/kg	50	ND	08/06/94
1,2-Dichloroethane	mg/kg	50	ND	08/06/94
Carbon Tetrachloride	mg/kg	50	ND	08/06/94
Benzene	mg/kg	50	ND	08/06/94
1,2-Dichloropropane	mg/kg	50	ND	08/06/94
Trichloroethene	mg/kg	50	ND	08/06/94
Bromodichloromethane	mg/kg	50	ND	08/06/94
2-Chloroethyl Vinyl Ether	mg/kg	100	ND	08/06/94
trans-1,3-Dichloropropene	mg/kg	50	ND	08/06/94
4-Methyl-2-pentanone (MIBK)	mg/kg	500	ND	08/06/94
Toluene	mg/kg	50	ND	08/06/94
cis-1,3-Dichloropropene	mg/kg	50	ND	08/06/94
1,1,2-Trichloroethane	mg/kg	50	ND	08/06/94
Dibromochloromethane	mg/kg	50	ND	08/06/94
2-Hexanone	mg/kg	500	ND	08/06/94

REPORT OF LABORATORY ANALYSIS

Ms. Rosanna Garrison
 Page 6

August 10, 1994
 PACE Project Number: 440804523

Client Reference: Young's Cleaners, Oakland CA

PACE Sample Number: 70 0365732
 Date Collected: 07/29/94
 Date Received: 08/04/94
 Client Sample ID: SS-3-2'

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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ORGANIC ANALYSIS

VOLATILE ORGANICS, EPA METHOD 8240 GC/MS

Tetrachloroethene	mg/kg	50	(2) 5000	08/06/94
Chlorobenzene	mg/kg	50	ND	08/06/94
Ethylbenzene	mg/kg	50	ND	08/06/94
Bromoform	mg/kg	50	ND	08/06/94
Xylene(s) Total	mg/kg	50	ND	08/06/94
Styrene	mg/kg	50	ND	08/06/94
1,1,2,2,-Tetrachloroethane	mg/kg	50	ND	08/06/94
1,3-Dichlorobenzene	mg/kg	50	ND	08/06/94
1,4-Dichlorobenzene	mg/kg	50	ND	08/06/94
1,2-Dichlorobenzene	mg/kg	50	ND	08/06/94
1,2-Dichloroethane-d4 (Surrog. Recovery)	%		ND SR	08/06/94
Toluene-d8 (Surrogate Recovery)	%		ND	08/06/94
4-Bromofluorobenzene (Surrog. Recovery)	%		ND	08/06/94

Ms. Rosanna Garrison
 Page 7

August 10, 1994
 PACE Project Number: 440804523

Client Reference: Young's Cleaners, Oakland CA

PACE Sample Number: 70 0365740
 Date Collected: 07/29/94
 Date Received: 08/04/94
 Client Sample ID: SS-4-1.5'

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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ORGANIC ANALYSIS

VOLATILE ORGANICS, EPA METHOD 8240 GC/MS

Chloromethane	mg/kg	12	ND	08/06/94
Vinyl Chloride	mg/kg	12	ND	08/06/94
Bromomethane	mg/kg	12	ND	08/06/94
Chloroethane	mg/kg	12	ND	08/06/94
Trichlorofluoromethane	mg/kg	6.2	ND	08/06/94
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg	6.2	ND	08/06/94
2-Butanone (MEK)	mg/kg	62	ND	08/06/94
1,1-Dichloroethene	mg/kg	6.2	ND	08/06/94
Carbon Disulfide	mg/kg	6.2	ND	08/06/94
Acetone	mg/kg	62	ND	08/06/94
Methylene Chloride	mg/kg	6.2	ND	08/06/94
trans-1,2-Dichloroethene	mg/kg	6.2	ND	08/06/94
cis-1,2-Dichloroethene	mg/kg	6.2	ND	08/06/94
Vinyl Acetate	mg/kg	62	ND	08/06/94
1,1-Dichloroethane	mg/kg	6.2	ND	08/06/94
Chloroform	mg/kg	6.2	ND	08/06/94
1,1,1-Trichloroethane	mg/kg	6.2	ND	08/06/94
1,2-Dichloroethane	mg/kg	6.2	ND	08/06/94
Carbon Tetrachloride	mg/kg	6.2	ND	08/06/94
Benzene	mg/kg	6.2	ND	08/06/94
1,2-Dichloropropane	mg/kg	6.2	ND	08/06/94
Trichloroethene	mg/kg	6.2	ND	08/06/94
Bromodichloromethane	mg/kg	6.2	ND	08/06/94
2-Chloroethyl Vinyl Ether	mg/kg	12	ND	08/06/94
trans-1,3-Dichloropropene	mg/kg	6.2	ND	08/06/94
4-Methyl-2-pentanone (MIBK)	mg/kg	62	ND	08/06/94
Toluene	mg/kg	6.2	ND	08/06/94
cis-1,3-Dichloropropene	mg/kg	6.2	ND	08/06/94
1,1,2-Trichloroethane	mg/kg	6.2	ND	08/06/94
Dibromochloromethane	mg/kg	6.2	ND	08/06/94
2-Hexanone	mg/kg	62	ND	08/06/94

REPORT OF LABORATORY ANALYSIS

Ms. Rosanna Garrison
 Page 8

August 10, 1994
 PACE Project Number: 440804523

Client Reference: Young's Cleaners, Oakland CA

PACE Sample Number: 70 0365740
 Date Collected: 07/29/94
 Date Received: 08/04/94
 Client Sample ID: SS-4-1.5'

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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ORGANIC ANALYSIS

VOLATILE ORGANICS, EPA METHOD 8240 GC/MS

Tetrachloroethene	mg/kg	6.2	160	08/06/94
Chlorobenzene	mg/kg	6.2	ND	08/06/94
Ethylbenzene	mg/kg	6.2	ND	08/06/94
Bromoform	mg/kg	6.2	ND	08/06/94
Xylene(s) Total	mg/kg	6.2	ND	08/06/94
Styrene	mg/kg	6.2	ND	08/06/94
1,1,2,2,-Tetrachloroethane	mg/kg	6.2	ND	08/06/94
1,3-Dichlorobenzene	mg/kg	6.2	ND	08/06/94
1,4-Dichlorobenzene	mg/kg	6.2	ND	08/06/94
1,2-Dichlorobenzene	mg/kg	6.2	ND	08/06/94
1,2-Dichloroethane-d4 (Surrog. Recovery)	%		106	08/06/94
Toluene-d8 (Surrogate Recovery)	%		94	08/06/94
4-Bromofluorobenzene (Surrog. Recovery)	%		111	08/06/94

REPORT OF LABORATORY ANALYSIS

Ms. Rosanna Garrison
 Page 9

August 10, 1994
 PACE Project Number: 440804523

Client Reference: Young's Cleaners, Oakland CA

PACE Sample Number: 70 0365759
 Date Collected: 07/29/94
 Date Received: 08/04/94
 Client Sample ID: SS-5-2'

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>		<u>DATE ANALYZED</u>
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ORGANIC ANALYSIS

VOLATILE ORGANICS, EPA METHOD 8240 GC/MS

Chloromethane	ug/kg	50	ND	08/08/94
Vinyl Chloride	ug/kg	50	ND	08/08/94
Bromomethane	ug/kg	50	ND	08/08/94
Chloroethane	ug/kg	50	ND	08/08/94
Trichlorofluoromethane	ug/kg	25	ND	08/08/94
1,1,2-Trichlor-1,2,2-trifluoroethane	ug/kg	25	ND	08/08/94
2-Butanone (MEK)	ug/kg	250	ND	08/08/94
1,1-Dichloroethene	ug/kg	25	ND	08/08/94
Carbon Disulfide	ug/kg	25	ND	08/08/94
Acetone	ug/kg	250	ND	08/08/94
Methylene Chloride	ug/kg	25	ND	08/08/94
trans-1,2-Dichloroethene	ug/kg	25	ND	08/08/94
cis-1,2-Dichloroethene	ug/kg	25	240	08/08/94
Vinyl Acetate	ug/kg	250	ND	08/08/94
1,1-Dichloroethane	ug/kg	25	ND	08/08/94
Chloroform	ug/kg	25	ND	08/08/94
1,1,1-Trichloroethane	ug/kg	25	ND	08/08/94
1,2-Dichloroethane	ug/kg	25	ND	08/08/94
Carbon Tetrachloride	ug/kg	25	ND	08/08/94
Benzene	ug/kg	25	ND	08/08/94
1,2-Dichloropropane	ug/kg	25	ND	08/08/94
Trichloroethene	ug/kg	25	60	08/08/94
Bromodichloromethane	ug/kg	25	ND	08/08/94
2-Chloroethyl Vinyl Ether	ug/kg	50	ND	08/08/94
trans-1,3-Dichloropropene	ug/kg	25	ND	08/08/94
4-Methyl-2-pentanone (MIBK)	ug/kg	250	ND	08/08/94
Toluene	ug/kg	25	ND	08/08/94
cis-1,3-Dichloropropene	ug/kg	25	ND	08/08/94
1,1,2-Trichloroethane	ug/kg	25	ND	08/08/94
Dibromochloromethane	ug/kg	25	ND	08/08/94
2-Hexanone	ug/kg	250	ND	08/08/94

REPORT OF LABORATORY ANALYSIS

Ms. Rosanna Garrison
 Page 10

August 10, 1994
 PACE Project Number: 440804523

Client Reference: Young's Cleaners, Oakland CA

PACE Sample Number: 70 0365759
 Date Collected: 07/29/94
 Date Received: 08/04/94
 Client Sample ID: SS-5-2'

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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ORGANIC ANALYSIS

VOLATILE ORGANICS, EPA METHOD 8240 GC/MS

Tetrachloroethene	ug/kg	620	730 D	08/08/94
Chlorobenzene	ug/kg	25	ND	08/08/94
Ethylbenzene	ug/kg	25	ND	08/08/94
Bromoform	ug/kg	25	ND	08/08/94
Xylene(s) Total	ug/kg	25	ND	08/08/94
Styrene	ug/kg	25	ND	08/08/94
1,1,2,2,-Tetrachloroethane	ug/kg	25	ND	08/08/94
1,3-Dichlorobenzene	ug/kg	25	ND	08/08/94
1,4-Dichlorobenzene	ug/kg	25	ND	08/08/94
1,2-Dichlorobenzene	ug/kg	25	ND	08/08/94
1,2-Dichloroethane-d4 (Surrog. Recovery)	%		109	08/08/94
Toluene-d8 (Surrogate Recovery)	%		99	08/08/94
4-Bromofluorobenzene (Surrog. Recovery)	%		109	08/08/94

REPORT OF LABORATORY ANALYSIS

Ms. Rosanna Garrison
 Page 11

August 10, 1994
 PACE Project Number: 440804523

Client Reference: Young's Cleaners, Oakland CA

PACE Sample Number: 70 0365767
 Date Collected: 07/29/94
 Date Received: 08/04/94
 Client Sample ID: SS-6-2'

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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ORGANIC ANALYSIS

VOLATILE ORGANICS, EPA METHOD 8240 GC/MS

Chloromethane	mg/kg	25	ND	08/06/94
Vinyl Chloride	mg/kg	25	ND	08/06/94
Bromomethane	mg/kg	25	ND	08/06/94
Chloroethane	mg/kg	25	ND	08/06/94
Trichlorofluoromethane	mg/kg	12	ND	08/06/94
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg	12	ND	08/06/94
2-Butanone (MEK)	mg/kg	120	ND	08/06/94
1,1-Dichloroethene	mg/kg	12	ND	08/06/94
Carbon Disulfide	mg/kg	12	ND	08/06/94
Acetone	mg/kg	120	ND	08/06/94
Methylene Chloride	mg/kg	12	ND	08/06/94
trans-1,2-Dichloroethene	mg/kg	12	ND	08/06/94
cis-1,2-Dichloroethene	mg/kg	12	ND	08/06/94
Vinyl Acetate	mg/kg	120	ND	08/06/94
1,1-Dichloroethane	mg/kg	12	ND	08/06/94
Chloroform	mg/kg	12	ND	08/06/94
1,1,1-Trichloroethane	mg/kg	12	ND	08/06/94
1,2-Dichloroethane	mg/kg	12	ND	08/06/94
Carbon Tetrachloride	mg/kg	12	ND	08/06/94
Benzene	mg/kg	12	ND	08/06/94
1,2-Dichloropropane	mg/kg	12	ND	08/06/94
Trichloroethene	mg/kg	12	ND	08/06/94
Bromodichloromethane	mg/kg	12	ND	08/06/94
2-Chloroethyl Vinyl Ether	mg/kg	25	ND	08/06/94
trans-1,3-Dichloropropene	mg/kg	12	ND	08/06/94
4-Methyl-2-pentanone (MIBK)	mg/kg	120	ND	08/06/94
Toluene	mg/kg	12	ND	08/06/94
cis-1,3-Dichloropropene	mg/kg	12	ND	08/06/94
1,1,2-Trichloroethane	mg/kg	12	ND	08/06/94
Dibromochloromethane	mg/kg	12	ND	08/06/94
2-Hexanone	mg/kg	120	ND	08/06/94

REPORT OF LABORATORY ANALYSIS

Ms. Rosanna Garrison
 Page 12

August 10, 1994
 PACE Project Number: 440804523

Client Reference: Young's Cleaners, Oakland CA

PACE Sample Number:
 Date Collected:
 Date Received:
 Client Sample ID:
 Parameter

70 0365767
 07/29/94
 08/04/94
 SS-6-2'

Units MDL DATE ANALYZED

ORGANIC ANALYSIS

VOLATILE ORGANICS, EPA METHOD 8240 GC/MS

Tetrachloroethene	mg/kg	12	310	08/06/94
Chlorobenzene	mg/kg	12	ND	08/06/94
Ethylbenzene	mg/kg	12	ND	08/06/94
Bromoform	mg/kg	12	ND	08/06/94
Xylene(s) Total	mg/kg	12	ND	08/06/94
Styrene	mg/kg	12	ND	08/06/94
1,1,2,2,-Tetrachloroethane	mg/kg	12	ND	08/06/94
1,3-Dichlorobenzene	mg/kg	12	ND	08/06/94
1,4-Dichlorobenzene	mg/kg	12	ND	08/06/94
1,2-Dichlorobenzene	mg/kg	12	ND	08/06/94
1,2-Dichloroethane-d4 (Surrog. Recovery)	%		105	08/06/94
Toluene-d8 (Surrogate Recovery)	%		90	08/06/94
4-Bromofluorobenzene (Surrog. Recovery)	%		111	08/06/94

APPENDIX A

Well Permits
Boring Logs
Well Construction Details



ZONE 7 WATER AGENCY

5997 PARKSIDE DRIVE PLEASANTON, CALIFORNIA 94588

VOICE (510) 484-2600
FAX (510) 482-3914

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT 10700 MacArthur Blvd
OAKLAND

PERMIT NUMBER 94500
LOCATION NUMBER _____

CLIENT
Name Richard Gilcrease, Drake Builders
Address 5201 Sacramento Ave Voice (510) 524-1177
City Richmond CA Zip 94609

PERMIT CONDITIONS
Circled Permit Requirements Apply

APPLICANT
Name Charles Company, Augias Corp
Address 550 Yuxissima St Voice (415) 726-9300
City Half Moon Bay CA Zip 94019

- A. GENERAL.**
1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.
 2. Submit to Zone 7 within 90 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well Projects, or drilling logs and location sketch for geotechnical projects.
 3. Permit is void if project not begun within 90 days of approval date.

TYPE OF PROJECT

Well Construction	Geotechnical Investigation
Cathodic Protection _____	General _____
Water Supply _____	Confirmation _____
Monitoring <input checked="" type="checkbox"/>	Well Destruction _____

- B. WATER WELLS, INCLUDING PIEZOMETERS**
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
 2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved. Minimum seal depth for monitoring wells to the maximum depth practicable or 20 feet.

PROPOSED WATER SUPPLY WELL USE

Domestic _____	Industrial _____	Other _____
Municipal _____	Irrigation _____	

- C. GEOTECHNICAL.** Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.
- D. CATHODIC.** Fill hole above anode zone with concrete placed by tremie.
- E. WELL DESTRUCTION.** See attached.

DRILLING METHOD:

Mini Rotary _____	Air Rotary _____	Auger <input checked="" type="checkbox"/>
Cable _____	Other _____	

DRILLER'S LICENSE NO. 554979

WELL PROJECTS

Drill Hole Diameter <u>4</u> in.	Maximum _____
Casing Diameter <u>2</u> in.	Depth <u>32</u> ft.
Surface Seal Depth <u>20</u> ft.	Number <u>2</u>

GEOTECHNICAL PROJECTS

Number of Borings _____	Maximum _____
Hole Diameter _____ in.	Depth _____ ft.

ESTIMATED STARTING DATE 9-1-94
ESTIMATED COMPLETION DATE 9-1-94

Approved Wyman Hong Date 1 Sep 94
Wyman Hong

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE Charles J. Connor Date 9-1-94



ZONE 7 WATER AGENCY

5987 PARKSIDE DRIVE PLEASANTON, CALIFORNIA 94588

VOICE (510) 484-2600
FAX (510) 482-3014

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT 10700 MacArthur Blvd
Daly Park, California

PERMIT NUMBER 94705
LOCATION NUMBER _____

CLIENT
Name Mr. Richard Gilcrease
Address 5201 Sacramento Avenue Voice 510-529-1137
City Richmond, CA Zip 94804

PERMIT CONDITIONS

Circled Permit Requirements Apply

APPLICANT
Name Charles Conway / Augers Corporation
Address 360 Purissima Street Voice 915-726-1217
City Half Moon Bay, CA Zip 94019

A. GENERAL

- 1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.
- 2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects.
- 3. Permit is void if project not begun within 90 days of approval date.

B. WATER WELLS, INCLUDING PIEZOMETERS

- 1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
- 2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

C. GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.

D. CATHODIC. Fill hole above anode zone with concrete placed by tremie.

F. WELL DESTRUCTION. See attached.

TYPE OF PROJECT
 Construction Borings
 Cathodic Protection
 Water Supply
 Monitoring

Geotechnical Investigation:
 General
 Contamination
 Well Destruction

PROPOSED WATER SUPPLY WELL USE NA
 Domestic
 Municipal
 Industrial
 Irrigation

DRILLING METHOD:
 Mud Rotary
 Air Rotary
 Other
 Auger

DRILLER'S LICENSE NO. C-59 554479

PROJECTS Borings

Drill Hole Diameter	in.	Maximum
Casing Diameter	in.	Depth
Surface Seal Depth	ft.	Number

GEOTECHNICAL PROJECTS

Number of Borings	2	Maximum
Hole Diameter	8 in.	Depth

ESTIMATED STARTING DATE: Nov. 5, 1994
ESTIMATED COMPLETION DATE: Nov. 5, 1994

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

Approved: Wyman Hong
Wyman Hong

Date 1 Nov 94



ZONE 7 WATER AGENCY

5997 PARKSIDE DRIVE PLEASANTON, CALIFORNIA 94588

VOICE (810) 484-2600
FAX (510) 462-3914

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT 10700 MacArthur Blvd.
Oakland, CA

PERMIT NUMBER 94733
LOCATION NUMBER _____

CLIENT
Name Mr. Richard Gireuse
Address 5201 Sacramento St. Volco 510-524-1177
City Richmond, CA Zip 94809

PERMIT CONDITIONS

Circled Permit Requirements Apply

APPLICANT
Name Charles Conway/Augers Corporation
Address 300 Placerville St. Volco 415-726-1217
City Half Moon Bay, CA Zip 94019

- GENERAL**
1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.
 2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well Projects, or drilling logs and location sketch for geotechnical projects.
 3. Permit is void if project not begun within 90 days of approval date.

TYPE OF PROJECT
Well Construction _____
Cathodic Protection _____
Water Supply _____
Monitoring

Geotechnical Investigation
General _____
Contamination
Well Destruction _____

B. WATER WELLS, INCLUDING PIEZOMETERS

PROPOSED WATER SUPPLY WELL USE
Domestic _____ Industrial _____ Other _____
Municipal _____ Irrigation _____

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 60 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

DRILLING METHOD:
Mud Rotary _____ Air Rotary _____ Auger
Cable _____ Other _____

- C. GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.
- D. CATHODIC. Fill hole above anode zone with concrete placed by tremie.
- E. WELL DESTRUCTION. See attached.

DRILLER'S LICENSE NO. C57 # 554974

WELL PROJECTS
Drill Hole Diameter 8 in. Maximum _____
Casing Diameter 2 in. Depth 30-35 ft.
Surface Seal Depth 2 ft. Number 1

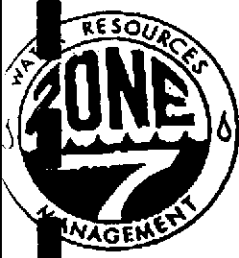
GEOTECHNICAL PROJECTS
Number of Borings 1 Maximum _____
Hole Diameter 8 in. Depth 25-30 ft.

ESTIMATED STARTING DATE NOV. 18, 1994
ESTIMATED COMPLETION DATE NOV. 18, 1994

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-66.

Approved Wyman Hong Date 15 Nov 94
Wyman Hong

APPLICANT'S SIGNATURE Charles Conway Date NOV. 15, 1994



ZONE 7 WATER AGENCY

5997 PARKSIDE DRIVE PLEASANTON, CALIFORNIA 94588

VOICE (510) 484-2600
FAX (510) 482-3914

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT 10700 MacArthur Blvd.
Oakland, California

PERMIT NUMBER _____
LOCATION NUMBER _____

APPLICANT NAME Mr. Richard Gilcrease
ADDRESS 9201 Sacramento Ave, Voice 510-524-1177
Richmond, CA Zip 94809

PERMIT CONDITIONS

Circled Permit Requirements Apply

APPLICANT NAME Charles Conway / Augers Corp.
ADDRESS 790 Purissima St, Voice 915-726-7700
Half Moon Bay, CA Zip 94019

A. GENERAL

1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.
2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well Projects, or drilling logs and location sketch for geotechnical projects.
3. Permit is void if project not begun within 90 days of approval date.

B. WATER WELLS, INCLUDING PIEZOMETERS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

C. GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.

D. CATHODIC. Fill hole above anode zone with concrete placed by tremie.

E. WELL DESTRUCTION. See attached.

TYPE OF PROJECT	Geotechnical Investigation
Well Construction	General
Cathodic Protection	Contamination
Water Supply	Well Destruction
Monitoring	

PROPOSED WATER SUPPLY WELL USE

Domestic	Industrial	Other
Municipal	Irrigation	

DRILLING METHOD:

Aud Rotary	Air Rotary	Auger
Other		<input checked="" type="checkbox"/>

DRILLER'S LICENSE NO. # 554979

WELL PROJECTS

Drill Hole Diameter	in.	Maximum
Casing Diameter	in.	Depth
Surface Seal Depth	ft.	Number

GEOTECHNICAL PROJECTS

Number of Borings	2	Maximum
Hole Diameter	8 in.	Depth
		22 ft.

ESTIMATED STARTING DATE 10/7/99
ESTIMATED COMPLETION DATE 10/7/99

Approved _____ Date _____

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE Charles Conway Date Dec. 12, 1994

APPENDIX B

Ground Water Sampling Field Logs
Chain of Custody
Certified Analytical Reports



COAST-TO-COAST ANALYTICAL SERVICES, INC.

EXCELLENCE
IN ANALYSIS

NorCal Division (San Jose Laboratory)
2059 Junction Ave.

San Jose, CA 95131
(408) 955-9077

CLIENT: Rosanna Garrison
Augeas Corporation
780 Purissima Street, P.O. Box 940
Half Moon Bay, CA 94019

Lab Number : JK-1792-1
Project : Gilcrease, Foothill
Square
Analyzed : 06/14/94
Analyzed by: MM
Method : EPA 8240

REPORT OF ANALYTICAL RESULTS

Page 1 of 3

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED	RECEIVED
SB-1	Soil	Charles Conway	06/03/94 1602	06/06/94
CONSTITUENT	(CAS RN)	*PQL µg/Kg	RESULT µg/Kg	NOTE
VOLATILE ORGANIC COMPOUNDS				1
Acetone	(67641)	100.	ND	
Benzene	(71432)	5.	ND	
Bromodichloromethane	(75274)	5.	ND	
Bromoform	(75252)	5.	ND	
Bromomethane	(74839)	5.	ND	
2-Butanone (MEK)	(78933)	50.	ND	
Carbon Disulfide	(75150)	10.	ND	
Carbon Tetrachloride	(56235)	5.	ND	
Chlorobenzene	(108907)	5.	ND	
Chloroethane	(75003)	5.	ND	
2-Chloroethyl Vinyl Ether	(110758)	50.	ND	
Chloroform	(67663)	10.	ND	
Chloromethane	(74873)	5.	ND	
Dibromochloromethane	(124481)	5.	ND	
1,2-Dichlorobenzene	(95501)	5.	ND	
1,3-Dichlorobenzene	(541731)	5.	ND	
1,4-Dichlorobenzene	(106467)	5.	ND	
1,1-Dichloroethane	(75343)	5.	ND	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)
(1) EXTRACTED by EPA 5030 (purge-and-trap)

06/20/94
FIN2/061407B/061708A
DT/eta3(dw)/mtm
FIN2-061494S

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COAST-TO-COAST ANALYTICAL SERVICES, INC.

EXCELLENCE
IN ANALYSIS

NorCal Division (San Jose Laboratory)
2059 Junction Ave.

San Jose, CA 95131
(408) 955-9077

CLIENT: Rosanna Garrison
Augeas Corporation
780 Purissima Street, P.O. Box 940
Half Moon Bay, CA 94019

Lab Number : JK-1792-1
Project : Gilcrease, Foothill
Square
Analyzed : 06/14/94
Analyzed by: MM
Method : EPA 8240

REPORT OF ANALYTICAL RESULTS

Page 2 of 3

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED	RECEIVED
SB-1	Soil	Charles Conway	06/03/94 1602	06/06/94
CONSTITUENT	(CAS RN)	*PQL µg/Kg	RESULT µg/Kg	NOTE
1,2-Dichloroethane	(107062)	5.	ND	
1,1-Dichloroethene	(75354)	5.	ND	
cis-1,2-Dichloroethene	(156592)	5.	550.	
trans-1,2-Dichloroethene	(156605)	5.	ND	
1,2-Dichloropropane	(78875)	5.	ND	
cis-1,3-Dichloropropene	(100610105)	5.	ND	
trans-1,3-Dichloropropene	(10061026)	5.	ND	
Ethylbenzene	(100414)	5.	ND	
2-Hexanone	(591786)	30.	ND	
Methyl Isobutyl Ketone (MIBK)	(108101)	30.	ND	
Methylene Chloride	(75092)	30.	ND	
Styrene	(100425)	5.	ND	
1,1,2,2-Tetrachloroethane	(79345)	5.	ND	
Tetrachloroethene	(127184)	5.	890000.	
Toluene	(108883)	5.	ND	
1,1,1-Trichloroethane	(71556)	5.	ND	
1,1,2-Trichloroethane	(79005)	5.	ND	
Trichloroethene	(79016)	5.	260.	
Trichlorofluoromethane	(75694)	5.	ND	
Trichlorotrifluoroethane	(76131)	30.	ND	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

06/20/94
FIN2/061407B/061708A
DT/eta3(dw)/mtm
FIN2-061494S

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Air, Water & Hazardous Waste Sampling, Analysis & Consultation • Certified Hazardous Waste, Chemistry, Bacteriology & Bioassay Laboratories



COAST-TO-COAST ANALYTICAL SERVICES, INC.

EXCELLENCE
IN ANALYSIS

NorCal Division (San Jose Laboratory)
2059 Junction Ave.

San Jose, CA 95131
(408) 955-9077

CLIENT: Rosanna Garrison
Augeas Corporation
780 Purissima Street, P.O. Box 940
Half Moon Bay, CA 94019

Lab Number : JK-1792-1
Project : Gilcrease, Foothill
Square
Analyzed : 06/14/94
Analyzed by: MM
Method : EPA 8240

REPORT OF ANALYTICAL RESULTS

Page 3 of 3

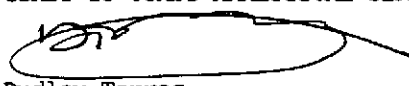
SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED	RECEIVED
SB-1	Soil	Charles Conway	06/03/94 1602	06/06/94
CONSTITUENT	(CAS RN)	*PQL µg/Kg	RESULT µg/Kg	NOTE
Vinyl Acetate	(108054)	30.	ND	
Vinyl Chloride	(75014)	5.	ND	
Xylenes (total)	(1330207)	5.	ND	
D4-DCA (% Surrogate Recovery #1)			91.	
D8-TOL (% Surrogate Recovery #2)			90.	
BFB (% Surrogate Recovery #3)			100.	

San Jose Lab Certifications: CAELAP #1204

*RESULTS listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit)

06/20/94
FIN2/061407B/061708A
DT/eta3(dw)/mtm
FIN2-061494S

Respectfully submitted,
COAST-TO-COAST ANALYTICAL SERVICES, INC.


Dudley Torres
Organics Manager

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REPORT OF LABORATORY ANALYSIS

Ms. Rosanna Garrison
 Page 13

August 10, 1994
 PACE Project Number: 440804523

Client Reference: Young's Cleaners, Oakland CA

PACE Sample Number: 70 0365775
 Date Collected: 07/29/94
 Date Received: 08/04/94
 Client Sample ID: SS-7-4.5'

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
------------------	--------------	------------	----------------------

ORGANIC ANALYSIS

VOLATILE ORGANICS, EPA METHOD 8240 GC/MS

Chloromethane	ug/kg	50	ND	08/06/94
Vinyl Chloride	ug/kg	50	ND	08/06/94
Bromomethane	ug/kg	50	ND	08/06/94
Chloroethane	ug/kg	50	ND	08/06/94
Trichlorofluoromethane	ug/kg	25	ND	08/06/94
1,1,2-Trichlor-1,2,2-trifluoroethane	ug/kg	25	ND	08/06/94
2-Butanone (MEK)	ug/kg	250	ND	08/06/94
1,1-Dichloroethene	ug/kg	25	ND	08/06/94
Carbon Disulfide	ug/kg	25	ND	08/06/94
Acetone	ug/kg	250	ND	08/06/94
Methylene Chloride	ug/kg	25	ND	08/06/94
trans-1,2-Dichloroethene	ug/kg	25	210	08/06/94
cis-1,2-Dichloroethene	ug/kg	625	2100 D	08/06/94
Vinyl Acetate	ug/kg	250	ND	08/06/94
1,1-Dichloroethane	ug/kg	25	ND	08/06/94
Chloroform	ug/kg	25	ND	08/06/94
1,1,1-Trichloroethane	ug/kg	25	ND	08/06/94
1,2-Dichloroethane	ug/kg	25	ND	08/06/94
Carbon Tetrachloride	ug/kg	25	ND	08/06/94
Benzene	ug/kg	25	ND	08/06/94
1,2-Dichloropropane	ug/kg	25	ND	08/06/94
Trichloroethene	ug/kg	25	920	08/06/94
Bromodichloromethane	ug/kg	25	ND	08/06/94
2-Chloroethyl Vinyl Ether	ug/kg	50	ND	08/06/94
trans-1,3-Dichloropropene	ug/kg	25	ND	08/06/94
4-Methyl-2-pentanone (MIBK)	ug/kg	250	ND	08/06/94
Toluene	ug/kg	25	37	08/06/94
cis-1,3-Dichloropropene	ug/kg	25	ND	08/06/94
1,1,2-Trichloroethane	ug/kg	25	ND	08/06/94
Dibromochloromethane	ug/kg	25	ND	08/06/94
2-Hexanone	ug/kg	250	ND	08/06/94

REPORT OF LABORATORY ANALYSIS

Ms. Rosanna Garrison
 Page 14

August 10, 1994
 PACE Project Number: 440804523

Client Reference: Young's Cleaners, Oakland CA

PACE Sample Number: 70 0365775
 Date Collected: 07/29/94
 Date Received: 08/04/94
 Client Sample ID: SS-7-4.5'

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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ORGANIC ANALYSIS

VOLATILE ORGANICS, EPA METHOD 8240 GC/MS

Tetrachloroethene	ug/kg	25	540	08/06/94
Chlorobenzene	ug/kg	25	ND	08/06/94
Ethylbenzene	ug/kg	25	ND	08/06/94
Bromoform	ug/kg	25	ND	08/06/94
Xylene(s) Total	ug/kg	25	ND	08/06/94
Styrene	ug/kg	25	ND	08/06/94
1,1,2,2,-Tetrachloroethane	ug/kg	25	ND	08/06/94
1,3-Dichlorobenzene	ug/kg	25	ND	08/06/94
1,4-Dichlorobenzene	ug/kg	25	ND	08/06/94
1,2-Dichlorobenzene	ug/kg	25	ND	08/06/94
1,2-Dichloroethane-d4 (Surrog. Recovery)	%		116	08/06/94
Toluene-d8 (Surrogate Recovery)	%		104	08/06/94
4-Bromofluorobenzene (Surrog. Recovery)	%		102	08/06/94

REPORT OF LABORATORY ANALYSIS

Ms. Rosanna Garrison
 Page 15

August 10, 1994
 PACE Project Number: 440804523

Client Reference: Young's Cleaners, Oakland CA

PACE Sample Number: 70 0365783
 Date Collected: 07/29/94
 Date Received: 08/04/94
 Client Sample ID: SS-8-3.75'

Parameter	Units	MDL		DATE ANALYZED
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ORGANIC ANALYSIS

VOLATILE ORGANICS, EPA METHOD 8240 GC/MS

Chloromethane	mg/kg	5.0	ND	08/06/94
Vinyl Chloride	mg/kg	5.0	ND	08/06/94
Bromomethane	mg/kg	5.0	ND	08/06/94
Chloroethane	mg/kg	5.0	ND	08/06/94
Trichlorofluoromethane	mg/kg	2.5	ND	08/06/94
1,1,2-Trichlor-1,2,2-trifluoroethane	mg/kg	2.5	ND	08/06/94
2-Butanone (MEK)	mg/kg	25	ND	08/06/94
1,1-Dichloroethene	mg/kg	2.5	ND	08/06/94
Carbon Disulfide	mg/kg	2.5	ND	08/06/94
Acetone	mg/kg	25	ND	08/06/94
Methylene Chloride	mg/kg	2.5	ND	08/06/94
trans-1,2-Dichloroethene	mg/kg	2.5	ND	08/06/94
cis-1,2-Dichloroethene	mg/kg	2.5	11	08/06/94
Vinyl Acetate	mg/kg	25	ND	08/06/94
1,1-Dichloroethane	mg/kg	2.5	ND	08/06/94
Chloroform	mg/kg	2.5	ND	08/06/94
1,1,1-Trichloroethane	mg/kg	2.5	ND	08/06/94
1,2-Dichloroethane	mg/kg	2.5	ND	08/06/94
Carbon Tetrachloride	mg/kg	2.5	ND	08/06/94
Benzene	mg/kg	2.5	ND	08/06/94
1,2-Dichloropropane	mg/kg	2.5	ND	08/06/94
Trichloroethene	mg/kg	2.5	34	08/06/94
Bromodichloromethane	mg/kg	2.5	ND	08/06/94
2-Chloroethyl Vinyl Ether	mg/kg	5.0	ND	08/06/94
trans-1,3-Dichloropropene	mg/kg	2.5	ND	08/06/94
4-Methyl-2-pentanone (MIBK)	mg/kg	25	ND	08/06/94
Toluene	mg/kg	2.5	ND	08/06/94
cis-1,3-Dichloropropene	mg/kg	2.5	ND	08/06/94
1,1,2-Trichloroethane	mg/kg	2.5	ND	08/06/94
Dibromochloromethane	mg/kg	2.5	ND	08/06/94
2-Hexanone	mg/kg	25	ND	08/06/94

REPORT OF LABORATORY ANALYSIS

Ms. Rosanna Garrison
 Page 16

August 10, 1994
 PACE Project Number: 440804523

Client Reference: Young's Cleaners, Oakland CA

PACE Sample Number: 70 0365783
 Date Collected: 07/29/94
 Date Received: 08/04/94
 Client Sample ID: SS-8-3.75'

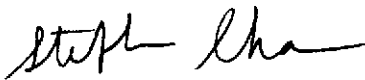
<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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ORGANIC ANALYSIS

VOLATILE ORGANICS, EPA METHOD 8240 GC/MS

Tetrachloroethene	mg/kg	12.5	300 D	08/06/94
Chlorobenzene	mg/kg	2.5	ND	08/06/94
Ethylbenzene	mg/kg	2.5	ND	08/06/94
Bromoform	mg/kg	2.5	ND	08/06/94
Xylene(s) Total	mg/kg	2.5	ND	08/06/94
Styrene	mg/kg	2.5	ND	08/06/94
1,1,2,2,-Tetrachloroethane	mg/kg	2.5	ND	08/06/94
1,3-Dichlorobenzene	mg/kg	2.5	ND	08/06/94
1,4-Dichlorobenzene	mg/kg	2.5	ND	08/06/94
1,2-Dichlorobenzene	mg/kg	2.5	ND	08/06/94
1,2-Dichloroethane-d4 (Surrog. Recovery)	%		101	08/06/94
Toluene-d8 (Surrogate Recovery)	%		94	08/06/94
4-Bromofluorobenzene (Surrog. Recovery)	%		107	08/06/94

These data have been reviewed and are approved for release.



Darrell C. Cain
 Regional Director

Ms. Rosanna Garrison
Page 17

FOOTNOTES
for pages 1 through 16

August 10, 1994
PACE Project Number: 440804523

Client Reference: Young's Cleaners, Oakland CA

- D Compound identified at secondary dilution factor.
- MDL Method Detection Limit
- ND Not detected at or above the MDL.
- SR Surrogate standards were not recovered due to sample dilution.
- (1) Reported in parts per million (mg/kg).
- (2) Reported in parts per million (mg/kg).

REPORT OF LABORATORY ANALYSIS

Ms. Rosanna Garrison
 Page 18

QUALITY CONTROL DATA

August 10, 1994
 PACE Project Number: 440804523

Client Reference: Young's Cleaners, Oakland CA

VOLATILE ORGANICS, EPA METHOD 8240 GC/MS

Batch: 70 32627

Samples: 70 0365716, 70 0365724, 70 0365732, 70 0365740, 70 0365767
 70 0365783

METHOD BLANK:

Parameter	Units	MDL	Method Blank
Chloromethane	ug/kg	1200	ND
Vinyl Chloride	ug/kg	1200	ND
Bromomethane	ug/kg	1200	ND
Chloroethane	ug/kg	1200	ND
Trichlorofluoromethane	ug/kg	620	ND
1,1,2-Trichlor-1,2,2-trifluoroethane	ug/kg	620	ND
2-Butanone (MEK)	ug/kg	6200	ND
1,1-Dichloroethene	ug/kg	620	ND
Carbon Disulfide	ug/kg	620	ND
Acetone	ug/kg	6200	ND
Methylene Chloride	ug/kg	620	ND
trans-1,2-Dichloroethene	ug/kg	620	ND
cis-1,2-Dichloroethene	ug/kg	620	ND
Vinyl Acetate	ug/kg	6200	ND
1,1-Dichloroethane	ug/kg	620	ND
Chloroform	ug/kg	620	ND
1,1,1-Trichloroethane	ug/kg	620	ND
1,2-Dichloroethane	ug/kg	620	ND
Carbon Tetrachloride	ug/kg	620	ND
Benzene	ug/kg	620	ND
1,2-Dichloropropane	ug/kg	620	ND
Trichloroethene	ug/kg	620	ND
Bromodichloromethane	ug/kg	620	ND
2-Chloroethyl Vinyl Ether	ug/kg	1200	ND
trans-1,3-Dichloropropene	ug/kg	620	ND
4-Methyl-2-pentanone (MIBK)	ug/kg	6200	ND
Toluene	ug/kg	620	ND
cis-1,3-Dichloropropene	ug/kg	620	ND
1,1,2-Trichloroethane	ug/kg	620	ND
Dibromochloromethane	ug/kg	620	ND
2-Hexanone	ug/kg	6200	ND

REPORT OF LABORATORY ANALYSIS

Ms. Rosanna Garrison
 Page 19

QUALITY CONTROL DATA

August 10, 1994
 PACE Project Number: 440804523

Client Reference: Young's Cleaners, Oakland CA

VOLATILE ORGANICS, EPA METHOD 8240 GC/MS

Batch: 70 32627

Samples: 70 0365716, 70 0365724, 70 0365732, 70 0365740, 70 0365767
 70 0365783

METHOD BLANK:

Parameter	Units	MDL	Method Blank
Tetrachloroethene	ug/kg	620	ND
Chlorobenzene	ug/kg	620	ND
Ethylbenzene	ug/kg	620	ND
Bromoform	ug/kg	620	ND
Xylene(s) Total	ug/kg	620	ND
Styrene	ug/kg	620	ND
1,1,2,2,-Tetrachloroethane	ug/kg	620	ND
1,3-Dichlorobenzene	ug/kg	620	ND
1,4-Dichlorobenzene	ug/kg	620	ND
1,2-Dichlorobenzene	ug/kg	620	ND
1,2-Dichloroethane-d4 (Surrog. Recovery)	%		116
Toluene-d8 (Surrogate Recovery)	%		107
4-Bromofluorobenzene (Surrog. Recovery)	%		125

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dup1 Recv	RPD
1,1-Dichloroethene	ug/kg	620	2500	114%	116%	2%
Benzene	ug/kg	620	2500	96%	108%	12%
Trichloroethene	ug/kg	620	2500	98%	94%	4%
Toluene	ug/kg	620	2500	99%	103%	4%
Chlorobenzene	ug/kg	620	2500	102%	102%	0%

REPORT OF LABORATORY ANALYSIS

Ms. Rosanna Garrison
 Page 20

QUALITY CONTROL DATA

August 10, 1994
 PACE Project Number: 440804523

Client Reference: Young's Cleaners, Oakland CA

VOLATILE ORGANICS, EPA METHOD 8240 GC/MS
 Batch: 70 32628
 Samples: 70 0365775

METHOD BLANK:

Parameter	Units	MDL	Method Blank
Chloromethane	ug/kg	10	ND
Vinyl Chloride	ug/kg	10	ND
Bromomethane	ug/kg	10	ND
Chloroethane	ug/kg	10	ND
Trichlorofluoromethane	ug/kg	5	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	5	ND
2-Butanone (MEK)	ug/kg	50	ND
1,1-Dichloroethene	ug/kg	5	ND
Carbon Disulfide	ug/kg	5	ND
Acetone	ug/kg	50	ND
Methylene Chloride	ug/kg	5	ND
trans-1,2-Dichloroethene	ug/kg	5	ND
cis-1,2-Dichloroethene	ug/kg	5	ND
Vinyl Acetate	ug/kg	50	ND
1,1-Dichloroethane	ug/kg	5	ND
Chloroform	ug/kg	5	ND
1,1,1-Trichloroethane	ug/kg	5	ND
1,2-Dichloroethane	ug/kg	5	ND
Carbon Tetrachloride	ug/kg	5	ND
Benzene	ug/kg	5	ND
1,2-Dichloropropane	ug/kg	5	ND
Trichloroethene	ug/kg	5	ND
Bromodichloromethane	ug/kg	5	ND
2-Chloroethyl Vinyl Ether	ug/kg	10	ND
trans-1,3-Dichloropropene	ug/kg	5	ND
4-Methyl-2-pentanone (MIBK)	ug/kg	50	ND
Toluene	ug/kg	5	ND
cis-1,3-Dichloropropene	ug/kg	5	ND
1,1,2-Trichloroethane	ug/kg	5	ND
Dibromochloromethane	ug/kg	5	ND
2-Hexanone	ug/kg	50	ND
Tetrachloroethene	ug/kg	5	ND

REPORT OF LABORATORY ANALYSIS

Ms. Rosanna Garrison
 Page 21

QUALITY CONTROL DATA

August 10, 1994
 PACE Project Number: 440804523

Client Reference: Young's Cleaners, Oakland CA

VOLATILE ORGANICS, EPA METHOD 8240 GC/MS

Batch: 70 32628
 Samples: 70 0365775

METHOD BLANK:

Parameter	Units	MDL	Method Blank
Chlorobenzene	ug/kg	5	ND
Ethylbenzene	ug/kg	5	ND
Bromoform	ug/kg	5	ND
Xylene(s) Total	ug/kg	5	ND
Styrene	ug/kg	5	ND
1,1,2,2,-Tetrachloroethane	ug/kg	5	ND
1,3-Dichlorobenzene	ug/kg	5	ND
1,4-Dichlorobenzene	ug/kg	5	ND
1,2-Dichlorobenzene	ug/kg	5	ND
1,2-Dichloroethane-d4 (Surrog. Recovery %)	%		120
Toluene-d8 (Surrogate Recovery %)	%		102
4-Bromofluorobenzene (Surrog. Recovery %)	%		109

SPIKE AND SPIKE DUPLICATE:

Parameter	Units	MDL	750147246	Spike	Spike Recv	Spike Dupl Recv	RPD
1,1-Dichloroethene	ug/kg	5	ND	20	98%	99%	1%
Benzene	ug/kg	5	ND	20	98%	92%	6%
Trichloroethene	ug/kg	5	ND	20	104%	100%	4%
Toluene	ug/kg	5	ND	20	96%	97%	1%
Chlorobenzene	ug/kg	5	ND	20	99%	97%	2%

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dupl Recv	RPD
1,1-Dichloroethene	ug/kg	5	20	89%	82%	8%
Benzene	ug/kg	5	20	78%	88%	12%
Trichloroethene	ug/kg	5	20	83%	94%	12%
Toluene	ug/kg	5	20	86%	89%	3%
Chlorobenzene	ug/kg	5	20	82%	85%	4%

REPORT OF LABORATORY ANALYSIS

Ms. Rosanna Garrison
 Page 22

QUALITY CONTROL DATA

August 10, 1994
 PACE Project Number: 440804523

Client Reference: Young's Cleaners, Oakland CA

VOLATILE ORGANICS, EPA METHOD 8240 GC/MS
 Batch: 70 32645
 Samples: 70 0365759

METHOD BLANK:

Parameter	Units	MDL	Method Blank
Chloromethane	ug/kg	10	ND
Vinyl Chloride	ug/kg	10	ND
Bromomethane	ug/kg	10	ND
Chloroethane	ug/kg	10	ND
Trichlorofluoromethane	ug/kg	5	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	5	ND
2-Butanone (MEK)	ug/kg	50	ND
1,1-Dichloroethene	ug/kg	5	ND
Carbon Disulfide	ug/kg	5	ND
Acetone	ug/kg	50	ND
Methylene Chloride	ug/kg	5	ND
trans-1,2-Dichloroethene	ug/kg	5	ND
cis-1,2-Dichloroethene	ug/kg	5	ND
Vinyl Acetate	ug/kg	50	ND
1,1-Dichloroethane	ug/kg	5	ND
Chloroform	ug/kg	5	ND
1,1,1-Trichloroethane	ug/kg	5	ND
1,2-Dichloroethane	ug/kg	5	ND
Carbon Tetrachloride	ug/kg	5	ND
Benzene	ug/kg	5	ND
1,2-Dichloropropane	ug/kg	5	ND
Trichloroethene	ug/kg	5	ND
Bromodichloromethane	ug/kg	5	ND
2-Chloroethyl Vinyl Ether	ug/kg	10	ND
trans-1,3-Dichloropropene	ug/kg	5	ND
4-Methyl-2-pentanone (MIBK)	ug/kg	50	ND
Toluene	ug/kg	5	ND
cis-1,3-Dichloropropene	ug/kg	5	ND
1,1,2-Trichloroethane	ug/kg	5	ND
Dibromochloromethane	ug/kg	5	ND
2-Hexanone	ug/kg	50	ND
Tetrachloroethene	ug/kg	5	ND

REPORT OF LABORATORY ANALYSIS

Ms. Rosanna Garrison
Page 23

QUALITY CONTROL DATA

August 10, 1994
PACE Project Number: 440804523

Client Reference: Young's Cleaners, Oakland CA

VOLATILE ORGANICS, EPA METHOD 8240 GC/MS

Batch: 70 32645
Samples: 70 0365759

METHOD BLANK:

Parameter	Units	MDL	Method Blank
Chlorobenzene	ug/kg	5	ND
Ethylbenzene	ug/kg	5	ND
Bromoform	ug/kg	5	ND
Xylene(s) Total	ug/kg	5	ND
Styrene	ug/kg	5	ND
1,1,2,2,-Tetrachloroethane	ug/kg	5	ND
1,3-Dichlorobenzene	ug/kg	5	ND
1,4-Dichlorobenzene	ug/kg	5	ND
1,2-Dichlorobenzene	ug/kg	5	ND
1,2-Dichloroethane-d4 (Surrog. Recovery)	%		111
Toluene-d8 (Surrogate Recovery)	%		104
4-Bromofluorobenzene (Surrog. Recovery)	%		104

SPIKE AND SPIKE DUPLICATE:

Parameter	Units	MDL	750147246	Spike	Spike Recv	Spike Dupl Recv	RPD
1,1-Dichloroethene	ug/kg	5	ND	20	98%	99%	1%
Benzene	ug/kg	5	ND	20	98%	92%	6%
Trichloroethene	ug/kg	5	ND	20	104%	100%	4%
Toluene	ug/kg	5	ND	20	96%	97%	1%
Chlorobenzene	ug/kg	5	ND	20	99%	97%	2%

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dupl Recv	RPD
1,1-Dichloroethene	ug/kg	5	20	89%	82%	8%
Benzene	ug/kg	5	20	78%	88%	12%
Trichloroethene	ug/kg	5	20	83%	94%	12%
Toluene	ug/kg	5	20	86%	89%	3%
Chlorobenzene	ug/kg	5	20	82%	85%	4%

Ms. Rosanna Garrison
Page 24

FOOTNOTES
for pages 18 through 23

August 10, 1994
PACE Project Number: 440804523

Client Reference: Young's Cleaners, Oakland CA

MDL Method Detection Limit
ND Not detected at or above the MDL.
RPD Relative Percent Difference



440804.523

PLEASE PRINT IN PEN

Client	Richard Gilcrease		Contact			Phone #			FAX #			
Address	Richmond CA			City				State	Zip			
Project Name/Number	Young's Cleaners 10700 MacArthur #9, Oakland CA						Project MGR					
Bill (if different than above)	Address											
Sampler (Print and sign)	Wayne Dittman W. Dittman				Due Date			Circle for RUSH*	Copies To: W. Dittman		Auth. Init.	

Sample Description	Date/Time Coll'd	*Matrix	# of Containers	Pres.	Filt. y/n	* Subject to Availability Analysis	Remarks	Lab ID #
SS-1-2'	7-29-94 1459	soil	1			EPA 8240	36571.6	JK2343-1
SS-2-2'	7-29-94 1506		1			/	36572.4	-2
SS-3-2'	7-29-94 1511		1				36573.2	-3
SS-4-1 1/2'	7-29 1523		1				36574.0	-4
SS-5-2'	7-29 1529		1				36575.9	-5
SS-6-2'	7-29 1535		1				36576.7	-6
SS-7-4 1/2'	7-29 1545		1				36577.5	-7
SS-8-3 3/4'	7-29 1554		1				36578.3	-8

Relinquished By	Date/Time	Received By	Relinquished By	Date/Time	Received By
Wayne Dittman	7-29-94	M. Tenter			
Wendy Abraham	08/04/94	Sean Shawell	Sean Shawell	4-4-94 13:35	D.R. / PALE

FOR LAB USE ONLY

Shipping Method	Shipping #	Received By	Date/Time	Condition (See Remarks)
World Courier	3	Mleen Feltran	07/29/94 1950	Cold <input checked="" type="checkbox"/> Sealed <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>

REMARKS
 Stored in walk-in refrigerator during weekend
 Samples sent to PACE, Novato

- * Matrix:
- DW - Drinking Water
- WW - Wastewater
- GW - Groundwater
- SW - Surface Water
- IM - Impinger
- FI - Filter
- FP - Free Product
- AG - Air/Gas
- SL - Sludge/Soil/Solid
- OT - Other



C E R T I F I C A T E O F A N A L Y S I S

JOB NO: 94-535	DATE SAMPLED: 09-12-94
CLIENT: AUGEAS CORP.	DATE EXTRACTED: 09-15-94
PROJECT NAME: Young's Cleaners	DATE ANALYZED: 09-15-94
10700 McArthur Blvd.	09-16-94

BTXE AND GASOLINE RANGE ORGANICS BY
EPA METHOD 8020/5030 AND 8015 M
STODDARD RANGE HYDROCARBONS BY EPA METHOD 8015 M

Sample No	Client ID	Analyte/Method	Result
94-535-01	B-2-6'	Benzene	ND
		Toluene	6 ug/Kg
		Ethylbenzene	ND
		Xylenes	ND
		Gasoline	ND
		Stoddard	ND
94-535-02	B-2-11'	Benzene	ND
		Toluene	ND
		Ethylbenzene	ND
		Xylenes	ND
		Gasoline	ND
		Stoddard	ND
94-535-03	B-2-16'	Benzene	ND
		Toluene	ND
		Ethylbenzene	ND
		Xylenes	ND
		Gasoline	ND
		Stoddard	ND
94-535-04	B-2-21'	Benzene	ND
		Toluene	ND
		Ethylbenzene	ND
		Xylenes	ND
		Gasoline	ND
		Stoddard	ND
94-535-05	B-2-24'	Benzene	ND
		Toluene	ND
		Ethylbenzene	ND
		Xylenes	ND
		Gasoline	ND
		Stoddard	ND



North State Environmental
Chemical Waste Disposal · Trucking · Consulting

C E R T I F I C A T E O F A N A L Y S I S

JOB NO: 94-535 DATE SAMPLED: 09-12-94
 CLIENT: AUGEAS CORP. DATE EXTRACTED: 09-15-94
 PROJECT NAME: Young's Cleaners DATE ANALYZED: 09-15-94
 10700 McArthur Blvd. 09-16-94

BTXE AND GASOLINE RANGE ORGANICS BY
 EPA METHOD 8020/5030 AND 8015 M
 STODDARD RANGE HYDROCARBONS BY EPA METHOD 8015 M

Sample No	Client ID	Analyte/Method	Result
94-535-06	AMW-1,4'	Benzene	ND
		Toluene	ND
		Ethylbenzene	ND
		Xylenes	ND
		Gasoline	ND
		Stoddard	ND
94-535-07	AMW-1,6'	Benzene	ND
		Toluene	ND
		Ethylbenzene	ND
		Xylenes	ND
		Gasoline	ND
		Stoddard	ND
94-535-08	AMW-1,11'	Benzene	ND
		Toluene	ND
		Ethylbenzene	ND
		Xylenes	ND
		Gasoline	ND
		Stoddard	ND
94-535-09	AMW-1,16'	Benzene	ND
		Toluene	6 ug/Kg
		Ethylbenzene	ND
		Xylenes	18 ug/Kg
		Gasoline	ND
		Stoddard	ND
94-535-10	AMW-1,21'	Benzene	ND
		Toluene	6 ug/Kg
		Ethylbenzene	ND
		Xylenes	ND
		Gasoline	ND
		Stoddard	ND



RUGGAS CORPORATION
 780 PURISSIMA
 HALF MOON BAY, CALIFORNIA 94019
 (415) 726-7700
 (415) 726-1217 (FAX)

Chain of Custody

Page ____ of ____

94-535

• PLEASE PRINT IN PEN

Client	<i>Richard Gilchrist</i>	Contact	Phone #	FAX #
Address	City	State	Zip	
Project Name/Number	<i>Young's Cleaners 10700 McArthur Blvd</i>			Project MGR
Bill (if different than above)	Address			
Sampler (Print and sign)	<i>W. DiHerman</i>	Due Date	Circle for RUSH*	Copies To:
	<i>Chandler County, AZ</i>			Auth. Init.

Sample Description	Date/Time Coll'd	*Matrix	# of Containers	Pres.	Filt. y/n	* Subject to Availability Analysis	Remarks	Lab ID #
B-2-6'	9-12-94 9-12-94	S	1	NV		FDA 8010 - analysis EPA 8015/8020 - Hurd - Standard solvent		94-535-01
B-2-11'	9-12-94 9-12-94	S	1				and TRH-g/BKJ	94-535-02
B2-16'	9-12-94 10-11-94	S	1					94-535-03
B2-21'	9-12-94 10-11-94	S	1					94-535-04
B2-24'	9-12-94 10-11-94	S	1					94-535-05
AMW-1, 4'	9-12-94 11-07-94		1					94-535-06
AMW-1, 6'	9-12-94 11-10-94		1					94-535-07
AMW-1, 11'	9-12-94 11-20-94		1					94-535-08

Relinquished By	Date/Time	Received By	Relinquished By	Date/Time	Received By
<i>C. Conway</i>	9-13-94 11-25-94	<i>Deanna Xi</i>			
		<i>9-15-94</i>		<i>11:25</i>	

FOR LAB USE ONLY

Shipping Method	Shipping #	Received By	Date/Time	Condition (See Remarks)		
				Cold	Sealed	Intact
REMARKS						

- * Matrix:
- DW - Drinking Water
- WW - Wastewater
- GW - Groundwater
- SW - Surface Water
- IM - Impinger
- FI - Filter
- FP - Free Product
- A/G - Air/Gas
- SL - Sludge/Soil/Solid
- OT - Other



AUGEAS CORPORATION
 780 PURISSIMA
 HALF MOON BAY, CALIFORNIA 94019
 (415) 726-7700
 (415) 726-1217 (FAX)

94-535

• PLEASE PRINT IN PEN

Client <i>Richard Gilcrease</i>	Contact	Phone # () () ()	FAX # () () ()
Address <i>10700 McArthur Blvd</i>	City	State	Zip
Project Name/Number <i>10700 McArthur Blvd</i>	Project MGR		
Bill (If different than above) <i>for W. D. H. Co.</i>	Address		
Sampler (Print and sign) <i>W. D. H. Co. Charles Compton</i>	Due Date	Circle for RUSH*	Copies To: Auth. Init.

Sample Description	Date/Time Coll'd	*Matrix	# of Containers	Pres.	Fit. y/n	* Subject to Availability Analysis	Remarks	Lab ID #
AMW-1-16'	9-12-94 11-30	S	1	NO		EPA 8010 - Analyze		94535-09
AMW-1-21'	9-12-94	S	1			EPA 8015/8020 for standard BTEX, and TPH-g-well! → well 20' sample → 11-30 31-30-94	50/6-ent	94535-10
AMW-1-26'	9-12-94 11-30	S	1					94535-11
AMW-1-20'	9-12-94 12-17	S	1					94535-12
AMW-1-31'	9-12-94 12-18	S	1					94535-13
AMW-1-34'	9-12-94 12-25	S	1					94535-14

Relinquished By	Date/Time	Received By	Relinquished By	Date/Time	Received By
<i>C. Compton</i>	9-13-94 11-25	<i>DeWaxi</i>			
		9-13-94 11:25A			

FOR LAB USE ONLY

Shipping Method	Shipping #	Received By	Date/Time	Condition (See Remarks)		
				Cold	Sealed	Intact

REMARKS _____

- * Matrix:
- DW - Drinking Water
 - WW - Wastewater
 - GW - Groundwater
 - SW - Surface Water
 - IM - Impinger
 - FI - Filter
 - FP - Free Product
 - A/G - Air/Gas
 - SL - Sludge/Soil/Solid
 - OT - Other



Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

NORTH STATE ENVIRONMENTAL
Attn: JOHN MURPHY

Project 10700 MCARTHUR
Reported 17-September-1994

HALOGENATED VOLATILE ORGANICS by EPA SW-846 Methods 5030/8010.

Chronology				Laboratory Number 92567		
Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
94-535-01	09/14/94	09/14/94	09/15/94	09/15/94		1
94-535-02	09/14/94	09/14/94	09/15/94	09/15/94		2
94-535-03	09/14/94	09/14/94	09/15/94	09/15/94		3
94-535-04	09/14/94	09/14/94	09/15/94	09/15/94		4
94-535-05	09/14/94	09/14/94	09/15/94	09/15/94		5
94-535-06	09/14/94	09/14/94	09/15/94	09/15/94		6
94-535-07	09/14/94	09/14/94	09/15/94	09/15/94		7
94-535-08	09/14/94	09/14/94	09/15/94	09/15/94		8
94-535-09	09/14/94	09/14/94	09/15/94	09/15/94		9
94-535-10	09/14/94	09/14/94	09/15/94	09/15/94		10
94-535-11	09/14/94	09/14/94	09/15/94	09/15/94		11
94-535-13	09/14/94	09/14/94	09/15/94	09/15/94		13
94-535-14	09/14/94	09/14/94	09/15/94	09/15/94		14

Page 1 of 5

Certified Laboratories

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NORTH STATE ENVIRONMENTAL
Attn: JOHN MURPHY

Project 10700 MCARTHUR
Reported 17-September-1994

HALOGENATED VOLATILE ORGANICS by EPA SW-846 Methods 5030/8010.

Laboratory Number	Sample Identification	Matrix
92567- 1	94-535-01	Soil
92567- 2	94-535-02	Soil
92567- 3	94-535-03	Soil
92567- 4	94-535-04	Soil
92567- 5	94-535-05	Soil

RESULTS OF ANALYSIS

Laboratory Number:	92567- 1	92567- 2	92567- 3	92567- 4	92567- 5
--------------------	----------	----------	----------	----------	----------

Chloromethane:	ND<5	ND<5	ND<5	ND<5	ND<5
Vinyl Chloride:	ND<5	ND<5	ND<5	ND<5	ND<5
Bromomethane:	ND<5	ND<5	ND<5	ND<5	ND<5
Chloroethane:	ND<5	ND<5	ND<5	ND<5	ND<5
Trichlorofluoromethane:	ND<10	ND<10	ND<10	ND<10	ND<10
1,1-Dichloroethene:	ND<5	ND<5	ND<5	ND<5	ND<5
Dichloromethane:	ND<10	ND<10	ND<10	ND<10	ND<10
t-1,2-Dichloroethene:	ND<5	ND<5	ND<5	ND<5	ND<5
1,1-Dichloroethane:	ND<5	ND<5	ND<5	ND<5	ND<5
c-1,2-Dichloroethene:	ND<5	ND<5	ND<5	ND<5	ND<5
Chloroform:	ND<5	ND<5	ND<5	ND<5	ND<5
1,1,1-Trichloroethane:	ND<5	ND<5	ND<5	ND<5	ND<5
Carbon tetrachloride:	ND<5	ND<5	ND<5	ND<5	ND<5
1,2-Dichloroethane:	ND<5	ND<5	ND<5	ND<5	ND<5
Trichloroethene:	ND<5	ND<5	ND<5	ND<5	ND<5
c-1,3-Dichloropropene:	ND<5	ND<5	ND<5	ND<5	ND<5
1,2-Dichloropropane:	ND<5	ND<5	ND<5	ND<5	ND<5
t-1,3-Dichloropropene:	ND<5	ND<5	ND<5	ND<5	ND<5
Bromodichloromethane:	ND<5	ND<5	ND<5	ND<5	ND<5
1,1,2-Trichloroethane:	ND<5	ND<5	ND<5	ND<5	ND<5
Tetrachloroethene:	ND<5	ND<5	ND<5	ND<5	ND<5
Dibromochloromethane:	ND<5	ND<5	ND<5	ND<5	ND<5
Chlorobenzene:	ND<5	ND<5	ND<5	ND<5	ND<5
Bromoform:	ND<5	ND<5	ND<5	ND<5	ND<5
1,1,2,2-Tetrachloroeth:	ND<5	ND<5	ND<5	ND<5	ND<5
1,3-Dichlorobenzene:	ND<5	ND<5	ND<5	ND<5	ND<5
1,2-Dichlorobenzene:	ND<5	ND<5	ND<5	ND<5	ND<5
1,4-Dichlorobenzene:	ND<5	ND<5	ND<5	ND<5	ND<5

Concentration:	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
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Project 10700 MCARTHUR
Reported 17-September-1994

HALOGENATED VOLATILE ORGANICS by EPA SW-846 Methods 5030/8010.

Laboratory Number	Sample Identification	Matrix
92567- 6	94-535-06	Soil
92567- 7	94-535-07	Soil
92567- 8	94-535-08	Soil
92567- 9	94-535-09	Soil
92567-10	94-535-10	Soil

RESULTS OF ANALYSIS

Laboratory Number: 92567- 6 92567- 7 92567- 8 92567- 9 92567-10

Chloromethane:	ND<5	ND<5	ND<5	ND<5	ND<5
Vinyl Chloride:	ND<5	ND<5	ND<5	ND<5	ND<5
Bromomethane:	ND<5	ND<5	ND<5	ND<5	ND<5
Chloroethane:	ND<5	ND<5	ND<5	ND<5	ND<5
Trichlorofluoromethane:	ND<10	ND<10	ND<10	ND<10	ND<10
1,1-Dichloroethene:	ND<5	ND<5	ND<5	ND<5	ND<5
Dichloromethane:	ND<10	ND<10	ND<10	ND<10	ND<10
t-1,2-Dichloroethene:	ND<5	ND<5	ND<5	ND<5	ND<5
1,1-Dichloroethane:	ND<5	ND<5	ND<5	ND<5	ND<5
c-1,2-Dichloroethene:	ND<5	ND<5	ND<5	ND<5	ND<5
Chloroform:	ND<5	ND<5	ND<5	ND<5	ND<5
1,1,1-Trichloroethane:	ND<5	ND<5	ND<5	ND<5	ND<5
Carbon tetrachloride:	ND<5	ND<5	ND<5	ND<5	ND<5
1,2-Dichloroethane:	ND<5	ND<5	ND<5	ND<5	ND<5
Trichloroethene:	ND<5	ND<5	ND<5	ND<5	ND<5
c-1,3-Dichloropropene:	ND<5	ND<5	ND<5	ND<5	ND<5
1,2-Dichloropropane:	ND<5	ND<5	ND<5	ND<5	ND<5
t-1,3-Dichloropropene:	ND<5	ND<5	ND<5	ND<5	ND<5
Bromodichloromethane:	ND<5	ND<5	ND<5	ND<5	ND<5
1,1,2-Trichloroethane:	ND<5	ND<5	ND<5	ND<5	ND<5
Tetrachloroethene:	ND<5	ND<5	ND<5	ND<5	ND<5
Dibromochloromethane:	ND<5	ND<5	ND<5	ND<5	ND<5
Chlorobenzene:	ND<5	ND<5	ND<5	ND<5	ND<5
Bromoform:	ND<5	ND<5	ND<5	ND<5	ND<5
1,1,2,2-Tetrachloroeth:	ND<5	ND<5	ND<5	ND<5	ND<5
1,3-Dichlorobenzene:	ND<5	ND<5	ND<5	ND<5	ND<5
1,2-Dichlorobenzene:	ND<5	ND<5	ND<5	ND<5	ND<5
1,4-Dichlorobenzene:	ND<5	ND<5	ND<5	ND<5	ND<5

Concentration: ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg

Page 3 of 5

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NORTH STATE ENVIRONMENTAL
Attn: JOHN MURPHY

Project 10700 MCARTHUR
Reported 17-September-1994

HALOGENATED VOLATILE ORGANICS by EPA SW-846 Methods 5030/8010.

Laboratory Number	Sample Identification	Matrix
92567-11	94-535-11	Soil
92567-13	94-535-13	Soil
92567-14	94-535-14	Soil

RESULTS OF ANALYSIS

Laboratory Number: 92567-11 92567-13 92567-14

Chloromethane:	ND<5	ND<5	ND<5
Vinyl Chloride:	ND<5	ND<5	ND<5
Bromomethane:	ND<5	ND<5	ND<5
Chloroethane:	ND<5	ND<5	ND<5
Trichlorofluoromethane:	ND<10	ND<10	ND<10
1,1-Dichloroethene:	ND<5	ND<5	ND<5
Dichloromethane:	ND<10	ND<10	ND<10
t-1,2-Dichloroethene:	ND<5	ND<5	ND<5
1,1-Dichloroethane:	ND<5	ND<5	ND<5
c-1,2-Dichloroethene:	ND<5	ND<5	ND<5
Chloroform:	ND<5	ND<5	ND<5
1,1,1-Trichloroethane:	ND<5	ND<5	ND<5
Carbon tetrachloride:	ND<5	ND<5	ND<5
1,2-Dichloroethane:	ND<5	ND<5	ND<5
Trichloroethene:	ND<5	ND<5	ND<5
c-1,3-Dichloropropene:	ND<5	ND<5	ND<5
1,2-Dichloropropane:	ND<5	ND<5	ND<5
t-1,3-Dichloropropene:	ND<5	ND<5	ND<5
Bromodichloromethane:	ND<5	ND<5	ND<5
1,1,2-Trichloroethane:	ND<5	ND<5	ND<5
Tetrachloroethene:	ND<5	ND<5	ND<5
Dibromochloromethane:	ND<5	ND<5	ND<5
Chlorobenzene:	ND<5	ND<5	ND<5
Bromoform:	ND<5	ND<5	ND<5
1,1,2,2-Tetrachloroeth:	ND<5	ND<5	ND<5
1,3-Dichlorobenzene:	ND<5	ND<5	ND<5
1,2-Dichlorobenzene:	ND<5	ND<5	ND<5
1,4-Dichlorobenzene:	ND<5	ND<5	ND<5

Concentration: ug/Kg ug/Kg ug/Kg
Page 4 of 5

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Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium


HALOGENATED VOLATILE ORGANICS by EPA SW-846 Methods 5030/8010.
Quality Assurance and Control Data - Soil

Laboratory Number 92567

Compound	Method Blank (ug/Kg)	RL (ug/Kg)	Spike Recovery (%)	Limits (%)	RPD (%)
Chloromethane:	ND<5	5			
Vinyl Chloride:	ND<5	5			
Bromomethane:	ND<5	5			
Chloroethane:	ND<5	5			
Trichlorofluoromethane:	ND<10	10			
1,1-Dichloroethene:	ND<5	5	137/147	44-184	7%
Dichloromethane:	ND<10	10			
t-1,2-Dichloroethene:	ND<5	5			
1,1-Dichloroethane:	ND<5	5			
c-1,2-Dichloroethene:	ND<5	5			
Chloroform:	ND<5	5			
1,1,1-Trichloroethane:	ND<5	5			
Carbon tetrachloride:	ND<5	5			
1,2-Dichloroethane:	ND<5	5			
Trichloroethene:	ND<5	5	103/107	55-141	4%
c-1,3-Dichloropropene:	ND<5	5			
1,2-Dichloropropane:	ND<5	5			
t-1,3-Dichloropropene:	ND<5	5			
Bromodichloromethane:	ND<5	5			
1,1,2-Trichloroethane:	ND<5	5			
Tetrachloroethene:	ND<5	5			
Dibromochloromethane:	ND<5	5			
Chlorobenzene:	ND<5	5	111/117	63-158	5%
Bromoform:	ND<5	5			
1,1,2,2-Tetrachloroeth:	ND<5	5			
1,3-Dichlorobenzene:	ND<5	5			
1,2-Dichlorobenzene:	ND<5	5			
1,4-Dichlorobenzene:	ND<5	5			

Definitions:

- ND = Not Detected
- RPD = Relative Percent Difference
- RL = Reporting Limit
- ug/Kg = Parts per billion (ppb)
- QC File No. 92567


 Senior Chemist
 Account Manager

Certified Laboratories



C E R T I F I C A T E O F A N A L Y S I S

JOB NO: 94-563 DATE SAMPLED: 09-30-94
 CLIENT: AUGEAS CORP. DATE EXTRACTED: 09-30-94
 PROJECT NAME: YOUNG'S CLEANERS DATE ANALYZED: 09-30-94
 FOOTHILL SQUARE

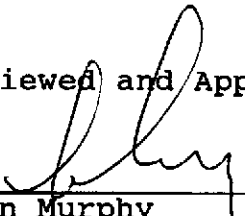
BTXE AND GASOLINE RANGE ORGANICS BY
 EPA METHOD 8020/5030 AND 8015 M
 STODDARD RANGE HYDROCARBONS BY EPA METHOD 8015 M

Quality Control Quality Assurance Summary: Soil

Analyte	Method	Reporting limit	Blank	MS/MSD Recovery	RPD
Benzene	8020	5 ug/Kg	ND	AVG 101%	6
Toluene	8020	5 ug/Kg	ND		
Ethylbenzene	8020	5 ug/Kg	ND		
Xylenes	8020	10 ug/Kg	ND		
Stoddard	8015 M	1 mg/Kg	ND	AVG 84%	1

DOHS CERTIFICATION NUMBER 1753

Reviewed and Approved by



 John Murphy
 Laboratory Director

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Attn: John Murphy
North State Environmental
P.O. Box 5624
So. San Francisco, CA 94083

Date Received: 10/03/94
Date Analyzed: 10/06/94
Date Reported: 10/12/94
Job #: 76255

Project: Young's Cleaners
Foot Hill Square
Matrix: Soil

Purgeable Halocarbons
EPA Method 8010
µg/Kg

Lab I.D.: 76255-1
Client I.D.: 94-563-01

	<u>Result</u>	<u>MDL</u>
Bromomethane & Chloroethane	ND<20	20
Vinyl Chloride & Chloromethane	ND<20	20
Freon 113	ND<12	12
1,1-Dichloroethene	ND<12	12
Methylene Chloride	ND<110	110
Trans-1,2-Dichloroethene	ND<6	6
1,1-Dichloroethane	ND<8	8
Cis-1,2-Dichloroethene	250	5
Chloroform	ND<3	3
1,1,1-Trichloroethane	ND<12	12
Carbon Tetrachloride	ND<6	6
1,2-Dichloroethane	ND<5	5
Trichloroethene	50	8
1,2-Dichloropropene	ND<7	7
2-Chloro-vinyl ether	ND<5	5
Bromodichloromethane	ND<8	8
T-1,3-Dichloropropene	ND<5	5
Cis-1,3-Dichloropropene	ND<6	6
1,1,2-Trichloroethane	ND<12	12
Tetrachloroethene	22,000	10
Dibromochloromethane	ND<8	8
Chlorobenzene	ND<10	10
Bromoform	ND<4	4
1,1,2,2-Tetrachloroethane	ND<10	10
1,3-Dichlorobenzene	ND<6	6
1,4-Dichlorobenzene	ND<6	6
1,2-Dichlorobenzene	ND<6	6

MDL: Method Detection Limit

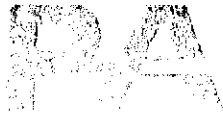

Jaime Chow

Laboratory Director

Page 1 of 2

OUTSTANDING QUALITY AND SERVICE
CALIFORNIA STATE CERTIFIED LABORATORY

JC/dwc



Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

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STATE LICENSE NO. 1150

Attn: John Murphy
North State Environmental
P.O. Box 5624
So. San Francisco, CA 94083

Date Received: 10/03/94
Date Analyzed: 10/06/94
Date Reported: 10/12/94
Job #: 76255

Project: Young's Cleaners
Foot Hill Square
Matrix: Soil

Purgeable Halocarbons
EPA Method 8010
 $\mu\text{g}/\text{Kg}$

Lab I.D.: 76255-1
Client I.D.: 94-563-01

QA/QC: Matrix Spike Recovery for 1,1-Dichloroethene: 102%
Matrix Spike Recovery for Trichloroethene: 96%
Matrix Spike Recovery for Chlorobenzene: 118%

Matrix Spike Duplicate Recovery for 1,1-Dichloroethene: 94%
Matrix Spike Duplicate Recovery for Trichloroethene: 106%
Matrix Spike Duplicate Recovery for Chlorobenzene: 115%

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

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CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Attn: John Murphy
North State Environmental
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Date Received: 10/03/94
Date Analyzed: 10/06/94
Date Reported: 10/12/94
Job #: 76255

Project: Young's Cleaners
Foot Hill Square
Matrix: Soil

Purgeable Halocarbons
EPA Method 8010
 $\mu\text{g}/\text{Kg}$

Lab I.D.: 76255-2
Client I.D.: 94-563-02

	<u>Result</u>	<u>MDL</u>
Bromomethane & Chloroethane	ND<20	20
Vinyl Chloride & Chloromethane	ND<20	20
Freon 113	ND<12	12
1,1-Dichloroethene	ND<12	12
Methylene Chloride	ND<110	110
Trans-1,2-Dichloroethene	ND<6	6
1,1-Dichloroethane	ND<8	8
Cis-1,2-Dichloroethene	210	5
Chloroform	ND<3	3
1,1,1-Trichloroethane	ND<12	12
Carbon Tetrachloride	ND<6	6
1,2-Dichloroethane	ND<5	5
Trichloroethene	600	8
1,2-Dichloropropene	ND<7	7
2-Chloro-vinyl ether	ND<5	5
Bromodichloromethane	ND<8	8
T-1,3-Dichloropropene	ND<5	5
Cis-1,3-Dichloropropene	ND<6	6
1,1,2-Trichloroethane	ND<12	12
Tetrachloroethene	90,000	10
Dibromochloromethane	ND<8	8
Chlorobenzene	ND<10	10
Bromoform	ND<4	4
1,1,2,2-Tetrachloroethane	ND<10	10
1,3-Dichlorobenzene	ND<6	6
1,4-Dichlorobenzene	ND<6	6
1,2-Dichlorobenzene	ND<6	6

MDL: Method Detection Limit


Jaime Chow

Laboratory Director *OUTSTANDING QUALITY AND SERVICE*
CALIFORNIA STATE CERTIFIED LABORATORY

JC/dwc

Precision Analytical Laboratory, Inc.

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CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Attn: John Murphy
North State Environmental
P.O. Box 5624
So. San Francisco, CA 94083

Date Received: 10/03/94
Date Analyzed: 10/06/94
Date Reported: 10/12/94
Job #: 76255

Project: Young's Cleaners
Foot Hill Square
Matrix: Soil

Purgeable Halocarbons
EPA Method 8010
µg/Kg

Lab I.D.: 76255-3
Client I.D.: 94-563-03

Table with 3 columns: Compound Name, Result, MDL. Lists various halocarbons and their detection results.

MDL: Method Detection Limit

Signature of Jaime Chow
Jaime Chow
Laboratory Director
OUTSTANDING QUALITY AND SERVICE
CALIFORNIA STATE CERTIFIED LABORATORY

JC/dwc

Precision Analytical Laboratory, Inc.

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CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Attn: John Murphy
North State Environmental
P.O. Box 5624
So. San Francisco, CA 94083

Date Received: 10/03/94
Date Analyzed: 10/06/94
Date Reported: 10/12/94
Job #: 76255

Project: Young's Cleaners
Foot Hill Square
Matrix: Soil

Purgeable Halocarbons
EPA Method 8010
µg/Kg

Lab I.D.: 76255-4
Client I.D.: 94-563-04

	<u>Result</u>	<u>MDL</u>
Bromomethane & Chloroethane	ND<20	20
Vinyl Chloride & Chloromethane	ND<20	20
Freon 113	ND<12	12
1,1-Dichloroethene	ND<12	12
Methylene Chloride	ND<110	110
Trans-1,2-Dichloroethene	ND<6	6
1,1-Dichloroethane	ND<8	8
Cis-1,2-Dichloroethene	ND<5	5
Chloroform	ND<3	3
1,1,1-Trichloroethane	ND<12	12
Carbon Tetrachloride	ND<6	6
1,2-Dichloroethane	ND<5	5
Trichloroethene	ND<8	8
1,2-Dichloropropene	ND<7	7
2-Chloro-vinyl ether	ND<5	5
Bromodichloromethane	ND<8	8
T-1,3-Dichloropropene	ND<5	5
Cis-1,3-Dichloropropene	ND<6	6
1,1,2-Trichloroethane	ND<12	12
Tetrachloroethene	30	10
Dibromochloromethane	ND<8	8
Chlorobenzene	ND<10	10
Bromoform	ND<4	4
1,1,2,2-Tetrachloroethane	ND<10	10
1,3-Dichlorobenzene	ND<6	6
1,4-Dichlorobenzene	ND<6	6
1,2-Dichlorobenzene	ND<6	6

MDL: Method Detection Limit


Jaime Chow
Laboratory Director *OUTSTANDING QUALITY AND SERVICE*
CALIFORNIA STATE CERTIFIED LABORATORY

JC/dwc



AUGEAS CORPORATION
 780 PURISSIMA
 HALF MOON BAY, CALIFORNIA 94019
 (415) 726-7700
 (415) 726-1217 (FAX)

Chain of Custody

Page 1 of 1

9K563

• PLEASE PRINT IN PEN

Client <u>Jay Phares Corporation</u>	Contact <u>John Jay</u>	Phone # <u>()</u>	FAX # <u>()</u>
Address <u>MacArthur Blvd. City Oakland</u>		State <u>CA</u>	Zip <u></u>
Project Name/Number <u>Young's Cleaners - Foothill Square</u>		Project MGR <u></u>	
Bill (If different than above) <u></u>		Address <u></u>	
Sampler (Print and sign) <u>F. Moss</u>	Due Date <u></u>	Circle for RUSH <u></u>	Copies To: <u></u> Auth. Init. <u></u>

Sample Description	Date/Time Coll'd	*Matrix	# of Containers	Pres.	Flt. y/n	* Subject to Availability Analysis	Remarks	Lab ID #
AMW-2 (10 ft.)	9/30	SOIL	1			8015 - TPH as Stoddard Solvent 8010 - Chlorinated Solvents 8020 - BTEX		9K563-01
AMW-2 (15 ft.)	9/30	u	1					9K563-02
AMW-2 (20 ft.)	9/30	u	1					9K563-03
AMW-2 (25 ft.)	9/30	u	1					9K563-04

Relinquished By	Date/Time	Received By	Relinquished By	Date/Time	Received By
<u>F. Moss</u>	1715 hr 9/30/94	<u>Deanna</u>			
		1715 9/30/94			

FOR LAB USE ONLY

Shipping Method	Shipping #	Received By	Date/Time	Condition (See Remarks)		
				Cold	Sealed	Intact

REMARKS

- * Matrix:
- DW - Drinking Water
 - WW - Wastewater
 - GW - Groundwater
 - SW - Surface Water
 - IM - Impinger
 - FI - Filter
 - FP - Free Product
 - A/G - Air/Gas
 - SL - Sludge/Soil/Solid
 - OT - Other



North State Environmental
 Chemical Waste Disposal · Trucking · Consulting

C E R T I F I C A T E O F A N A L Y S I S

JOB NO: 94-568 DATE SAMPLED: 10-04-94
 CLIENT: AUGEAS CORP. DATE EXTRACTED: 10-05-94
 PROJECT NAME: 10700 MacArthur Blvd, Oakland, CA DATE ANALYZED: 10-05-94

BTXE AND GASOLINE RANGE ORGANICS BY
 EPA METHOD 8020/5030 AND 8015 M
 STODDARD RANGE HYDROCARBONS BY EPA METHOD 8015 M

Sample No.	Client ID	Analyte	Result
94-568-01	AMW-1 Water	Benzene	ND
		Toluene	ND
		Ethylbenzene	ND
		Xylenes	ND
		Stoddard	ND
94-568-02	AMW-2 Water	Benzene	ND
		Toluene	ND
		Ethylbenzene	ND
		Xylenes	ND
		Stoddard	0.2 mg/L

Quality Control Quality Assurance Summary: Water

Analyte	Method	Reporting limit	Blank	MS/MSD Recovery	RPD
Benzene	8020	0.5 ug/L	ND	AVG 100%	2
Toluene	8020	0.5 ug/L	ND		
Ethylbenzene	8020	0.5 ug/L	ND		
Xylenes	8020	1.0 ug/L	ND		
Stoddard	8015 M	50.0 ug/L	ND	AVG 83%	2

DOHS CERTIFICATION NUMBER 1753

Reviewed and Approved by

John Murphy
 John Murphy
 Laboratory Director

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Attn: John Murphy
North State Environmental
P.O. Box 5624
So. San Francisco, CA 94083

Date Received: 10/06/94
Date Analyzed: 10/10/94
Date Reported: 10/12/94
Job #: 76270

Project: 10700 Mac Arthur Boulevard
Oakland, CA
Matrix: Water

PURGEABLE HALOCARBONS
EPA Method 601
µg/L

Lab I.D.: 76270-2
Client I.D.: 94-568-02

	<u>Result</u>	<u>MDL</u>
Bromomethane & Chloroethane	ND<2.0	2.0
Vinyl Chloride & Chloromethane	ND<1.0	1.0
Freon 113	ND<1.0	1.0
1,1-Dichloroethene	8.0	0.3
Methylene Chloride	ND<1.0	1.0
Trans-1,2-Dichloroethene	50	0.2
1,1-Dichloroethane	ND<0.2	0.2
Cis-1,2-Dichloroethene	110	0.2
Chloroform	ND<0.1	0.1
1,1,1-Trichloroethane	ND<0.2	0.2
Carbon Tetrachloride	ND<0.2	0.2
1,2-Dichloroethane	ND<0.5	0.5
Trichloroethene	320	0.2
1,2-Dichloropropene	ND<0.4	0.4
2-Chloro-vinyl ether	ND<0.2	0.2
Bromodichloromethane	ND<0.3	0.3
T-1,3-Dichloropropene	ND<0.2	0.2
Cis-1,3-Dichloropropene	4.2	0.4
1,1,2-Trichloroethane	ND<0.3	0.3
Tetrachloroethene	28,000	0.2
Dibromochloromethane	ND<0.4	0.4
Chlorobenzene	ND<0.3	0.3
Bromoform	ND<0.3	0.3
1,1,2,2-Tetrachloroethane	ND<0.5	0.5
1,3-Dichlorobenzene	ND<0.2	0.2
1,4-Dichlorobenzene	ND<0.2	0.2
1,2-Dichlorobenzene	ND<0.2	0.2

MDL: Method Detection Limit

Swinder Sidhu (For)

Jaime Chow

Laboratory Director *OUTSTANDING QUALITY AND SERVICE*

CALIFORNIA STATE CERTIFIED LABORATORY

JC/dwc

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

STATE LICENSE NO. 1150

Attn: John Murphy
North State Environmental
P.O. Box 5624
So. San Francisco, CA 94083

Date Received: 10/06/94
Date Analyzed: 10/10/94
Date Reported: 10/12/94
Job #: 76270

Project: 10700 Mac Arthur Boulevard
Oakland, CA
Matrix: Water

PURGEABLE HALOCARBONS
EPA Method 601
 $\mu\text{g/L}$

Lab I.D.: 76270-1
Client I.D.: 94-568-01

QA/QC: Matrix Spike Recovery for 1,1-Dichloroethene: 125%
Matrix Spike Recovery for Trichloroethene: 77%
Matrix Spike Recovery for Chlorobenzene: 76%

Matrix Spike Duplicate Recovery for 1,1-Dichloroethene: 130%
Matrix Spike Duplicate Recovery for Trichloroethene: 84%
Matrix Spike Duplicate Recovery for Chlorobenzene: 77%

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

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CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Attn: John Murphy
North State Environmental
P.O. Box 5624
So. San Francisco, CA 94083

Date Received: 10/06/94
Date Analyzed: 10/10/94
Date Reported: 10/12/94
Job #: 76270

Project: 10700 Mac Arthur Boulevard
Oakland, CA
Matrix: Water

PURGEABLE HALOCARBONS
EPA Method 601
 $\mu\text{g/L}$

Lab I.D.: 76270-1
Client I.D.: 94-568-01

	<u>Result</u>	<u>MDL</u>
Bromomethane & Chloroethane	ND<2.0	2.0
Vinyl Chloride & Chloromethane	ND<1.0	1.0
Freon 113	ND<1.0	1.0
1,1-Dichloroethene	ND<0.3	0.3
Methylene Chloride	ND<1.0	1.0
Trans-1,2-Dichloroethene	ND<0.2	0.2
1,1-Dichloroethane	ND<0.2	0.2
Cis-1,2-Dichloroethene	0.5	0.2
Chloroform	ND<0.1	0.1
1,1,1-Trichloroethane	ND<0.2	0.2
Carbon Tetrachloride	ND<0.2	0.2
1,2-Dichloroethane	ND<0.5	0.5
Trichloroethene	ND<0.2	0.2
1,2-Dichloropropene	ND<0.4	0.4
2-Chloro-vinyl ether	ND<0.2	0.2
Bromodichloromethane	ND<0.3	0.3
T-1,3-Dichloropropene	ND<0.2	0.2
Cis-1,3-Dichloropropene	ND<0.4	0.4
1,1,2-Trichloroethane	ND<0.3	0.3
Tetrachloroethene	ND<0.2	0.2
Dibromochloromethane	ND<0.4	0.4
Chlorobenzene	ND<0.3	0.3
Bromoform	ND<0.3	0.3
1,1,2,2-Tetrachloroethane	ND<0.5	0.5
1,3-Dichlorobenzene	ND<0.2	0.2
1,4-Dichlorobenzene	ND<0.2	0.2
1,2-Dichlorobenzene	ND<0.2	0.2

MDL: Method Detection Limit

Jaime Chow S.d.L. (for)

Jaime Chow
Laboratory Director

Page 1 of 2

OUTSTANDING QUALITY AND SERVICE
CALIFORNIA STATE CERTIFIED LABORATORY

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Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Attn: John Murphy
 North State Environmental
 P.O. Box 5624
 So. San Francisco, CA 94083

Date Received: 10/06/94
 Date Analyzed: 10/10/94
 Date Reported: 10/12/94
 Job #: 76270

Project: 10700 Mac Arthur Boulevard
 Oakland, CA
 Matrix: Water

PURGEABLE HALOCARBONS
 EPA Method 601
 µg/L

Lab I.D.: 76270-1
 Client I.D.: 94-568-01

	Result	MDL
Bromomethane & Chloroethane	ND<2.0	2.0
Vinyl Chloride & Chloromethane	ND<1.0	1.0
Freon 113	ND<1.0	1.0
1,1-Dichloroethene	ND<0.3	0.3
Methylene Chloride	ND<1.0	1.0
Trans-1,2-Dichloroethene	ND<0.2	0.2
1,1-Dichloroethane	ND<0.2	0.2
Cis-1,2-Dichloroethene	0.5	0.2
Chloroform	ND<0.1	0.1
1,1,1-Trichloroethane	ND<0.2	0.2
Carbon Tetrachloride	ND<0.2	0.2
1,2-Dichloroethane	ND<0.5	0.5
Trichloroethene	ND<0.2	0.2
1,2-Dichloropropene	ND<0.4	0.4
2-Chloro-vinyl ether	ND<0.2	0.2
Bromodichloromethane	ND<0.3	0.3
T-1,3-Dichloropropene	ND<0.2	0.2
Cis-1,3-Dichloropropene	ND<0.4	0.4
1,1,2-Trichloroethane	ND<0.3	0.3
Tetrachloroethene	ND<0.2	0.2
Dibromochloromethane	ND<0.4	0.4
Chlorobenzene	ND<0.3	0.3
Bromoform	ND<0.3	0.3
1,1,2,2-Tetrachloroethane	ND<0.5	0.5
1,3-Dichlorobenzene	ND<0.2	0.2
1,4-Dichlorobenzene	ND<0.2	0.2
1,2-Dichlorobenzene	ND<0.2	0.2

MDL: Method Detection Limit

Sunder Siduk for

Jaime Chow
 Laboratory Director

Page 1 of 2
 OUTSTANDING QUALITY AND SERVICE
 CALIFORNIA STATE CERTIFIED LABORATORY

JC/dwc



AUGEAS CORPORATION
 780 PURISSIMA
 HALF MOON BAY, CALIFORNIA 94019
 (415) 726-7700
 (415) 726-1217 (FAX)

Chain of Custody

Page 1 of 1

94-968

• PLEASE PRINT IN PEN

Client <i>R. Gilcrease</i>	Contact	Phone # () ()	FAX # () ()
Address	City	State	Zip
Project Name/Number <i>10700 MacArthur Blvd., Oakland, CA</i>			Project MGR
Bill (If different than above) Address			
Sampler (Print and sign)	Due Date	Circle for RUSH*	Copies To: Auth. Init.

Sample Description	Date/Time Coll'd	*Matrix	# of Containers	Pres.	Filt. y/n	* Subject to Availability Analysis				Remarks	Lab ID #
						8020 BTEX	8015 Gasoline	Stoddard Solvent	EPA 8010		
<i>AMW-1</i>	<i>10-4-94 16:45</i>	<i>W</i>	<i>5</i>	<i>Y</i>		<i>8020 BTEX</i>	<i>8015 Gasoline</i>	<i>Stoddard Solvent</i>	<i>EPA 8010</i>	<i>94-968-4</i>	
<i>AMW-2</i>	<i>10-4-94 16:02</i>	<i>W</i>	<i>5</i>	<i>Y</i>		<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>		<i>94-968-2</i>

Relinquished By	Date/Time	Received By	Relinquished By	Date/Time	Received By
<i>W. S. H.</i>	<i>10-5-94 8:00</i>	<i>D. J. H.</i>			
		<i>10/5/94</i>		<i>10:00</i>	

FOR LAB USE ONLY

Shipping Method	Shipping #	Received By	Date/Time	Condition (See Remarks)		
				Cold	Sealed	Intact
REMARKS <i>To N. State</i>						

- * Matrix:
- DW - Drinking Water
 - WW - Wastewater
 - GW - Groundwater
 - SW - Surface Water
 - IM - Impinger
 - FI - Filter
 - FP - Free Product
 - A/G - Air/Gas
 - SL - Sludge/Soil/Solid
 - OT - Other

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222 1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Attn: John Murphy
North State Environmental
P.O. Box 5624
So. San Francisco, CA 94083

Date Received: 10/06/94
Date Analyzed: 10/10/94
Date Reported: 10/12/94
Job #: 76270

Project: 10700 Mac Arthur Boulevard
Oakland, CA
Matrix: Water

PURGEABLE HALOCARBONS
EPA Method 601
µg/L

Lab I.D.: 76270-2
Client I.D.: 94-568-02

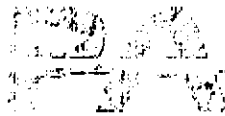
Table with 3 columns: Compound Name, Result, MDL. Lists various halocarbons and their detection results.

MDL: Method Detection Limit

Signature: Swinder Sidhu (for)
Jaime Chow

Laboratory Director OUTSTANDING QUALITY AND SERVICE
CALIFORNIA STATE CERTIFIED LABORATORY

JC/dwc



Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3007

FAX (510) 222-1251

STATE LICENSE NO. 1150

Attn: John Murphy
North State Environmental
P.O. Box 5624
So. San Francisco, CA 94083

Date Received: 10/06/94
Date Analyzed: 10/10/94
Date Reported: 10/12/94
Job #: 76270

Project: 10700 Mac Arthur Boulevard
Oakland, CA
Matrix: Water

PURGEABLE HALOCARBONS
EPA Method 601
 $\mu\text{g/L}$

Lab I.D.: 76270-1

Client I.D.: 94-568-01

QA/QC: Matrix Spike Recovery for 1,1-Dichloroethene: 125%
Matrix Spike Recovery for Trichloroethene: 77%
Matrix Spike Recovery for Chlorobenzene: 76%

Matrix Spike Duplicate Recovery for 1,1-Dichloroethene: 130%
Matrix Spike Duplicate Recovery for Trichloroethene: 84%
Matrix Spike Duplicate Recovery for Chlorobenzene: 77%



North State Environmental
 Chemical Waste Disposal • Tracking • Consulting

CHAIN OF CUSTODY REPORT

CLIENT: NSE	REPORT TO: John Murphy	TURNAROUND TIME:		
ADDRESS: 90. S. Spruce Ave S. SF. CA 94080	BILLING TO:	15 NR.	30 NR.	45 NR.
PHONE: 415-588-9652	POP/BILLING REFERENCE:	<u>5 DAY</u>	10 DAY	15 DAY
PROJECT NAME/SITE: 10700 MacArthur Blvd Oakland. CA	ANALYSIS REQUESTED			

SAMPLER:	DATE:	ANALYSIS REQUESTED				REMARKS	SAMPLE NUMBER
SAMPLE ID#/ STATION	SAMPLE DESCRIPTION	NUMBER OF CONT.	TYPE CONT.	SAMPLING TIME/DATE			
94568-01	AMW-1	2	G	10-10-94	f		
94568-02	AMW-2	2	G	10-10-94	f		

RELINQUISHED BY: John Murphy	DATE: 10/5	TIME: 12:00	RECEIVED BY: John Murphy	DATE: 10/5	TIME: 12:00	TRAVEL TIME:		
RELINQUISHED BY: Michael Butler	DATE: 10/6/94	TIME: 9:20 AM	RECEIVED BY: Krisinda	DATE: 10.6.94	TIME: 9:20 AM	ON SITE TIME:		
RELINQUISHED BY:	DATE:	TIME:	RECEIVED IN LAB BY:	DATE:	TIME:	OTHER:		
						WERE SAMPLES: PRESERVED ?	YES	NO
						IN GOOD CONDITION?		



AUGEAS CORPORATION
 780 PURISSIMA
 HALF MOON BAY, CALIFORNIA 94019
 (415) 726-7700
 (415) 726-1217 (FAX)

• PLEASE PRINT IN PEN

Client <u>R. Gilcrease</u>	Contact	Phone # ()	FAX # ()
Address	City	State	Zip
Project Name/Number <u>10700 MacArthur Blvd., Oakland, CA</u>	Project MGR		
Bill (If different than above)	Address		
Sampler (Print and sign)	Due Date	Circle for RUSH*	Copies To: Auth. Init.

Sample Description	Date/Time Coll'd	*Matrix	# of Containers	Pres.	Filt. y/n	* Subject to Availability Analysis				Remarks	Lab ID #
						8015 Gasoline	Standard Solvent	BPA 8016			
<u>AMW-1</u>	<u>10-11-94</u> <u>16:25</u>	<u>W</u>	<u>5</u>	<u>Y</u>		<u>8020 BTEX</u>					
<u>AMW-2</u>	<u>10-11-94</u> <u>16:02</u>	<u>W</u>	<u>5</u>	<u>Y</u>		<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>		

Relinquished By	Date/Time	Received By	Relinquished By	Date/Time	Received By
<u>W. D. H.</u>	<u>10-15-94</u> <u>8:00</u>	<u>[Signature]</u>			
		<u>10/5/94</u>		<u>10:00</u>	

FOR LAB USE ONLY

Shipping Method	Shipping #	Received By	Date/Time	Condition (See Remarks)		
				Cold	Sealed	Intact
REMARKS <u>To N. State</u>						

- * Matrix:
- DW - Drinking Water
 - WW - Wastewater
 - GW - Groundwater
 - SW - Surface Water
 - IM - Impinger
 - FI - Filter
 - FP - Free Product
 - A/G - Air/Gas
 - SL - Sludge/Soil/Solid
 - OT - Other



North State Environmental
 Chemical Waste Disposal • Trucking • Consulting

C E R T I F I C A T E O F A N A L Y S I S

JOB NO: 94-568 DATE SAMPLED: 10-04-94
 CLIENT: AUGEAS CORP. DATE EXTRACTED: 10-05-94
 PROJECT NAME: 10700 MacArthur DATE ANALYZED: 10-05-94
 Blvd, Oakland, CA

BTXE AND GASOLINE RANGE ORGANICS BY
 EPA METHOD 8020/5030 AND 8015 M
 STODDARD RANGE HYDROCARBONS BY EPA METHOD 8015 M

Sample No.	Client ID	Analyte	Result
94-568-01	AMW-1 Water	Benzene	ND
		Toluene	ND
		Ethylbenzene	ND
		Xylenes	ND
		Stoddard	ND
94-568-02	AMW-2 Water	Benzene	ND
		Toluene	ND
		Ethylbenzene	ND
		Xylenes	ND
		Stoddard	0.2 mg/L

Quality Control Quality Assurance Summary: Water

Analyte	Method	Reporting limit	Blank	MS/MSD Recovery	RPD
Benzene	8020	0.5 ug/L	ND	AVG 100%	2
Toluene	8020	0.5 ug/L	ND		
Ethylbenzene	8020	0.5 ug/L	ND		
Xylenes	8020	1.0 ug/L	ND		
Stoddard	8015 M	50.0 ug/L	ND	AVG 83%	2

DOHS CERTIFICATION NUMBER 1753

Reviewed and Approved by

John Murphy
 John Murphy
 Laboratory Director

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Attn: John Murphy
 North State Environmental
 P.O. Box 5624
 So. San Francisco, CA 94083

Date Received: 10/06/94
 Date Analyzed: 10/10/94
 Date Reported: 10/12/94
 Job #: 76270

Project: 10700 Mac Arthur Boulevard
 Oakland, CA
 Matrix: Water

PURGEABLE HALOCARBONS
 EPA Method 601
 µg/L

Lab I.D.: 76270-1

Client I.D.: 94-568-01 (AMW-1)

	<u>Result</u>	<u>MDL</u>
Bromomethane & Chloroethane	ND<2.0	2.0
Vinyl Chloride & Chloromethane	ND<1.0	1.0
Freon 113	ND<1.0	1.0
1,1-Dichloroethene	ND<0.3	0.3
Methylene Chloride	ND<1.0	1.0
Trans-1,2-Dichloroethene	ND<0.2	0.2
1,1-Dichloroethane	ND<0.2	0.2
Cis-1,2-Dichloroethene	0.5	0.2
Chloroform	ND<0.1	0.1
1,1,1-Trichloroethane	ND<0.2	0.2
Carbon Tetrachloride	ND<0.2	0.2
1,2-Dichloroethane	ND<0.5	0.5
Trichloroethene	ND<0.2	0.2
1,2-Dichloropropene	ND<0.4	0.4
2-Chloro-vinyl ether	ND<0.2	0.2
Bromodichloromethane	ND<0.3	0.3
T-1,3-Dichloropropene	ND<0.2	0.2
Cis-1,3-Dichloropropene	ND<0.4	0.4
1,1,2-Trichloroethane	ND<0.3	0.3
Tetrachloroethene	ND<0.2	0.2
Dibromochloromethane	ND<0.4	0.4
Chlorobenzene	ND<0.3	0.3
Bromoform	ND<0.3	0.3
1,1,2,2-Tetrachloroethane	ND<0.5	0.5
1,3-Dichlorobenzene	ND<0.2	0.2
1,4-Dichlorobenzene	ND<0.2	0.2
1,2-Dichlorobenzene	ND<0.2	0.2

MDL: Method Detection Limit

Swinder Sidlik for

Jaime Chow

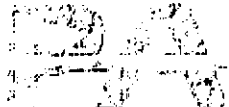
Laboratory Director

Page 1 of 2

OUTSTANDING QUALITY AND SERVICE

CALIFORNIA STATE CERTIFIED LABORATORY

JC/dwc



Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3007

FAX (510) 222-1251

STATE LICENSE NO. 1150

Attn: John Murphy
North State Environmental
P.O. Box 5624
So. San Francisco, CA 94083

Date Received: 10/06/94
Date Analyzed: 10/10/94
Date Reported: 10/12/94
Job #: 76270

Project: 10700 Mac Arthur Boulevard
Oakland, CA
Matrix: Water

PURGEABLE HALOCARBONS
EPA Method 601
µg/L

Lab I.D.: 76270-1

Client I.D.: 94-568-01 (AMW-1)

QA/QC: Matrix Spike Recovery for 1,1-Dichloroethene: 125%
Matrix Spike Recovery for Trichloroethene: 77%
Matrix Spike Recovery for Chlorobenzene: 76%

Matrix Spike Duplicate Recovery for 1,1-Dichloroethene: 130%
Matrix Spike Duplicate Recovery for Trichloroethene: 84%
Matrix Spike Duplicate Recovery for Chlorobenzene: 77%

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222 1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Attn: John Murphy
North State Environmental
P.O. Box 5624
So. San Francisco, CA 94083

Date Received: 10/06/94
Date Analyzed: 10/10/94
Date Reported: 10/12/94
Job #: 76270

Project: 10700 Mac Arthur Boulevard
Oakland, CA
Matrix: Water

PURGEABLE HALOCARBONS
EPA Method 601
µg/L

Lab I.D.: 76270-2
Client I.D.: 94-568-02 (AMW-2)

Table with 3 columns: Compound Name, Result, MDL. Lists various halocarbons and their detection results.

MDL: Method Detection Limit

Signature: Swinder Sidhu (for)
Jaime Chow

Laboratory Director OUTSTANDING QUALITY AND SERVICE
CALIFORNIA STATE CERTIFIED LABORATORY

JC/DWC



North State Environmental
Chemical Waste Disposal • Trucking • Consulting

CHAIN OF CUSTODY REPORT

CLIENT: NSE
 ADDRESS: 90. S. Spruce Ave
S. SF. CA 94080
 PHONE: 415-588-9652
 PROJECT NAME/SITE: 10700 MacArthur Blvd
Oakland, CA

REPORT TO: John Murphy
 BILLING TO:
 TURNAROUND TIME:
 24 HR. 48 HR. 72 HR.
5 DAY 30 DAY 115 DAY

POF/BILLING REFERENCE:

SAMPLE ID#/ STATION	SAMPLE DESCRIPTION	NUMBER OF CONT.	TYPE CONT.	SAMPLING TIME/DATE	ANALYSIS REQUESTED										REMARKS	SAMPLE NUMBER	
<u>94568-01</u>	<u>AMW-1</u>	<u>2</u>	<u>G</u>	<u>10-6-94</u>	<u>5/10</u>												
<u>94568-02</u>	<u>AMW-2</u>	<u>2</u>	<u>G</u>	<u>10-6-94</u>	<u>5/10</u>												

RELINQUISHED BY: [Signature] DATE: 10/5 TIME: 12:00
 RECEIVED BY: [Signature] DATE: 10/5 TIME: 12:00
 TRAVEL TIME:
 ON SITE TIME:

RELINQUISHED BY: Michael Buehler DATE: 10/6/94 TIME: 9:20 am
 RECEIVED BY: [Signature] DATE: 10/6/94 TIME: 9:20 AM
 OTHER:

RELINQUISHED BY: DATE: TIME: RECEIVED IN LAB BY:

WERE SAMPLES: YES NO
 PRESERVED ?
 IN GOOD CONDITION?



North State Environmental
Chemical Waste Disposal · Trucking · Consulting

C E R T I F I C A T E O F A N A L Y S I S

JOB NO: 94-574 DATE SAMPLED: 10-07-94
CLIENT: AUGEAS CORP. DATE EXTRACTED: 10-10-94
PROJECT NAME: 10700 MacArthur DATE ANALYZED: 10-10-94
 Blvd, Oakland CA

BTXE AND GASOLINE RANGE ORGANICS BY
EPA METHOD 8020/5030 AND 8015 M
STODDARD RANGE HYDROCARBONS BY EPA METHOD 8015 M

Sample No.	Client ID	Analyte	Result
94-574-01	B3-6'	Benzene	ND
		Toluene	ND
		Ethylbenzene	ND
		Xylenes	ND
		Stoddard	ND
94-574-02	B3-13'	Benzene	ND
		Toluene	ND
		Ethylbenzene	ND
		Xylenes	ND
		Stoddard	ND
94-574-03	B3-16'	Benzene	ND
		Toluene	ND
		Ethylbenzene	ND
		Xylenes	ND
		Stoddard	ND
94-574-04	B3-21'	Benzene	ND
		Toluene	ND
		Ethylbenzene	ND
		Xylenes	ND
		Stoddard	ND
94-574-05	B4-5.5'	Benzene	ND
		Toluene	7 ^{mg} /Kg
		Ethylbenzene	ND
		Xylenes	ND
		Stoddard	ND

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

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FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Attn: John Murphy
North State Environmental
P.O. Box 5624
So. San Francisco, CA 94083

Date Received: 10/10/94
Date Analyzed: 10/13/94
Date Reported: 10/17/94
Job #: 76280

Project: 10700 MacArthur Boulevard
Oakland, CA
Matrix: Soil

Purgeable Halocarbons
EPA Method 8010
 $\mu\text{g}/\text{Kg}$

Lab I.D.: 76280-8
Client I.D.: 94-574-08

	<u>Result</u>	<u>MDL</u>
Bromomethane & Chloroethane	ND<20	20
Vinyl Chloride & Chloromethane	ND<20	20
Freon 113	ND<12	12
1,1-Dichloroethene	ND<12	12
Methylene Chloride	ND<104	104
Trans-1,2-Dichloroethene	ND<6	6
1,1-Dichloroethane	ND<8	8
Cis-1,2-Dichloroethene	ND<5	5
Chloroform	ND<3	3
1,1,1-Trichloroethane	ND<12	12
Carbon Tetrachloride	ND<6	6
1,2-Dichloroethane	ND<4	4
Trichloroethene	ND<8	8
1,2-Dichloropropene	ND<7	7
2-Chloro-vinyl ether	ND<5	5
Bromodichloromethane	ND<8	8
T-1,3-Dichloropropene	ND<5	5
Cis-1,3-Dichloropropene	ND<6	6
1,1,2-Trichloroethane	ND<12	12
Tetrachloroethene	30	10
Dibromochloromethane	ND<8	8
Chlorobenzene	ND<10	10
Bromoform	ND<4	4
1,1,2,2-Tetrachloroethane	ND<10	10
1,3-Dichlorobenzene	ND<6	6
1,4-Dichlorobenzene	ND<6	6
1,2-Dichlorobenzene	ND<6	6

MDL: Method Detection Limit


Jaime Chow
Laboratory Director

OUTSTANDING QUALITY AND SERVICE
CALIFORNIA STATE CERTIFIED LABORATORY

JC/dwc

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

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CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Attn: John Murphy
North State Environmental
P.O. Box 5624
So. San Francisco, CA 94083

Date Received: 10/10/94
Date Analyzed: 10/13/94
Date Reported: 10/17/94
Job #: 76280

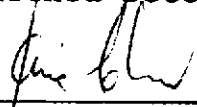
Project: 10700 MacArthur Boulevard
Oakland, CA
Matrix: Soil

Purgeable Halocarbons
EPA Method 8010
µg/Kg

Lab I.D.: 76280-1
Client I.D.: 94-574-01

	<u>Result</u>	<u>MDL</u>
Bromomethane & Chloroethane	ND<20	20
Vinyl Chloride & Chloromethane	ND<20	20
Freon 113	ND<12	12
1,1-Dichloroethene	ND<12	12
Methylene Chloride	ND<104	104
Trans-1,2-Dichloroethene	ND<6	6
1,1-Dichloroethane	ND<8	8
Cis-1,2-Dichloroethene	ND<5	5
Chloroform	ND<3	3
1,1,1-Trichloroethane	ND<12	12
Carbon Tetrachloride	ND<6	6
1,2-Dichloroethane	ND<4	4
Trichloroethene	ND<8	8
1,2-Dichloropropene	ND<7	7
2-Chloro-vinyl ether	ND<5	5
Bromodichloromethane	ND<8	8
T-1,3-Dichloropropene	ND<5	5
Cis-1,3-Dichloropropene	ND<6	6
1,1,2-Trichloroethane	ND<12	12
Tetrachloroethene	15	10
Dibromochloromethane	ND<8	8
Chlorobenzene	ND<10	10
Bromoform	ND<4	4
1,1,2,2-Tetrachloroethane	ND<10	10
1,3-Dichlorobenzene	ND<6	6
1,4-Dichlorobenzene	ND<6	6
1,2-Dichlorobenzene	ND<6	6

MDL: Method Detection Limit


Jaime Chow
Laboratory Director



Precision Analytical Laboratory, Inc.

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STATE LICENSE NO. 1150

Attn: John Murphy
North State Environmental
P.O. Box 5624
So. San Francisco, CA 94083

Date Received: 10/10/94
Date Analyzed: 10/13/94
Date Reported: 10/17/94
Job #: 76280

Project: 10700 MacArthur Boulevard
Oakland, CA
Matrix: Soil

Purgeable Halocarbons
EPA Method 8010
 $\mu\text{g}/\text{Kg}$

Lab I.D.: 76280-1
Client I.D.: 94-574-01

QA/QC: Matrix Spike Recovery for 1,1-Dichloroethene: 120%
Matrix Spike Recovery for Trichloroethene: 77%
Matrix Spike Recovery for Chlorobenzene: 80%

Matrix Spike Duplicate Recovery for 1,1-Dichloroethene: 117%
Matrix Spike Duplicate Recovery for Trichloroethene: 74%
Matrix Spike Duplicate Recovery for Chlorobenzene: 77%

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Attn: John Murphy
North State Environmental
P.O. Box 5624
So. San Francisco, CA 94083

Date Received: 10/10/94
Date Analyzed: 10/13/94
Date Reported: 10/17/94
Job #: 76280

Project: 10700 MacArthur Boulevard
Oakland, CA
Matrix: Soil

Purgeable Halocarbons
EPA Method 8010
µg/Kg

Lab I.D.: 76280-2
Client I.D.: 94-574-02

Table with 3 columns: Compound Name, Result, MDL. Lists various halocarbons and their detection results.

MDL: Method Detection Limit

Signature of Jaime Chow
Jaime Chow
Laboratory Director

OUTSTANDING QUALITY AND SERVICE
CALIFORNIA STATE CERTIFIED LABORATORY

JC/dwc

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

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FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Attn: John Murphy
North State Environmental
P.O. Box 5624
So. San Francisco, CA 94083

Date Received: 10/10/94
Date Analyzed: 10/13/94
Date Reported: 10/17/94
Job #: 76280

Project: 10700 MacArthur Boulevard
Oakland, CA
Matrix: Soil

Purgeable Halocarbons
EPA Method 8010
 $\mu\text{g}/\text{Kg}$

Lab I.D.: 76280-3
Client I.D.: 94-574-03

	<u>Result</u>	<u>MDL</u>
Bromomethane & Chloroethane	ND<20	20
Vinyl Chloride & Chloromethane	ND<20	20
Freon 113	ND<12	12
1,1-Dichloroethene	ND<12	12
Methylene Chloride	ND<104	104
Trans-1,2-Dichloroethene	ND<6	6
1,1-Dichloroethane	ND<8	8
Cis-1,2-Dichloroethene	ND<5	5
Chloroform	ND<3	3
1,1,1-Trichloroethane	ND<12	12
Carbon Tetrachloride	ND<6	6
1,2-Dichloroethane	ND<4	4
Trichloroethene	ND<8	8
1,2-Dichloropropene	ND<7	7
2-Chloro-vinyl ether	ND<5	5
Bromodichloromethane	ND<8	8
T-1,3-Dichloropropene	ND<5	5
Cis-1,3-Dichloropropene	ND<6	6
1,1,2-Trichloroethane	ND<12	12
Tetrachloroethene	12	10
Dibromochloromethane	ND<8	8
Chlorobenzene	ND<10	10
Bromoform	ND<4	4
1,1,2,2-Tetrachloroethane	ND<10	10
1,3-Dichlorobenzene	ND<6	6
1,4-Dichlorobenzene	ND<6	6
1,2-Dichlorobenzene	ND<6	6

MDL: Method Detection Limit


Jaime Chow
Laboratory Director

OUTSTANDING QUALITY AND SERVICE
CALIFORNIA STATE CERTIFIED LABORATORY

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FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Attn: John Murphy
North State Environmental
P.O. Box 5624
So. San Francisco, CA 94083

Date Received: 10/10/94
Date Analyzed: 10/13/94
Date Reported: 10/17/94
Job #: 76280

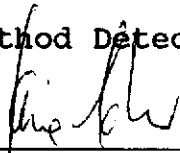
Project: 10700 MacArthur Boulevard
Oakland, CA
Matrix: Soil

Purgeable Halocarbons
EPA Method 8010
µg/Kg

Lab I.D.: 76280-4
Client I.D.: 94-574-04

	<u>Result</u>	<u>MDL</u>
Bromomethane & Chloroethane	ND<20	20
Vinyl Chloride & Chloromethane	ND<20	20
Freon 113	ND<12	12
1,1-Dichloroethene	ND<12	12
Methylene Chloride	ND<104	104
Trans-1,2-Dichloroethene	ND<6	6
1,1-Dichloroethane	ND<8	8
Cis-1,2-Dichloroethene	ND<5	5
Chloroform	ND<3	3
1,1,1-Trichloroethane	ND<12	12
Carbon Tetrachloride	ND<6	6
1,2-Dichloroethane	ND<4	4
Trichloroethene	ND<8	8
1,2-Dichloropropene	ND<7	7
2-Chloro-vinyl ether	ND<5	5
Bromodichloromethane	ND<8	8
T-1,3-Dichloropropene	ND<5	5
Cis-1,3-Dichloropropene	ND<6	6
1,1,2-Trichloroethane	ND<12	12
Tetrachloroethene	27	10
Dibromochloromethane	ND<8	8
Chlorobenzene	ND<10	10
Bromoform	ND<4	4
1,1,2,2-Tetrachloroethane	ND<10	10
1,3-Dichlorobenzene	ND<6	6
1,4-Dichlorobenzene	ND<6	6
1,2-Dichlorobenzene	ND<6	6

MDL: Method Detection Limit


Jaime Chow
Laboratory Director

OUTSTANDING QUALITY AND SERVICE
CALIFORNIA STATE CERTIFIED LABORATORY

JC/dwc



Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Attn: John Murphy
North State Environmental
P.O. Box 5624
So. San Francisco, CA 94083

Date Received: 10/10/94
Date Analyzed: 10/13/94
Date Reported: 10/17/94
Job #: 76280

Project: 10700 MacArthur Boulevard
Oakland, CA
Matrix: Soil

Purgeable Halocarbons
EPA Method 8010
µg/Kg

Lab I.D.: 76280-5
Client I.D.: 94-574-05

Table with 3 columns: Compound Name, Result, MDL. Lists various halocarbons and their detection results.

MDL: Method Detection Limit

Signature of Jaime Chow
Jaime Chow
Laboratory Director

OUTSTANDING QUALITY AND SERVICE
CALIFORNIA STATE CERTIFIED LABORATORY

JC/dwc

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Attn: John Murphy
North State Environmental
P.O. Box 5624
So. San Francisco, CA 94083

Date Received: 10/10/94
Date Analyzed: 10/13/94
Date Reported: 10/17/94
Job #: 76280

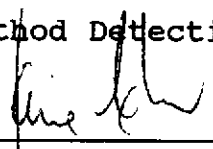
Project: 10700 MacArthur Boulevard
Oakland, CA
Matrix: Soil

Purgeable Halocarbons
EPA Method 8010
 $\mu\text{g}/\text{Kg}$

Lab I.D.: 76280-6
Client I.D.: 94-574-06

	<u>Result</u>	<u>MDL</u>
Bromomethane & Chloroethane	ND<20	20
Vinyl Chloride & Chloromethane	ND<20	20
Freon 113	ND<12	12
1,1-Dichloroethene	ND<12	12
Methylene Chloride	ND<104	104
Trans-1,2-Dichloroethene	ND<6	6
1,1-Dichloroethane	ND<8	8
Cis-1,2-Dichloroethene	22	5
Chloroform	ND<3	3
1,1,1-Trichloroethane	ND<12	12
Carbon Tetrachloride	ND<6	6
1,2-Dichloroethane	ND<4	4
Trichloroethene	ND<8	8
1,2-Dichloropropene	ND<7	7
2-Chloro-vinyl ether	ND<5	5
Bromodichloromethane	ND<8	8
T-1,3-Dichloropropene	ND<5	5
Cis-1,3-Dichloropropene	ND<6	6
1,1,2-Trichloroethane	ND<12	12
Tetrachloroethene	70	10
Dibromochloromethane	ND<8	8
Chlorobenzene	ND<10	10
Bromoform	ND<4	4
1,1,2,2-Tetrachloroethane	ND<10	10
1,3-Dichlorobenzene	ND<6	6
1,4-Dichlorobenzene	ND<6	6
1,2-Dichlorobenzene	ND<6	6

MDL: Method Detection Limit


Jaime Chow
Laboratory Director

OUTSTANDING QUALITY AND SERVICE
CALIFORNIA STATE CERTIFIED LABORATORY

JC/dwc

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Attn: John Murphy
North State Environmental
P.O. Box 5624
So. San Francisco, CA 94083

Date Received: 10/10/94
Date Analyzed: 10/13/94
Date Reported: 10/17/94
Job #: 76280

Project: 10700 MacArthur Boulevard
Oakland, CA
Matrix: Soil

Purgeable Halocarbons
EPA Method 8010
 $\mu\text{g}/\text{Kg}$

Lab I.D.: 76280-7
Client I.D.: 94-574-07

	<u>Result</u>	<u>MDL</u>
Bromomethane & Chloroethane	ND<20	20
Vinyl Chloride & Chloromethane	ND<20	20
Freon 113	ND<12	12
1,1-Dichloroethene	ND<12	12
Methylene Chloride	ND<104	104
Trans-1,2-Dichloroethene	ND<6	6
1,1-Dichloroethane	ND<8	8
Cis-1,2-Dichloroethene	9	5
Chloroform	ND<3	3
1,1,1-Trichloroethane	ND<12	12
Carbon Tetrachloride	ND<6	6
1,2-Dichloroethane	ND<4	4
Trichloroethene	ND<8	8
1,2-Dichloropropene	ND<7	7
2-Chloro-vinyl ether	ND<5	5
Bromodichloromethane	ND<8	8
T-1,3-Dichloropropene	ND<5	5
Cis-1,3-Dichloropropene	ND<6	6
1,1,2-Trichloroethane	ND<12	12
Tetrachloroethene	100	10
Dibromochloromethane	ND<8	8
Chlorobenzene	ND<10	10
Bromoform	ND<4	4
1,1,2,2-Tetrachloroethane	ND<10	10
1,3-Dichlorobenzene	ND<6	6
1,4-Dichlorobenzene	ND<6	6
1,2-Dichlorobenzene	ND<6	6

MDL: Method Detection Limit


Jaime Chow
Laboratory Director

OUTSTANDING QUALITY AND SERVICE
CALIFORNIA STATE CERTIFIED LABORATORY

JC/dwc

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

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FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Attn: John Murphy
North State Environmental
P.O. Box 5624
So. San Francisco, CA 94083

Date Received: 10/10/94
Date Analyzed: 10/10/94
Date Reported: 10/11/94
Job #: 76280

Project: 10700 MacArthur Boulevard
Oakland, CA
Matrix: Water

Purgeable Halocarbons
EPA Method 601
 $\mu\text{g/L}$

Lab I.D.: 76280-9
Client I.D.: 94-574-09

	<u>Result</u>	<u>MDL</u>
Bromomethane & Chloroethane	ND<2.0	2.0
Vinyl Chloride & Chloromethane	ND<1.0	1.0
Freon 113	ND<1.0	1.0
1,1-Dichloroethene	4.2	0.3
Methylene Chloride	ND<1.0	1.0
Trans-1,2-Dichloroethene	19	0.2
1,1-Dichloroethane	ND<0.2	0.2
Cis-1,2-Dichloroethene	130	0.2
Chloroform	ND<0.1	0.1
1,1,1-Trichloroethane	ND<0.2	0.2
Carbon Tetrachloride	ND<0.2	0.2
1,2-Dichloroethane	ND<0.5	0.5
Trichloroethene	180	0.2
1,2-Dichloropropene	ND<0.4	0.4
2-Chloro-vinyl ether	ND<0.2	0.2
Bromodichloromethane	ND<0.3	0.3
T-1,3-Dichloropropene	ND<0.2	0.2
Cis-1,3-Dichloropropene	11	0.4
1,1,2-Trichloroethane	14	0.3
Tetrachloroethene	11,000	0.2
Dibromochloromethane	ND<0.4	0.4
Chlorobenzene	ND<0.3	0.3
Bromoform	ND<0.3	0.3
1,1,2,2-Tetrachloroethane	ND<0.5	0.5
1,3-Dichlorobenzene	ND<0.2	0.2
1,4-Dichlorobenzene	ND<0.2	0.2
1,2-Dichlorobenzene	ND<0.2	0.2

MDL: Method Detection Limit

Swinder Sidhu (for)

Jaime Chow

Laboratory Director *OUTSTANDING QUALITY AND SERVICE*

CALIFORNIA STATE CERTIFIED LABORATORY

JC/dwc



AUGEAS CORPORATION
 780 PURISSIMA
 HALF MOON BAY, CALIFORNIA 94019
 (415) 726-7700
 (415) 726-1217 (FAX)

94574

• PLEASE PRINT IN PEN

Client <u>R. Gilcrease</u>	Contact	Phone # () ()	FAX # () ()
Address		City	State
Project Name/Number <u>10700 MacArthur Blvd., Oakland CA</u>			Project MGR
Bill (If different than above) Address			
Sampler (Print and sign) <u>Wayne Dittman, W. Dittman</u>		Due Date	Circle for RUSH* <input type="checkbox"/>
		Copies To:	Auth. Init.

Sample Description	Date/Time Coll'd	*Matrix	# of Containers	Pres.	Filt. y/n	* Subject to Availability Analysis	Remarks	Lab ID #
B3-6'	10-7-94 9:17	S	one			EPA 8010	EPA 8015 Stoddard Solvent	94574-01
B3-13'	10-7-94 9:25	S	↓			↓	↓	-02
B3-16'	10-7-94 9:35	S		-03				
B3-21'	10-7-94 9:45	S		-04				
B4-5 1/2'	10-7-94 10:30	S		-05				
B4-11'	10-7-94 10:40	S		-06				
B4-16'	10-7-94 10:50	S		-07				
B4-21	10-7-94 11:10	S		-08				

Relinquished By	Date/Time	Received By	Date/Time	Received By
<u>Wayne Dittman</u>	10-7-94 13:12	<u>Cora Nordt</u>	10/7/94 13:12	

FOR LAB USE ONLY

Shipping Method	Shipping #	Received By	Date/Time	Condition (See Remarks)		
				Cold	Sealed	Intact
REMARKS <u>Hold all samples until further notice.</u>						

- * Matrix:
- DW - Drinking Water
 - WW - Wastewater
 - GW - Groundwater
 - SW - Surface Water
 - IM - Impinger
 - FI - Filter
 - FP - Free Product
 - AG - Air/Gas
 - SL - Sludge/Soil/Solid
 - OT - Other _____



AUGEAS CORPORATION
 780 PURISSIMA
 HALF MOON BAY, CALIFORNIA 94019
 (415) 726-7700
 (415) 726-1217 (FAX)

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Client <u>R. Gilcrease</u>	Contact	Phone # ()	FAX # ()
Address		City	State
Project Name/Number <u>10700 MacArthur Blvd, Oakland, CA</u>		Project MGR	
Bill (if different than above)		Address	
Sampler (Print and sign) <u>Wayne Dittman W. Ditt</u>	Due Date	Circle for RUSH*	Copies To:
			Auth. Init.

Sample Description	Date/Time Coll'd	*Matrix	# of Containers	Pres.	Filt. y/n	* Subject to Availability Analysis	Remarks	Lab ID #
<u>B4-W</u>	<u>10-7-94 11:20</u>	<u>W</u>	<u>2</u>	<u>Y</u>		<u>EPA 8010</u>		<u>98573-09</u>

Relinquished By	Date/Time	Received By	Relinquished By	Date/Time	Received By
<u>W. Dittman</u>	<u>10-7-94 13:17</u>	<u>Carol Nordet</u>			

FOR LAB USE ONLY

Shipping Method	Shipping #	Received By	Date/Time	Condition (See Remarks)		
				Cold	Sealed	Intact
REMARKS <u>To N- State</u>						

- * Matrix:
- DW - Drinking Water
 - WW - Wastewater
 - GW - Groundwater
 - SW - Surface Water
 - IM - Impinger
 - FI - Filter
 - FP - Free Product
 - A/G - Air/Gas
 - SL - Sludge/Soil/Solid
 - OT - Other



North State Environmental
Chemical Waste Disposal • Trucking • Consulting

C E R T I F I C A T E O F A N A L Y S I S

JOB NO: 94-596 DATE SAMPLED: 10-18-94
CLIENT: AUGÉAS CORP. DATE EXTRACTED: 10-20-94
PROJECT NAME: 10700 MacArthur Blvd, Oakland, CA DATE ANALYZED: 10-20-94

BTXE AND GASOLINE RANGE ORGANICS BY
EPA METHOD 8020/5030 AND 8015 M
STODDARD RANGE HYDROCARBONS BY EPA METHOD 8015 M

Sample No.	Client ID	Analyte	Result
94-596-01	AMW-2 Water	Benzene	ND
		Toluene	ND
		Ethylbenzene	ND
		Xylenes	ND
		Stoddard	ND

Quality Control Quality Assurance Summary: Water

Analyte	Method	Reporting limit	Blank	MS/MSD Recovery	RPD
Benzene	8020	0.5 ug/L	ND	AVG 105%	3
Toluene	8020	0.5 ug/L	ND		
Ethylbenzene	8020	0.5 ug/L	ND		
Xylenes	8020	1.0 ug/L	ND		
Stoddard	8015 M	50.0 ug/L	ND	AVG 87%	1

DOHS CERTIFICATION NUMBER 1753

Reviewed and Approved by

(Signature)
John Murphy
Laboratory Director

AUGEAS CORPORATION
 780 PURISSIMA
 HALF MOON BAY, CALIFORNIA 94019
 (415) 726-7700
 (415) 726-1217 (FAX)

• PLEASE PRINT IN PEN

Client <u>Arcence</u>	Contact	Phone # () ()	FAX # () ()
Address		City	State
Project Name/Number <u>10700 MacArthur Blvd Oakland, CA</u>		Project MGR	
Bill (if different than above)		Address	
Sampler (Print and sign) <u>W. Schroeder</u>		Due Date	<input checked="" type="checkbox"/> Circle for RUSH* Copies To: _____ Auth. Init. _____

Sample Description	Date/Time Coll'd	*Matrix	# of Containers	Pres.	Filt. y/n	* Subject to Availability Analysis			Remarks	Lab ID #
AMW-2	<u>10-18-94</u> 2:20PM	W	5	Y		8020PBTEX	8025 galdeno	Stocking solvent	EPA 3010	
Blank	<u>10-19-94</u> 2:20PM	W	2	Y		No	No	No	Yes	

Relinquished By	Date/Time	Received By	Relinquished By	Date/Time	Received By
<u>W. Schroeder</u>	<u>10-18-94</u> 2:20PM	<u>[Signature]</u>			

FOR LAB USE ONLY

Shipping Method	Shipping #	Received By	Date/Time	Condition (See Remarks)		
				Cold	Sealed	Intact
REMARKS _____						

- * Matrix:**
- DW - Drinking Water
 - WW - Wastewater
 - GW - Groundwater
 - SW - Surface Water
 - IM - Impinger
 - FI - Filter
 - FP - Free Product
 - A/G - Air/Gas
 - SL - Sludge/Soil/Solid
 - OT - Other

P. 03



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HALF MOON BAY, CALIFORNIA 94019
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94-596

PLEASE PRINT IN PEN

Client Milcrease Contact _____ Phone # _____ FAX # _____

Address _____ City _____ State _____ Zip _____

Project Name/Number 10700 Macarthur Blvd. Oakland, CA Project MGR _____

Bill (if different than above) _____ Address _____

Sampler (Print and sign) W. Schrader W Schrader Due Date _____ **Circle for RUSH*** Copies To: _____ Auth. Init. _____

1 day turnaround!!

Sample Description	Date/Time Coll'd	# of Matrix Containers	Pres.	Fit. y/n	* Subject to Availability Analysis		Remarks	Lab ID #
AMW-2	10-18-94 2:09P	W 5	Y		8020BIEX	8025 gasoline	Standard Solvent EPA 8010	94-596-01
Blank	10-18-94 2:09P	W 2	Y		No	No	No Yes	94-596-02
/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/

Relinquished By	Date/Time	Received By	Relinquished By	Date/Time	Received By
<u>W Schrader</u>	10-18-94 2:20PM	<u>Jim Blair</u>	<u>Jim Blair</u>	10/19/94 16:00 PM	<u>D. Louie</u>

FOR LAB USE ONLY

Shipping Method	Shipping #	Received By	Date/Time	Condition (See Remarks)		
			/	Cold	Sealed	Intact
REMARKS _____						

- * Matrix:
- DW - Drinking Water
 - WW - Wastewater
 - GW - Groundwater
 - SW - Surface Water
 - IM - Impinger
 - FI - Filter
 - FP - Free Product
 - AG - Air/Gas
 - SL - Sludge/Soil/Solid
 - OT - Other

10-20-94 WED 12:33



Superior Precision Analytical, Inc.

A member of ESSCON Environmental Support Service Consortium

NORTH STATE ENVIRONMENTAL
Attn: JOHN MURPHY

Project 10700 MACARTHUR
Reported 21-October-1994

HALOGENATED VOLATILE ORGANICS by EPA SW-846 Methods 5030/8010.

Chronology

Laboratory Number 92855

Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
94-596-01	10/18/94	10/20/94	10/20/94	10/20/94		1



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A member of ESSCON Environmental Support Service Consortium

NORTH STATE ENVIRONMENTAL
Attn: JOHN MURPHY

Project 10700 MACARTHUR
Reported 21-October-1994

HALOGENATED VOLATILE ORGANICS by EPA SW-846 Methods 5030/8010.

Laboratory Number	Sample Identification	Matrix
92855- 1	94-596-01	Water

RESULTS OF ANALYSIS

Laboratory Number: 92855- 1

Chloromethane: ND<250
 Vinyl Chloride: ND<250
 Bromomethane: ND<250
 Chloroethane: ND<250
 Trichlorofluoromethane: ND<250
 1,1-Dichloroethene: ND<250
 Dichloromethane: ND<250
 t-1,2-Dichloroethene: ND<250
 1,1-Dichloroethane: ND<250
 c-1,2-Dichloroethene: ND<250
 Chloroform: ND<250
 1,1,1-Trichloroethane: ND<250
 Carbon tetrachloride: ND<250
 1,2-Dichloroethane: ND<250
 Trichloroethene: ND<250
 c-1,3-Dichloropropene: ND<250
 1,2-Dichloropropane: ND<250
 t-1,3-Dichloropropene: ND<250
 Bromodichloromethane: ND<250
 1,1,2-Trichloroethane: ND<250
 Tetrachloroethene: 18000
 Dibromochloromethane: ND<250
 Chlorobenzene: ND<250
 Bromoform: ND<250
 1,1,2,2-Tetrachloroeth: ND<250
 1,3-Dichlorobenzene: ND<250
 1,2-Dichlorobenzene: ND<250
 1,4-Dichlorobenzene: ND<250

Concentration: ug/L

Certified Laboratories

825 Arnold Dr., Suite 114
Martinez, California 94553
(510) 229-1512 / fax (510) 229-1526

1555 Burke St., Unit I
San Francisco, California 94124
(415) 647-2081 / fax (415) 821-7123

309 S. Cloverdale St., Suite B-24
Seattle, Washington 98108
(206) 763-2992 / fax (206) 763-8429



Superior Precision Analytical, Inc.

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HALOGENATED VOLATILE ORGANICS by EPA SW-846 Methods 5030/8010.
Quality Assurance and Control Data - Water

Laboratory Number 92855

Compound	Method Blank (ug/L)	RL (ug/L)	Spike Recovery (%)	Limits (%)	RPD (%)
Chloromethane:	ND<0.5	0.5			
Vinyl Chloride:	ND<0.5	0.5			
Bromomethane:	ND<0.5	0.5			
Chloroethane:	ND<0.5	0.5			
Trichlorofluoromethane:	ND<0.5	0.5			
1,1-Dichloroethene:	ND<0.5	0.5	49/52	50-189	6%
Dichloromethane:	ND<1.0	1.0			
1,2-Dichloroethene:	ND<0.5	0.5			
1,1-Dichloroethane:	ND<0.5	0.5			
c-1,2-Dichloroethene:	ND<0.5	0.5			
Chloroform:	ND<0.5	0.5			
1,1,1-Trichloroethane:	ND<0.5	0.5			
Carbon tetrachloride:	ND<0.5	0.5			
1,2-Dichloroethane:	ND<0.5	0.5			
1,1,2-Trichloroethane:	ND<0.5	0.5	81/83	53-161	2%
1,3-Dichloropropene:	ND<0.5	0.5			
1,2-Dichloropropane:	ND<0.5	0.5			
1,3-Dichloropropene:	ND<0.5	0.5			
1,1,1-Tribromodichloromethane:	ND<0.5	0.5			
1,1,2-Trichloroethane:	ND<0.5	0.5			
Tetrachloroethene:	ND<0.5	0.5			
Bromochloromethane:	ND<0.5	0.5			
Chlorobenzene:	ND<0.5	0.5	119/123	57-171	3%
Bromoform:	ND<0.5	0.5			
1,1,2,2-Tetrachloroeth:	ND<0.5	0.5			
1,3-Dichlorobenzene:	ND<0.5	0.5			
1,2-Dichlorobenzene:	ND<0.5	0.5			
1,4-Dichlorobenzene:	ND<0.5	0.5			

Definitions:

ND = Not Detected
 RPD = Relative Percent Difference
 RL = Reporting Limit
 ug/L = Parts per billion (ppb)
 Lab File No. 92855

A. Lane
 Senior Chemist
 Account Manager

Certified Laboratories

825 Arnold Dr., Suite 114
 Martinez, California 94553
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Chain of Custody

Page 1 of 1

94-596

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Client <u>Gilcrease</u>	Contact	Phone # ()	FAX # ()
Address	City	State	Zip
Project Name/Number <u>10700 MacArthur Blvd. Oakland, CA</u>	Project MGR		
Bill (if different than above)	Address		
Sampler (Print and sign) <u>W. Schrader</u>	Due Date	<u>1 day turnaround!!</u> Circle for RUSH*	Copies To: Auth. Init.

Sample Description	Date/Time Coll'd	*Matrix	# of Containers	Pres.	Filt. y/n	* Subject to Availability Analysis				Remarks	Lab ID #
						Standard Solvent	EPA 8010	8020BTEX	8015 gasoline		
AMW-2	10-18-94 2:09P	W	5	Y		Standard Solvent	EPA 8010	8020BTEX	8015 gasoline		94-596-01
Blank	10-18-94 2:09P	W	2	Y		No	No	No	Yes		94-596-02

Relinquished By	Date/Time	Received By	Relinquished By	Date/Time	Received By
<u>W. Schrader</u>	10-18-94 2:20PM	<u>Jim [Signature]</u>	<u>Jim [Signature]</u>	10/19/94 16:00 PM	<u>D. Louie</u>

FOR LAB USE ONLY

Shipping Method	Shipping #	Received By	Date/Time	Condition (See Remarks)		
				Cold	Sealed	Intact
REMARKS _____						

- * Matrix:
- DW - Drinking Water
 - WW - Wastewater
 - GW - Groundwater
 - SW - Surface Water
 - IM - Impinger
 - FI - Filter
 - FP - Free Product
 - A/G - Air/Gas
 - SL - Sludge/Soil/Solid
 - OT - Other



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C E R T I F I C A T E O F A N A L Y S I S

JOB NO: 94-626 DATE SAMPLED: 11/03/94
CLIENT: AUGEAS CORP. DATE EXTRACTED: 11/09/94
PROJECT NAME: YOUNG'S CLEANERS DATE ANALYZED: 11/09/94

HALOGENATED VOLATILE ORGANICS BY EPA SW-846 METHODS 5030/8010

RESULT OF ANALYSIS

Laboratory Number	94-626-03	94-626-04
Client ID:	B-5 15.5'-16'	B-5 20.5-21'
Matrix:	Soil	Soil
Analyte	Result	Result
Chloromethane:	ND<10	ND<10
Bromomethane:	ND<10	ND<10
Vinyl Chloride:	ND<10	ND<10
Chloroethane:	ND<10	ND<10
Trichlorofluoromethane:	ND<10	ND<10
1,1-Dichloroethene:	ND<5	ND<5
Dichloromethane:	ND<10	ND<10
1,1-Dichloroethane:	ND<5	ND<5
t-1,2-Dichloroethene:	ND<5	ND<5
Chloroform:	ND<5	ND<5
1,2-Dichloroethane:	ND<5	ND<5
1,1,1-Trichloroethane:	ND<5	ND<5
Carbon tetrachloride:	ND<5	ND<5
Bromodichloromethane:	ND<5	ND<5
1,2-Dichloropropane:	ND<5	ND<5
c-1-2-Dichloroethene:	ND<5	ND<5
c-1-3-Dichloropropene:	ND<5	ND<5
Trichloroethene:	ND<5	ND<5
Dibromochloromethane:	ND<5	ND<5
1,1,2-Trichloroethane:	ND<5	ND<5
t-1,3-Dichloropropene	ND<5	ND<5
Bromoform:	ND<10	ND<10
Tetrachloroethene:	440	ND<5
1,1,2,2-Tetrachloroethane:	ND<5	ND<5
Chlorobenzene:	ND<5	ND<5
1,3-Dichlorobenzene:	ND<5	ND<5
1,4-Dichlorobenzene:	ND<5	ND<5
1,2-Dichlorobenzene:	ND<5	ND<5
Concentration:	ug/Kg	ug/Kg



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C E R T I F I C A T E O F A N A L Y S I S

JOB NO: 94-626 DATE SAMPLED: 11/03/94
CLIENT: AUGEAS CORP. DATE EXTRACTED: 11/10/94
PROJECT NAME: YOUNG'S CLEANERS DATE ANALYZED: 11/10/94

HALOGENATED VOLATILE ORGANICS BY EPA SW-846 METHODS 5030/8010

RESULT OF ANALYSIS

Laboratory Number	94-626-05	94-626-06
Client ID:	B-5 25.5'-26' B-6 10.5'-11'	
Matrix	Soil	Soil
Analyte	Result	Result
Chloromethane:	ND<10	ND<10
Bromomethane:	ND<10	ND<10
Vinyl Chloride:	ND<10	ND<10
Chloroethane:	ND<10	ND<10
Trichlorofluoromethane:	ND<10	ND<10
1,1-Dichloroethene:	ND<5	ND<5
Dichloromethane:	ND<10	ND<10
1,1-Dichloroethane:	ND<5	ND<5
t-1,2-Dichloroethene:	ND<5	ND<5
Chloroform:	ND<5	ND<5
1,2-Dichloroethane:	ND<5	ND<5
1,1,1-Trichloroethane:	ND<5	ND<5
Carbon tetrachloride:	ND<5	ND<5
Bromodichloromethane:	ND<5	ND<5
1,2-Dichloropropane:	ND<5	ND<5
c-1-2-Dichloroethene:	ND<5	ND<5
c-1-3-Dichloropropene:	ND<5	ND<5
Trichloroethene:	ND<5	ND<5
Dibromochloromethane:	ND<5	ND<5
1,1,2-Trichloroethane:	ND<5	ND<5
t-1,3-Dichloropropene:	ND<5	ND<5
Bromoform:	ND<10	ND<10
Tetrachloroethene:	ND<5	5000
1,1,2,2-Tetracl-ethane:	ND<5	ND<5
Chlorobenzene:	ND<5	ND<5
1,3-Dichlorobenzene:	ND<5	ND<5
1,4-Dichlorobenzene:	ND<5	ND<5
1,2-Dichlorobenzene:	ND<5	ND<5
Concentration:	ug/Kg	ug/Kg



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C E R T I F I C A T E O F A N A L Y S I S

JOB NO: 94-626 DATE SAMPLED: 11/03/94
CLIENT: AUGEAS CORP. DATE EXTRACTED: 11/10/94
PROJECT NAME: YOUNG'S CLEANERS DATE ANALYZED: 11/10/94

HALOGENATED VOLATILE ORGANICS BY EPA SW-846 METHODS 5030/8010

RESULT OF ANALYSIS

Laboratory Number	94-626-07	94-626-08
Client ID:	B-6 15'-15.5' B-6 20.5'-21'	
Matrix	Soil	Soil
Analyte	Result	Result
Chloromethane:	ND<10	ND<10
Bromomethane:	ND<10	ND<10
Vinyl Chloride:	ND<10	ND<10
Chloroethane:	ND<10	ND<10
Trichlorofluoromethane:	ND<10	ND<10
1,1-Dichloroethene:	ND<5	ND<5
Dichloromethane:	ND<10	ND<10
1,1-Dichloroethane:	ND<5	ND<5
t-1,2-Dichloroethene:	ND<5	ND<5
Chloroform:	ND<5	ND<5
1,2-Dichloroethane:	ND<5	ND<5
1,1,1-Trichloroethane:	ND<5	ND<5
Carbon tetrachloride:	ND<5	ND<5
Bromodichloromethane:	ND<5	ND<5
1,2-Dichloropropane:	ND<5	ND<5
c-1-2-Dichloroethene:	ND<5	ND<5
c-1-3-Dichloropropene:	ND<5	ND<5
Trichloroethene:	ND<5	ND<5
Dibromochloromethane:	ND<5	ND<5
1,1,2-Trichloroethane:	ND<5	ND<5
t-1,3-Dichloropropene:	ND<5	ND<5
Bromoform:	ND<10	ND<10
Tetrachloroethene:	590	ND<5
1,1,2,2-Tetracl-ethane:	ND<5	ND<5
Chlorobenzene:	ND<5	ND<5
1,3-Dichlorobenzene:	ND<5	ND<5
1,4-Dichlorobenzene:	ND<5	ND<5
1,2-Dichlorobenzene:	ND<5	ND<5
Concentration:	ug/Kg	ug/Kg



North State Environmental

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C E R T I F I C A T E O F A N A L Y S I S

JOB NO: 94-626 DATE SAMPLED: 11/03/94
 CLIENT: AUGEAS CORP. DATE EXTRACTED: 11/10/94
 PROJECT NAME: YOUNG'S CLEANERS DATE ANALYZED: 11/10/94

HALOGENATED VOLATILE ORGANICS BY EPA SW-846 METHODS 5030/8010

RESULT OF ANALYSIS

Laboratory Number	94-626-09	94-626-10
Client ID:	B-6 25.5'-26'B-5	
Matrix:	Soil	Water
Analyte	Result	Result
Chloromethane:	ND<10	ND<10
Bromomethane:	ND<10	ND<10
Vinyl Chloride:	ND<10	ND<10
Chloroethane:	ND<10	ND<10
Trichlorofluoromethane:	ND<10	ND<10
1,1-Dichloroethene:	ND<5	ND<5
Dichloromethane:	ND<10	ND<10
1,1-Dichloroethane:	ND<5	ND<5
t-1,2-Dichloroethene:	ND<5	ND<5
Chloroform:	ND<5	ND<5
1,2-Dichloroethane:	ND<5	ND<5
1,1,1-Trichloroethane:	ND<5	ND<5
Carbon tetrachloride:	ND<5	ND<5
Bromodichloromethane:	ND<5	ND<5
1,2-Dichloropropane:	ND<5	ND<5
c-1-2-Dichloroethene:	ND<5	ND<5
c-1-3-Dichloropropene:	ND<5	ND<5
Trichloroethene:	ND<5	ND<5
Dibromochloromethane:	ND<5	ND<5
1,1,2-Trichloroethane:	ND<5	ND<5
t-1,3-Dichloropropene:	ND<5	ND<5
Bromoform:	ND<10	ND<10
Tetrachloroethene:	ND<5	1000
1,1,2,2-Tetracl-ethane:	ND<5	ND<5
Chlorobenzene:	ND<5	ND<5
1,3-Dichlorobenzene:	ND<5	ND<5
1,4-Dichlorobenzene:	ND<5	ND<5
1,2-Dichlorobenzene:	ND<5	ND<5
Concentration:	ug/Kg	ug/L


North State Environmental
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C E R T I F I C A T E O F A N A L Y S I S

 JOB NO: 94-626
 CLIENT: AUGEAS CORP.
 PROJECT NAME: YOUNG'S CLEANERS

 DATE SAMPLED: 11/03/94
 DATE EXTRACTED: 11/10/94
 DATE ANALYZED: 11/10/94

HALOGENATED VOLATILE ORGANICS BY EPA SW-846 METHODS 5030/8010

R E S U L T O F A N A L Y S I S

Laboratory Number	94-626-11	94-626-12
Client ID:	B-6	D-1
Matrix	Water	Water
Analyte	Result	Result
Chloromethane:	ND<10	ND<10
Bromomethane:	ND<10	ND<10
Vinyl Chloride:	ND<10	ND<10
Chloroethane:	ND<10	ND<10
Trichlorofluoromethane:	ND<10	ND<10
1,1-Dichloroethene:	ND<5	ND<5
Dichloromethane:	ND<10	ND<10
1,1-Dichloroethane:	ND<5	ND<5
t-1,2-Dichloroethene:	ND<5	ND<5
Chloroform:	ND<5	ND<5
1,2-Dichloroethane:	ND<5	ND<5
1,1,1-Trichloroethane:	ND<5	ND<5
Carbon tetrachloride:	ND<5	ND<5
Bromodichloromethane:	ND<5	ND<5
1,2-Dichloropropane:	ND<5	ND<5
c-1-2-Dichloroethene:	ND<5	ND<5
c-1-3-Dichloropropene:	ND<5	ND<5
Trichloroethene:	ND<5	ND<5
Dibromochloromethane:	ND<5	ND<5
1,1,2-Trichloroethane:	ND<5	ND<5
t-1,3-Dichloropropene:	ND<5	ND<5
Bromoform:	ND<10	ND<10
Tetrachloroethene:	870	5900
1,1,2,2-Tetracl-ethane:	ND<5	ND<5
Chlorobenzene:	ND<5	ND<5
1,3-Dichlorobenzene:	ND<5	ND<5
1,4-Dichlorobenzene:	ND<5	ND<5
1,2-Dichlorobenzene:	ND<5	ND<5
Concentration:	ug/L	ug/L



North State Environmental
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C E R T I F I C A T E O F A N A L Y S I S

JOB NO: 94-626 DATE SAMPLED: 11/03/94
CLIENT: AUGEAS CORP. DATE EXTRACTED: 11/10/94
PROJECT NAME: YOUNG'S CLEANERS DATE ANALYZED: 11/10/94

HALOGENATED VOLATILE ORGANICS BY EPA SW-846 METHODS 5030/8010

RESULT OF ANALYSIS

Laboratory Number	94-626-13	94-626-14
Client ID:	D-2	D-3
Matrix	Water	Water
Analyte	Result	Result
Chloromethane:	ND<10	ND<10
Bromomethane:	ND<10	ND<10
Vinyl Chloride:	ND<10	ND<10
Chloroethane:	ND<10	ND<10
Trichlorofluoromethane:	ND<10	ND<10
1,1-Dichloroethene:	ND<5	ND<5
Dichloromethane:	ND<10	ND<10
1,1-Dichloroethane:	ND<5	ND<5
t-1,2-Dichloroethene:	ND<5	ND<5
Chloroform:	ND<5	ND<5
1,2-Dichloroethane:	ND<5	ND<5
1,1,1-Trichloroethane:	ND<5	ND<5
Carbon tetrachloride:	ND<5	ND<5
Bromodichloromethane:	ND<5	ND<5
1,2-Dichloropropane:	ND<5	ND<5
c-1-2-Dichloroethene:	ND<5	ND<5
c-1-3-Dichloropropene:	ND<5	ND<5
Trichloroethene:	ND<5	ND<5
Dibromochloromethane:	ND<5	ND<5
1,1,2-Trichloroethane:	ND<5	ND<5
t-1,3-Dichloropropene	ND<5	ND<5
Bromoform:	ND<10	ND<10
Tetrachloroethene:	8300	12000
1,1,2,2-Tetracl-ethane:	ND<5	ND<5
Chlorobenzene:	ND<5	ND<5
1,3-Dichlorobenzene:	ND<5	ND<5
1,4-Dichlorobenzene:	ND<5	ND<5
1,2-Dichlorobenzene:	ND<5	ND<5
Concentration:	ug/L	ug/L



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C E R T I F I C A T E O F A N A L Y S I S

JOB NO: 94-626
CLIENT: AUGEAS CORP.
PROJECT NAME: YOUNG'S CLEANERS

DATE SAMPLED: 11/03/94
DATE EXTRACTED: 11/10/94
DATE ANALYZED: 11/10/94

HALOGENATED VOLATILE ORGANICS BY EPA SW-846 METHODS 5030/8010

RESULT OF ANALYSIS

Laboratory Number	94-626-15	94-626-16
Client ID:	D-4	D-5
Matrix:	Water	Water
Analyte	Result	Result
Chloromethane:	ND<10	ND<10
Bromomethane:	ND<10	ND<10
Vinyl Chloride:	ND<10	ND<10
Chloroethane:	ND<10	ND<10
Trichlorofluoromethane:	ND<10	ND<10
1,1-Dichloroethene:	ND<5	ND<5
Dichloromethane:	ND<10	ND<10
1,1-Dichloroethane:	ND<5	ND<5
t-1,2-Dichloroethene:	ND<5	ND<5
Chloroform:	ND<5	ND<5
1,2-Dichloroethane:	ND<5	ND<5
1,1,1-Trichloroethane:	ND<5	ND<5
Carbon tetrachloride:	ND<5	ND<5
Bromodichloromethane:	ND<5	ND<5
1,2-Dichloropropane:	ND<5	ND<5
c-1-2-Dichloroethene:	ND<5	ND<5
c-1-3-Dichloropropene:	ND<5	ND<5
Trichloroethene:	ND<5	ND<5
Dibromochloromethane:	ND<5	ND<5
1,1,2-Trichloroethane:	ND<5	ND<5
t-1,3-Dichloropropene:	ND<5	ND<5
Bromoform:	ND<10	ND<10
Tetrachloroethene:	10000	11000
1,1,2,2-Tetracl-ethane:	ND<5	ND<5
Chlorobenzene:	ND<5	ND<5
1,3-Dichlorobenzene:	ND<5	ND<5
1,4-Dichlorobenzene:	ND<5	ND<5
1,2-Dichlorobenzene:	ND<5	ND<5
Concentration:	ug/L	ug/L



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C E R T I F I C A T E O F A N A L Y S I S

JOB NO: 94-626
CLIENT: AUGEAS CORP.
PROJECT NAME: YOUNG'S CLEANERS

DATE SAMPLED: 11/03/94
DATE EXTRACTED: 11/10/94
DATE ANALYZED: 11/10/94

HALOGENATED VOLATILE ORGANICS BY EPA SW-846 METHODS 5030/8010

RESULT OF ANALYSIS

Laboratory Number	94-626-17	94-626-18
Client ID:	D-6	D-7
Matrix	Water	Water
Analyte	Result	Result
Chloromethane:	ND<10	ND<10
Bromomethane:	ND<10	ND<10
Vinyl Chloride:	ND<10	ND<10
Chloroethane:	ND<10	ND<10
Trichlorofluoromethane:	ND<10	ND<10
1,1-Dichloroethene:	ND<5	ND<5
Dichloromethane:	ND<10	ND<10
1,1-Dichloroethane:	ND<5	ND<5
t-1,2-Dichloroethene:	ND<5	ND<5
Chloroform:	ND<5	ND<5
1,2-Dichloroethane:	ND<5	ND<5
1,1,1-Trichloroethane:	ND<5	ND<5
Carbon tetrachloride:	ND<5	ND<5
Bromodichloromethane:	ND<5	ND<5
1,2-Dichloropropane:	ND<5	ND<5
c-1-2-Dichloroethene:	ND<5	ND<5
c-1-3-Dichloropropene:	ND<5	ND<5
Trichloroethene:	ND<5	ND<5
Dibromochloromethane:	ND<5	ND<5
1,1,2-Trichloroethane:	ND<5	ND<5
t-1,3-Dichloropropene:	ND<5	ND<5
Bromoform:	ND<10	ND<10
Tetrachloroethene:	13000	9200
1,1,2,2-Tetracl-ethane:	ND<5	ND<5
Chlorobenzene:	ND<5	ND<5
1,3-Dichlorobenzene:	ND<5	ND<5
1,4-Dichlorobenzene:	ND<5	ND<5
1,2-Dichlorobenzene:	ND<5	ND<5
Concentration:	ug/L	ug/L



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C E R T I F I C A T E O F A N A L Y S I S

JOB NO: 94-626
CLIENT: AUGÉAS CORP.
PROJECT NAME: YOUNG'S CLEANERS

DATE SAMPLED: 11/03/94
DATE EXTRACTED: 11/08/94
DATE ANALYZED: 11/08/94

HALOGENATED VOLATILE ORGANICS BY EPA SW-846 METHODS 5030/8010
QUALITY ASSURANCE AND CONTROL DATA-WATER

Compound:	Method Blank	RL (ug/L)	Spike Recovery (%)	Limits (%)	RPD (%)
Chloromethane:	ND<10	10			
Bromomethane:	ND<10	10			
Vinyl Chloride:	ND<10	10			
Chloroethane:	ND<10	10			
Trichlorofluoromethane:	ND<10	10			
1,1-Dichloroethene:	ND<5	5			
1,1-Dichloroethane:	ND<10	10			
t-1,2-Dichloroethene:	ND<5	5			
Chloroform:	ND<5	5			
1,2-Dichloroethane:	ND<5	5			
1,1,1-Trichloroethane:	ND<5	5			
Carbon tetrachloride:	ND<5	5			
Bromodichloromethane:	ND<5	5			
1,2-Dichloropropane:	ND<5	5			
c-1-2-Dichloroethene:	ND<5	5			
c-1-3-Dichloropropene:	ND<5	5			
Trichloroethene:	ND<5	5	122/128	75-130	5%
Dibromochloromethane:	ND<5	5			
1,1,2-Trichloroethane:	ND<5	5			
t-1,3-Dichloropropene:	ND<5	5			
Bromoform:	ND<10	10			
Tetrachloroethene:	ND<5	5			
1,1,2,2-Tetracl-ethane:	ND<5	5			
Chlorobenzene:	ND<5	5	117/119	75-120	1%
1,3-Dichlorobenzene:	ND<5	5			
1,4-Dichlorobenzene:	ND<5	5			
1,2-Dichlorobenzene:	ND<5	5			

Reviewed and Approved


John Murphy
Laboratory Director

Page 10 of 10



AUGEAS CORPORATION
 780 PURISSIMA
 HALF MOON BAY, CALIFORNIA 94019
 (415) 726-7700
 (415) 726-1217 (FAX)

Chain of Custody

Page 1 of 3

94626

11-10-94 MED 19:08

PLEASE PRINT IN PEN

Client <u>R. Gilcrease</u>	Contact <u>Charles Connors</u>	Phone # <u>(415) 726-7700</u>	FAX # <u>(415) 726-7217</u>
Address <u>Youngs Clearing</u>	City <u>Youngs</u>	State <u>OR</u>	Zip <u>97138</u>
Project Name/Number <u>Youngs Clearing</u>	Project MGR <u>C. Connors</u>		
Bill (if different than above) <u>Augeas Corp</u>			
Sampler (Print and sign) <u>Charles Connors/Charles Connors</u>		Due Date	Auth. Init.
		Circle for RUSH	Copies To:

Sample Description	Date/Time Coll'd	# of Matrix Containers	Pres.	Fit. y/n	Subject to Availability Analysis	Remarks	Lab ID #
B-5, 6-6.5'	11-3-94 11-3-94 11:37	S 1			EPA 8010	SEE COMMENT P. 2/2	94626-01
B-5, 10.5'-11'	11-3-94 11-3-94 11:49	S 1			EPA 8010		94626-02
B-5, 15.5'-16'	11-3-94 11-3-94 12:17	S 1			EPA 8010		94626-03
B-5, 20.5'-21'	11-3-94 11-3-94 12:19	S 1			EPA 8010		94626-04
B-5, 25.5'-26'	11-3-94 11-3-94 12:31	S 1			EPA 8010		94626-05
B-6, 10.5'-11'	11-3-94 11-3-94 13:35	S 1			EPA 8010		94626-06
B-6, 15-15.5'	11-3-94 11-3-94 13:42	S 1			EPA 8010		94626-07
B-6, 20.5'-21'	11-3-94 11-3-94 13:53	S 1			EPA 8010		94626-08

Relinquished By	Date/Time	Received By	Relinquished By	Date/Time	Received By
<u>Charles Connors</u>	11-3-94 11-3-94 18:42	<u>[Signature]</u>			
		<u>11-3-94 18:42</u>			

OR LAB USE ONLY

Shipping Method	Shipping #	Received By	Date/Time	Condition (See Remarks)
		<u>[Signature]</u>	<u>11-3-94 18:42</u>	Cold <input checked="" type="checkbox"/> Sealed <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/>

REMARKS

- * Matrix:
- DW - Drinking Water
- WW - Wastewater
- GW - Groundwater
- SW - Surface Water
- IM - Impinger
- F - Filter
- FP - Free Product
- AG - Air/Gas
- SL - Sludge/Soil/Solid
- OT - Other

P-11

AUGUS CORPORATION
 780 PURISSIMA
 HALF MOON BAY, CALIFORNIA 94019
 (415) 726-7700
 (415) 726-1217 (FAX)



P. 12

• PLEASE PRINT IN PEN

Client <u>R. Wilcrease</u>	Contact <u>Charles Conway</u>	Phone # <u>(415) 726-7700</u>	FAX # <u>(415) 726-1217</u>
Address _____ City _____ State _____ Zip _____			
Project Name/Number <u>Yungas Cleaners</u>		Project MGR <u>C. Conway</u>	
Bill (If different than above) <u>Douglas Corp.</u>	Address _____		
Sampler (Print and sign) <u>Charles Conway</u>	Due Date _____	Circle for RUSH* _____	Copies To: _____ Auth. Init. _____

Sample Description	Date/Time Col'd	# of Matrix Containers	Pres.	Filt. y/n	* Subject to Availability Analysis	Remarks	Lab ID #
B-6 25.5' - 26'	11-3-94 15:35	S 1			EPA 8010		94669
B-5	11-3-94 14:30	W 2	y	n	EPA 8010 - water	grab sample	94669
B-6	11-3-94 15:31	W 2	y	n	EPA 8010 - water	grab sample	94669
					see comment below ↓		
					Hold until "rush" status is cleared with client will call.		

Relinquished By	Date/Time	Received By	Relinquished By	Date/Time	Received By
<u>Charles Conway</u>	11-3-94 18:42	<u>[Signature]</u>			
		<u>[Signature]</u>			

Shipping Method	Shipping #	Received By <u>[Signature]</u>	Date/Time <u>11-3-94</u> <u>18:42</u>	Condition (See Remarks)	* Matrix			
				<table style="width: 100%; border: none;"> <tr> <td style="border: 1px solid black; width: 33%;">Cold <input checked="" type="checkbox"/></td> <td style="border: 1px solid black; width: 33%;">Sealed <input type="checkbox"/></td> <td style="border: 1px solid black; width: 33%;">Intact <input type="checkbox"/></td> </tr> </table>	Cold <input checked="" type="checkbox"/>	Sealed <input type="checkbox"/>	Intact <input type="checkbox"/>	<ul style="list-style-type: none"> DW - Drinking Water WW - Wastewater GW - Groundwater SW - Surface Water IM - Impinger FI - Filter FP - Free Product AG - Air/Gas SL - Sludge/Soil/Solid
Cold <input checked="" type="checkbox"/>	Sealed <input type="checkbox"/>	Intact <input type="checkbox"/>						
REMARKS _____								

11-10-94 WED 19:09 OR LAB USE ONLY



AUSTIN LABORATORY
 780 PURISSIMA
 HALF MOON BAY, CALIFORNIA 94019
 (415) 726-7700
 (415) 726-1217 (FAX)

PLEASE PRINT IN PEN

Client R. Gilcrease		Contact Charles Conway	Phone # (415) 726-7700	FAX # (415) 726-1217
Address		City	State	Zip
Project Name/Number Youngs Clean-up			Project MGR	
Bill (if different than above) Augus Corp.		Address		
Sampler (Print and sign) C. Conway / Charles Conway		Due Date	Circle for RUSH*	Copies To:
				Auth. Init.

Sample Description	Date/Time Coll'd	*Matrix	# of Containers	Pres.	Fit. y/n	* Subject to Availability Analysis	Remarks	Lab ID #
D-1	11-3-94 15:25	W	2	Y	NO	See Below, drum sample ↓		9466-1
D-2	11-3-94 15:27	W	2	Y	NO			9466-2
D-3	11-3-94 15:31	W	2	Y	NO			9466-3
D-4	11-3-94 15:35	W	2	Y	NO			9466-4
D-5	11-3-94 15:39	W	2	Y	NO			9466-5
D-6	11-3-94 15:43	W	2	Y	NO			9466-6
D-7	11-3-94 15:50	W	2	Y	NO			9466-7

NOTE: Composite D1 → D-7 into one and do EPA 8010

Relinquished By	Date/Time	Received By	Date/Time	Relinquished By	Date/Time	Received By
Charles Conway	11-3-94 18:42	[Signature]	11-3-94 18:42	[Signature]		

Shipping Method	Shipping #	Received By	Date/Time	Condition (See Remarks)		
		[Signature]	11-3-94 18:42	Cold	Sealed	Intact
REMARKS						

- *Matrix:
- DW - Drinking Water
- WW - Wastewater
- GW - Groundwater
- SW - Surface Water
- IM - Impinger
- FI - Filter
- FP - Free Product
- A/G - Air/Gas
- SL - Sludge/Soil/Solid
- OT - Other

11-10-94 WED 19:10

FOR LAB USE ONLY



North State Environmental
Chemical Waste Disposal · Trucking · Consulting

C E R T I F I C A T E O F A N A L Y S I S

JOB NO: 94-634 DATE SAMPLED: 11/08/94
CLIENT: AUGEAS CORP. DATE EXTRACTED: 11/15/94
PROJECT NAME: YOUNG'S CLEANERS DATE ANALYZED: 11/15/94

HALOGENATED VOLATILE ORGANICS BY EPA SW-846 METHODS 5030/8010

RESULT OF ANALYSIS

Laboratory Number	94-634-01	94-634-02	94-634-03
Client ID:	AMW-2	D-4	Trip Blank
Matrix:	Water	Water	Water
Analyte	Result	Result	Result
Chloromethane:	ND<1.0	ND<1.0	ND<1.0
Bromomethane:	ND<1.0	ND<1.0	ND<1.0
Vinyl Chloride:	ND<1.0	ND<1.0	ND<1.0
Chloroethane:	ND<1.0	ND<1.0	ND<1.0
Trichlorofluoromethane:	ND<1.0	ND<1.0	ND<0.5
1,1-Dichloroethene:	ND<0.5	ND<0.5	ND<0.5
Dichloromethane:	ND<1.0	ND<1.0	ND<1.0
1,1-Dichloroethane:	ND<0.5	ND<0.5	ND<0.5
t-1,2-Dichloroethene:	ND<0.5	ND<0.5	ND<0.5
Chloroform:	ND<0.5	ND<0.5	ND<0.5
1,2-Dichloroethane:	ND<0.5	ND<0.5	ND<0.5
1,1,1-Trichloroethane:	ND<0.5	ND<0.5	ND<0.5
Carbon tetrachloride:	ND<0.5	ND<0.5	ND<0.5
Bromodichloromethane:	ND<0.5	ND<0.5	ND<0.5
1,2-Dichloropropane:	ND<0.5	ND<0.5	ND<0.5
c-1-2-Dichloroethene:	ND<0.5	ND<0.5	ND<0.5
c-1-3-Dichloropropene:	ND<0.5	ND<0.5	ND<0.5
Trichloroethene:	ND<0.5	ND<0.5	ND<0.5
Dibromochloromethane:	ND<0.5	ND<0.5	ND<0.5
1,1,2-Trichloroethane:	ND<0.5	ND<0.5	ND<0.5
t-1,3-Dichloropropene	ND<0.5	ND<0.5	ND<0.5
Bromoform:	ND<1.0	ND<1.0	ND<1.0
Tetrachloroethene:	35000	17000	ND<0.5
1,1,2,2-Tetracl-ethane:	ND<0.5	ND<0.5	ND<0.5
Chlorobenzene:	ND<0.5	ND<0.5	ND<0.5
1,3-Dichlorobenzene:	ND<0.5	ND<0.5	ND<0.5
1,4-Dichlorobenzene:	ND<0.5	ND<0.5	ND<0.5
1,2-Dichlorobenzene:	ND<0.5	ND<0.5	ND<0.5
Concentration:	ug/L	ug/L	ug/L



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C E R T I F I C A T E O F A N A L Y S I S

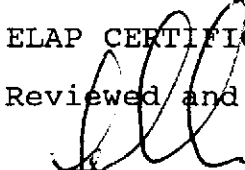
JOB NO: 94-634 DATE SAMPLED: 11/08/94
CLIENT: AUGEAS CORP. DATE EXTRACTED: 11/15/94
PROJECT NAME: YOUNG'S CLEANER DATE ANALYZED: 11/15/94

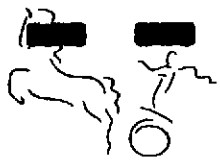
HALOGENATED VOLATILE ORGANICS BY EPA SW-846 METHODS 5030/8010
QUALITY ASSURANCE AND CONTROL DATA-WATER

Compound:	Method		Spike Recovery (%)	Limits (%)	RPD (%)
	Blank	RL (ug/L)			
Chloromethane:	ND<1.0	1.0			
Bromomethane:	ND<1.0	1.0			
Vinyl Chloride:	ND<1.0	1.0			
Chloroethane:	ND<1.0	1.0			
Trichlorofluoromethane:	ND<1.0	1.0			
1,1-Dichloroethene:	ND<0.5	0.5			
Dichloromethane:	ND<1.0	1.0			
1,1-Dichloroethane:	ND<0.5	0.5			
t-1,2-Dichloroethene:	ND<0.5	0.5			
Chloroform:	ND<0.5	0.5			
1,2-Dichloroethane:	ND<0.5	0.5			
1,1,1-Trichloroethane:	ND<0.5	0.5			
Carbon tetrachloride:	ND<0.5	0.5			
Bromodichloromethane:	ND<0.5	0.5			
1,2-Dichloropropane:	ND<0.5	0.5			
c-1-2-Dichloroethene:	ND<0.5	0.5			
c-1-3-Dichloropropene:	ND<0.5	0.5			
Trichloroethene:	ND<0.5	0.5	97/99	75-125	2%
Dibromochloromethane:	ND<0.5	0.5			
1,1,2-Trichloroethane:	ND<0.5	0.5			
t-1,3-Dichloropropene:	ND<0.5	0.5			
Bromoform:	ND<1.0	1.0			
Tetrachloroethene:	ND<0.5	0.5			
1,1,2,2-Tetracl-ethane:	ND<0.5	0.5			
Chlorobenzene:	ND<0.5	0.5	112/102	75-125	9%
1,3-Dichlorobenzene:	ND<0.5	0.5			
1,4-Dichlorobenzene:	ND<0.5	0.5			
1,2-Dichlorobenzene:	ND<0.5	0.5			

ELAP CERTIFICATION # 1753

Reviewed and Approved


John Murphy
Laboratory Director



RUGER CORPORATION
780 PURISSIMA
HALF MOON BAY, CALIFORNIA 94019
(415) 726-7700
(415) 726-1217 (FAX)

Chain of Custody

Page 1 of 1

94-634

• PLEASE PRINT IN PEN

Client <u>Gilcrease</u>	Contact	Phone # () ()	FAX # () ()
Address	City	State	Zip
Project Name/Number <u>YONG'S CLEANERS 3 10700 MACARTHUR BLVD.</u>	Project MGR <u>C. CONWAY</u>		
Bill (if different than above)	Address		
Sampler (Print and sign) <u>W. SCHRAMER</u>	Due Date	Circle for RUSH	Copies To: Auth. Init.

Sample Description	Date/Time Coll'd	*Matrix	# of Containers	Pres.	Filt. y/n	* Subject to Availability Analysis	Remarks	Lab ID #
AMW-2	11-8-94 4:00P	W	2	HCL		EPA 8010		94-634-01
D-4	11-8-94 4:00P	W	2	HCL		EPA 8010		94-634-02
TRIP BLANK	11-8-94 10:20A	W	2	HCL		EPA 8010		94-634-03

Relinquished By	Date/Time	Received By	Relinquished By	Date/Time	Received By
<u>W. Schramer</u>	11-9-94 10:30AM	<u>[Signature]</u>			

FOR LAB USE ONLY

Shipping Method	Shipping #	Received By	Date/Time	Condition (See Remarks)
		<u>[Signature]</u>	11-9-94 10:30AM	Cold <input checked="" type="checkbox"/> Sealed <input type="checkbox"/> Intact <input type="checkbox"/>
REMARKS				

- * Matrix:
- DW - Drinking Water
 - WW - Wastewater
 - GW - Groundwater
 - SW - Surface Water
 - IM - Impinger
 - FI - Filter
 - FP - Free Product
 - A/G - Air/Gas
 - SL - Sludge/Soil/Solid
 - OT - Other



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C E R T I F I C A T E O F A N A L Y S I S

JOB NO: 94-654 DATE SAMPLED: 11/18/94
 CLIENT: AUGEAS CORP. DATE EXTRACTED: 11/21/94
 PROJECT NAME: YOUNG'S CLEANERS DATE ANALYZED: 11/21/94

HALOGENATED VOLATILE ORGANICS BY EPA SW-846 METHODS 5030/8010

RESULT OF ANALYSIS

Laboratory Number	94-654-01	94-654-02
Client ID:	AMW-3	AMW-3
	5.5-6'	10-10.5'
Matrix:	Soil	Soil

Analyte	Result	Result
Chloromethane:	ND<10	ND<10
Bromomethane:	ND<10	ND<10
Vinyl Chloride:	ND<10	ND<10
Chloroethane:	ND<10	ND<10
Trichlorofluoromethane:	ND<10	ND<10
1,1-Dichloroethene:	ND<5	ND<5
Dichloromethane:	ND<10	ND<10
1,1-Dichloroethane:	ND<5	ND<5
t-1,2-Dichloroethene:	ND<5	ND<5
Chloroform:	ND<5	ND<5
1,2-Dichloroethane:	ND<5	ND<5
1,1,1-Trichloroethane:	ND<5	ND<5
Carbon tetrachloride:	ND<5	ND<5
Bromodichloromethane:	ND<5	ND<5
1,2-Dichloropropane:	ND<5	ND<5
c-1-2-Dichloroethene:	ND<5	ND<5
c-1-3-Dichloropropene:	ND<5	ND<5
Trichloroethene:	ND<5	ND<5
Dibromochloromethane:	ND<5	ND<5
1,1,2-Trichloroethane:	ND<5	ND<5
t-1,3-Dichloropropene:	ND<5	ND<5
Bromoform:	ND<10	ND<10
Tetrachloroethene:	6	390
1,1,2,2-Tetracl-ethane:	ND<5	ND<5
Chlorobenzene:	ND<5	ND<5
1,3-Dichlorobenzene:	ND<5	ND<5
1,4-Dichlorobenzene:	ND<5	ND<5
1,2-Dichlorobenzene:	ND<5	ND<5

Concentration: ug/Kg ug/Kg



North State Environmental
Chemical Waste Disposal · Trucking · Consulting

C E R T I F I C A T E O F A N A L Y S I S

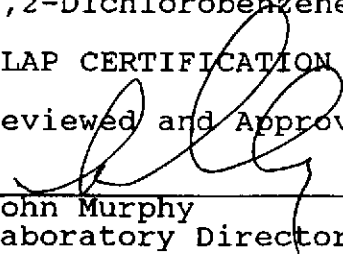
JOB NO: 94-654 DATE SAMPLED: 11/18/94
 CLIENT: AUGEAS CORP. DATE EXTRACTED: 11/21/94
 PROJECT NAME: YOUNG'S CLEANERS DATE ANALYZED: 11/21/94

**HALOGENATED VOLATILE ORGANICS BY EPA SW-846 METHODS 5030/8010
 QUALITY ASSURANCE AND CONTROL DATA-SOIL**

Compound:	Method Blank (ug/Kg)	RL (ug/Kg)	Spike Recovery (%)	Limits (%)	RPD (%)
Chloromethane:	ND<10	10			
Bromomethane:	ND<10	10			
Vinyl Chloride:	ND<10	10			
Chloroethane:	ND<10	10			
Trichlorofluoromethane:	ND<10	10			
1,1-Dichloroethene:	ND<5	5			
Dichloromethane:	ND<10	10			
1,1-Dichloroethane:	ND<5	5	88/89	75/125	<1
t-1,2-Dichloroethene:	ND<5	5			
Chloroform:	ND<5	5			
1,2-Dichloroethane:	ND<5	5			
1,1,1-Trichloroethane:	ND<5	5			
Carbon tetrachloride:	ND<5	5			
Bromodichloromethane:	ND<5	5			
1,2-Dichloropropane:	ND<5	5			
c-1-2-Dichloroethene:	ND<5	5			
c-1-3-Dichloropropene:	ND<5	5			
Trichloroethene:	ND<5	5	88/101	75/125	14
Dibromochloromethane:	ND<5	5			
1,1,2-Trichloroethane:	ND<5	5			
t-1,3-Dichloropropene:	ND<5	5			
Bromoform:	ND<10	10			
Tetrachloroethene:	ND<5	5			
1,1,2,2-Tetracl-ethane:	ND<5	5			
Chlorobenzene:	ND<5	5	108/120	75/125	11
1,3-Dichlorobenzene:	ND<5	5			
1,4-Dichlorobenzene:	ND<5	5			
1,2-Dichlorobenzene:	ND<5	5			

ELAP CERTIFICATION # 1753

Reviewed and Approved


 John Murphy
 Laboratory Director



North State Environmental
Chemical Waste Disposal · Trucking · Consulting

C E R T I F I C A T E O F A N A L Y S I S

JOB NO: 94-654 DATE SAMPLED: 11/18/94
CLIENT: AUGEAS CORP. DATE EXTRACTED: 11/21/94
PROJECT NAME: YOUNGS CLEANERS DATE ANALYZED: 11/21/94

HALOGENATED VOLATILE ORGANICS BY EPA SW-846 METHODS 5030/8010

RESULT OF ANALYSIS

Laboratory Number	94-654-03	94-654-04
Client ID:	AMW-3	AMW-3 <i>AMW-3</i>
	15.5-16'	20.5-21'
Matrix:	Soil	Soil
Analyte	Result	Result
Chloromethane:	ND<10	ND<10
Bromomethane:	ND<10	ND<10
Vinyl Chloride:	ND<10	ND<10
Chloroethane:	ND<10	ND<10
Trichlorofluoromethane:	ND<10	ND<10
1,1-Dichloroethene:	ND<5	ND<5
Dichloromethane:	ND<10	ND<10
1,1-Dichloroethane:	ND<5	ND<5
t-1,2-Dichloroethene:	ND<5	ND<5
Chloroform:	ND<5	ND<5
1,2-Dichloroethane:	ND<5	ND<5
1,1,1-Trichloroethane:	ND<5	ND<5
Carbon tetrachloride:	ND<5	ND<5
Bromodichloromethane:	ND<5	ND<5
1,2-Dichloropropane:	ND<5	ND<5
c-1-2-Dichloroethene:	ND<5	ND<5
c-1-3-Dichloropropene:	ND<5	ND<5
Trichloroethene:	ND<5	ND<5
Dibromochloromethane:	ND<5	ND<5
1,1,2-Trichloroethane:	ND<5	ND<5
t-1,3-Dichloropropene	ND<5	ND<5
Bromoform:	ND<10	ND<10
Tetrachloroethene:	59	820
1,1,2,2-Tetracl-ethane:	ND<5	ND<5
Chlorobenzene:	ND<5	ND<5
1,3-Dichlorobenzene:	ND<5	ND<5
1,4-Dichlorobenzene:	ND<5	ND<5
1,2-Dichlorobenzene:	ND<5	ND<5
Concentration:	ug/Kg	ug/Kg



North State Environmental

Chemical Waste Disposal · Trucking · Consulting

C E R T I F I C A T E O F A N A L Y S I S

JOB NO: 94-654	DATE SAMPLED: 11/18/94
CLIENT: AUGEAS CORP.	DATE EXTRACTED: 11/21/94
PROJECT NAME: YOUNG'S CLEANERS	DATE ANALYZED: 11/21/94

HALOGENATED VOLATILE ORGANICS BY EPA SW-846 METHODS 5030/8010

RESULT OF ANALYSIS

Laboratory Number	94-654-05	94-654-06
Client ID:	AMW-3 25.5-26'	SP-6 29.5-30'
Matrix:	Soil	Soil

Analyte	Result	Result
Chloromethane:	ND<10	ND<10
Bromomethane:	ND<10	ND<10
Vinyl Chloride:	ND<10	ND<10
Chloroethane:	ND<10	ND<10
Trichlorofluoromethane:	ND<10	ND<10
1,1-Dichloroethene:	ND<5	ND<5
Dichloromethane:	ND<10	ND<10
1,1-Dichloroethane:	ND<5	ND<5
t-1,2-Dichloroethene:	ND<5	ND<5
Chloroform:	ND<5	ND<5
1,2-Dichloroethane:	ND<5	ND<5
1,1,1-Trichloroethane:	ND<5	ND<5
Carbon tetrachloride:	ND<5	ND<5
Bromodichloromethane:	ND<5	ND<5
1,2-Dichloropropane:	ND<5	ND<5
c-1-2-Dichloroethene:	ND<5	ND<5
c-1-3-Dichloropropene:	ND<5	ND<5
Trichloroethene:	ND<5	ND<5
Dibromochloromethane:	ND<5	ND<5
1,1,2-Trichloroethane:	ND<5	ND<5
t-1,3-Dichloropropene:	ND<5	ND<5
Bromoform:	ND<10	ND<10
Tetrachloroethene:	1400	210
1,1,2,2-Tetracl-ethane:	ND<5	ND<5
Chlorobenzene:	ND<5	ND<5
1,3-Dichlorobenzene:	ND<5	ND<5
1,4-Dichlorobenzene:	ND<5	ND<5
1,2-Dichlorobenzene:	ND<5	ND<5

Concentration:	ug/Kg	ug/Kg
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AUGER CORPORATION
 780 PURISSIMA
 HALF MOON BAY, CALIFORNIA 94019
 (415) 726-7700
 (415) 726-1217 (FAX)

94654

• PLEASE PRINT IN PEN

Client <u>Richard Gilcrease</u>	Contact <u>Charles Conway</u>	Phone # <u>(415) 726-7700</u>	FAX # <u>(415) 726-1217</u>
Address <u>5201 Sacramento Ave.</u>	City <u>Pittsburg</u>	State <u>CA</u>	Zip <u>94604</u>
Project Name/Number <u>Youngs Cleaners</u>			Project MGR <u>Charles Conway</u>
Bill (if different than above) <u>AUGER CORP.</u>	Address		
Sampler (Print and sign) <u>Charles Conway</u>	<u>Charles Conway</u>	Due Date	Circle for RUSH*
		Copies To:	Auth. Init.

Sample Description	Date/Time Coll'd	*Matrix	# of Containers	Pres.	Filt. y/n	* Subject to Availability Analysis	Remarks	Lab ID #
AMW-3, 5.5'-6'	11-18-99 09:50	S	1	no	no	EPA 8010	(RUSH)	94654-01
AMW-3, 10'-10.5'	11-18-99 10:03	S	1	no	no	EPA 8010		-02
AMW-3, 15.5'-16'	11-18-99 10:13	S	1	no	no	EPA 8010		-03
AMW-3, 20.5'-21'	11-18-99 10:32	S	1	no	no	EPA 8010		-04
AMW-3, 25.5'-26'	11-18-99 10:42	S	1	no	no	EPA 8010		-05
AMW-3, 29.5'-30'	11-18-99 10:55	S	1	no	no	EPA 8010		-06

Relinquished By	Date/Time	Received By	Relinquished By	Date/Time	Received By
<u>Charles Conway</u>	11-18-99 10:50	<u>[Signature]</u>			
		<u>NSE</u>			

FOR LAB USE ONLY

Shipping Method	Shipping #	Received By	Date/Time	Condition (See Remarks)		
		<u>[Signature]</u>	11-18-99 16:50	Cold	Sealed	Intact
REMARKS _____						

- * Matrix:
- DW - Drinking Water
 - WW - Wastewater
 - GW - Groundwater
 - SW - Surface Water
 - IM - Impinger
 - FI - Filter
 - FP - Free Product
 - A/G - Air/Gas
 - SL - Sludge/Soil/Solid
 - OT - Other

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Attn: John Murphy
 North State Environmental
 P.O. Box 5624
 So. San Francisco, CA 94083

Date Received: 11/30/94
 Date Analyzed: 11/30/94
 Date Reported: 12/01/94
 Job #: 76452

Project: Young's Cleaners
 Matrix: Soil

Purgeable Halocarbons
 EPA Method 8010
 µg/Kg

Lab I.D.: 76452-1

Client I.D.: B-7, 10.5'-11'

	Result	MDL
Bromomethane & Chloroethane	ND<20	20
Vinyl Chloride & Chloromethane	ND<20	20
Freon 113	ND<12	12
1,1-Dichloroethene	ND<12	12
Methylene Chloride	ND<104	104
Trans-1,2-Dichloroethene	ND<6	6
1,1-Dichloroethane	ND<8	8
Cis-1,2-Dichloroethene	ND<5	5
Chloroform	ND<3	3
1,1,1-Trichloroethane	ND<12	12
Carbon Tetrachloride	ND<6	6
1,2-Dichloroethane	ND<4	4
Trichloroethene	ND<8	8
1,2-Dichloropropene	ND<7	7
2-Chloro-vinyl ether	ND<5	5
Bromodichloromethane	ND<8	8
T-1,3-Dichloropropene	ND<5	5
Cis-1,3-Dichloropropene	ND<6	6
1,1,2-Trichloroethane	ND<12	12
Tetrachloroethene	38	10
Dibromochloromethane	ND<8	8
Chlorobenzene	ND<10	10
Bromoform	ND<4	4
1,1,2,2-Tetrachloroethane	ND<10	10
1,3-Dichlorobenzene	ND<6	6
1,4-Dichlorobenzene	ND<6	6
1,2-Dichlorobenzene	ND<6	6

MDL: Method Detection Limit


 Jaime Chow
 Laboratory Director

Page 1 of 2

JC/dwo


Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Attn: John Murphy
 North State Environmental
 P.O. Box 5624
 So. San Francisco, CA 94083

Date Received: 11/30/94
 Date Analyzed: 11/30/94
 Date Reported: 12/01/94
 Job #: 76452

Project: Young's Cleaners
 Matrix: Soil

Purgeable Halocarbons
 EPA Method 8010
 µg/Kg

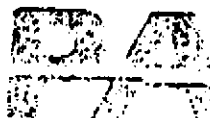
Lab I.D.: 76452-2
 Client I.D.: B-7, 15.5'-16'

	<u>Result</u>	<u>MDL</u>
Bromomethane & Chloroethane	ND<20	20
Vinyl Chloride & Chloromethane	ND<20	20
Freon 113	ND<12	12
1,1-Dichloroethene	ND<12	12
Methylene Chloride	ND<104	104
Trans-1,2-Dichloroethene	ND<6	6
1,1-Dichloroethane	ND<8	8
Cis-1,2-Dichloroethene	ND<5	5
Chloroform	ND<3	3
1,1,1-Trichloroethane	ND<12	12
Carbon Tetrachloride	ND<6	6
1,2-Dichloroethane	ND<4	4
Trichloroethene	ND<8	8
1,2-Dichloropropene	ND<7	7
2-Chloro-vinyl ether	ND<5	5
Bromodichloromethane	ND<8	8
T-1,3-Dichloropropene	ND<5	5
Cis-1,3-Dichloropropene	ND<6	6
1,1,2-Trichloroethane	ND<12	12
Tetrachloroethene	60	10
Dibromochloromethane	ND<8	8
Chlorobenzene	ND<10	10
Bromoform	ND<4	4
1,1,2,2-Tetrachloroethane	ND<10	10
1,3-Dichlorobenzene	ND<6	6
1,4-Dichlorobenzene	ND<6	6
1,2-Dichlorobenzene	ND<6	6

MDL: Method Detection Limit


 Jaime Chow
 Laboratory Director

JC/dwc



Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Attn: John Murphy
 North State Environmental
 P.O. Box 5624
 So. San Francisco, CA 94083

Date Received: 11/30/94
 Date Analyzed: 11/30/94
 Date Reported: 12/01/94
 Job #: 76452

Project: Young's Cleaners
 Matrix: Soil

Purgeable Halocarbons
 EPA Method 8010
 µg/Kg

Lab I.D.: 76452-3
Client I.D.: B-7, 20.5'-21'

	Result	MDL
Bromomethane & Chloroethane	ND<20	20
Vinyl Chloride & Chloromethane	ND<20	20
Freon 113	ND<12	12
1,1-Dichloroethene	ND<12	12
Methylene Chloride	ND<104	104
Trans-1,2-Dichloroethene	ND<6	6
1,1-Dichloroethane	ND<8	8
Cis-1,2-Dichloroethene	ND<5	5
Chloroform	ND<3	3
1,1,1-Trichloroethane	ND<12	12
Carbon Tetrachloride	ND<6	6
1,2-Dichloroethane	ND<4	4
Trichloroethene	ND<8	8
1,2-Dichloropropene	ND<7	7
2-Chloro-vinyl ether	ND<5	5
Bromodichloromethane	ND<8	8
T-1,3-Dichloropropene	ND<5	5
Cis-1,3-Dichloropropene	ND<6	6
1,1,2-Trichloroethane	ND<12	12
Tetrachloroethene	ND<10	10
Dibromochloromethane	ND<8	8
Chlorobenzene	ND<10	10
Bromoform	ND<4	4
1,1,2,2-Tetrachloroethane	ND<10	10
1,3-Dichlorobenzene	ND<6	6
1,4-Dichlorobenzene	ND<6	6
1,2-Dichlorobenzene	ND<6	6

MDL: Method Detection Limit

Jaime Chow
 Laboratory Director

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

STATE LICENSE NO. 1150

Attn: John Murphy
North State Environmental
P.O. Box 5624
So. San Francisco, CA 94083

Date Received: 11/30/94
Date Analyzed: 11/30/94
Date Reported: 12/01/94
Job #: 76452

Project: Young's Cleaners
Matrix: Soil

Purgeable Halocarbons
EPA Method 8010
µg/Kg

Lab I.D.: 76452-1

Client I.D.: B-7, 10.5'-11'

QA/QC: Matrix Spike Recovery for 1,1-Dichloroethene: 58%
Matrix Spike Recovery for Trichloroethene: 78%
Matrix Spike Recovery for Chlorobenzene: 58%

Matrix Spike Duplicate Recovery for 1,1-Dichloroethene: 66%
Matrix Spike Duplicate Recovery for Trichloroethene: 86%
Matrix Spike Duplicate Recovery for Chlorobenzene: 58%


Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Attn: John Murphy
 North State Environmental
 P.O. Box 5624
 South San Francisco, CA 94083

Date Received: 11/30/94
 Date Analyzed: 11/30/94
 Date Reported: 12/01/94
 Job #: 76452

Project: Young's Cleaners
 Matrix: Water

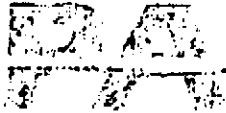
PURGEABLE HALOCARBONS
 EPA Method 601
 µg/L

Lab I.D.: 76452-5
 Client I.D.: B-7

	<u>Result</u>	<u>MDL</u>
Bromomethane & Chloroethane	ND<2.0	2.0
Vinyl Chloride & Chloromethane	ND<1.0	1.0
Freon 113	ND<1.0	1.0
1,1-Dichloroethene	ND<0.3	0.3
Methylene Chloride	ND<1.0	1.0
Trans-1,2-Dichloroethene	ND<0.2	0.2
1,1-Dichloroethane	ND<0.2	0.2
Cis-1,2-Dichloroethene	ND<0.2	0.2
Chloroform	ND<0.1	0.1
1,1,1-Trichloroethane	ND<0.2	0.2
Carbon Tetrachloride	ND<0.2	0.2
1,2-Dichloroethane	ND<0.5	0.5
Trichloroethene	ND<0.2	0.2
1,2-Dichloropropene	ND<0.4	0.4
2-Chloro-vinyl ether	ND<0.2	0.2
Bromodichloromethane	ND<0.3	0.3
T-1,3-Dichloropropene	ND<0.2	0.2
Cis-1,3-Dichloropropene	ND<0.4	0.4
1,1,2-Trichloroethane	ND<0.3	0.3
Tetrachloroethene	19	0.2
Dibromochloromethane	ND<0.4	0.4
Chlorobenzene	ND<0.3	0.3
Bromoform	ND<0.3	0.3
1,1,2,2-Tetrachloroethane	ND<0.5	0.5
1,3-Dichlorobenzene	ND<0.2	0.2
1,4-Dichlorobenzene	ND<0.2	0.2
1,2-Dichlorobenzene	ND<0.2	0.2

MDL: Method Detection Limit

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Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806

PHONE (510) 222-3002

FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Attn: John Murphy
 North State Environmental
 P.O. Box 5624
 So. San Francisco, CA 94083

Date Received: 11/30/94
 Date Analyzed: 11/30/94
 Date Reported: 12/01/94
 Job #: 76452

Project: Young's Cleaners
 Matrix: Soil

Purgeable Halocarbons
 EPA Method 8010
 µg/Kg

Lab I.D.: 76452-4

Client I.D.: B-7, 25.5'-26'

	Result	MDL
Bromomethane & Chloroethane	ND<20	20
Vinyl Chloride & Chloromethane	ND<20	20
Fraon 113	ND<12	12
1,1-Dichloroethene	ND<12	12
Methylene Chloride	ND<104	104
Trans-1,2-Dichloroethene	ND<6	6
1,1-Dichloroethane	ND<8	8
Cis-1,2-Dichloroethane	ND<5	5
Chloroform	ND<3	3
1,1,1-Trichloroethane	ND<12	12
Carbon Tetrachloride	ND<6	6
1,2-Dichloroethane	ND<4	4
Trichloroethene	ND<8	8
1,2-Dichloropropene	ND<7	7
2-Chloro-vinyl ether	ND<5	5
Bromodichloromethane	ND<8	8
T-1,3-Dichloropropene	ND<5	5
Cis-1,3-Dichloropropene	ND<6	6
1,1,2-Trichloroethane	ND<12	12
Tetrachloroethene	ND<10	10
Dibromochloromethane	ND<8	8
Chlorobenzene	ND<10	10
Bromoform	ND<4	4
1,1,2,2-Tetrachloroethane	ND<10	10
1,3-Dichlorobenzene	ND<6	6
1,4-Dichlorobenzene	ND<6	6
1,2-Dichlorobenzene	ND<6	6

MDL: Method Detection Limit


 Jaime Chow

12/01/94 15:39 510 222 3002

PRECISION LAB

011



Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94804

PHONE (510) 222-3002

FAX (510) 222-1251

STATE LICENSE NO. 1150

Attn: John Murphy
North State Environmental
P.O. Box 5624
South San Francisco, CA 94083

Date Received: 11/30/94
Date Analyzed: 11/30/94
Date Reported: 12/01/94
Job #: 76452

Project: Young's Cleaners
Matrix: Water

PURGEABLE HALOCARBONS

EPA Method 601

µg/L

Lab I.D.: 76452-5

Client I.D.: B-7

QA/QC: Matrix Spike Recovery for 1,1-Dichloroethene: 83%
Matrix Spike Recovery for Trichloroethene: 99%
Matrix Spike Recovery for Chlorobenzene: 57%

Matrix Spike Duplicate Recovery for 1,1-Dichloroethene: 85%
Matrix Spike Duplicate Recovery for Trichloroethene: 107%
Matrix Spike Duplicate Recovery for Chlorobenzene: 63%

94664

AUGEAS CORPORATION
 780 PURISSIMA
 HALF MOON BAY, CALIFORNIA 94019
 (415) 726-7700
 (415) 726-1217 (FAX)



PLEASE PRINT IN PEN

Client <i>Richard Gilcrease</i>	Contact <i>Charles Conway</i>	Phone # <i>(415) 726-7700</i>	FAX # <i>(415) 726-1217</i>
Address <i>Drake Builders Richmond, CA</i>		Zip	
Project Name/Number <i>Youngs Cleaners</i>		Project MGR <i>C. Conway</i>	
Bill (If different than above) <i>Augeas Corporation</i>			
Sampler (Print and sign) <i>Charles Conway</i>		Due Date	Auth. Init.
<i>Charles Conway</i>		<i>Charles Conway</i>	
		<input checked="" type="checkbox"/> RUSH	Copies To:

Sample Description	Date/Time Col'd	*Matrix	# of Containers	Pres.	Flt. y/n	* Subject to Availability Analysis	Remarks	Lab ID #
B-7, 10.5' - 11'	11-23-94 10:25	S	1	NO	NO	EPA 8010		94664
B-7, 15.5' - 16'	11-23-94 10:34	S	1	NO	NO	EPA 8010		94664
B-7, 20.5' - 21'	11-23-94 10:56	S	1	NO	NO	EPA 8010		94664
B-7, 25.5' - 26'	11-23-94 11:00	S	1	NO	NO	EPA 8010		94664
B-7	11-23-94 11:00	W	1	HCl	NO	EPA 8010		94664

Relinquished By	Date/Time	Received By	Relinquished By	Date/Time	Received By
<i>Charles Conway</i>	11-23-94 13:25	<i>M.D. Goldenberg</i>			

Shipping Method	Shipping #	Received By	Date/Time	Condition (See Remarks)		
				Cold	Sealed	Intact

REMARKS _____

- * Matrix:
- DW - Drinking Water
 - WW - Wastewater
 - GW - Groundwater
 - SW - Surface Water
 - IM - Impinger
 - FI - Filter
 - FP - Free Product
 - AG - Air/Gas
 - SL - Sludge/Sol/Solid
 - OT - Other

P. 03

12-1-94 WED 16:47

FOR LAB USE ONLY



North State Environmental
Chemical Waste Disposal - Trucking - Consulting

C E R T I F I C A T E O F A N A L Y S I S

JOB NO: 94-668 DATE SAMPLED: 11/28/94
 CLIENT: AUGEAS CORP. DATE EXTRACTED: 11/30/94
 PROJECT NAME: YOUNG'S CLEANERS DATE ANALYZED: 11/30/94

HALOGENATED VOLATILE ORGANICS BY EPA SW-846 METHODS 5030/8010

RESULT OF ANALYSIS

Laboratory Number	94-668-01	94-668-02
Client ID:	AMW-3	Trip Blank
Matrix:	Water	Water
Analyte	Result	Result
Chloromethane:	ND<1.0	ND<1.0
Bromomethane:	ND<1.0	ND<1.0
Vinyl Chloride:	ND<1.0	ND<1.0
Chloroethane:	ND<1.0	ND<1.0
Trichlorofluoromethane:	ND<1.0	ND<1.0
1,1-Dichloroethene:	ND<0.5	ND<0.5
Dichloromethane:	ND<1.0	ND<1.0
1,1-Dichloroethane:	ND<0.5	ND<0.5
t-1,2-Dichloroethene:	ND<0.5	ND<0.5
Chloroform:	ND<0.5	ND<0.5
1,2-Dichloroethane:	ND<0.5	ND<0.5
1,1,1-Trichloroethane:	ND<0.5	ND<0.5
Carbon tetrachloride:	ND<0.5	ND<0.5
Bromodichloromethane:	ND<0.5	ND<0.5
1,2-Dichloropropane:	ND<0.5	ND<0.5
c-1-2-Dichloroethene:	ND<0.5	ND<0.5
c-1-3-Dichloropropene:	ND<0.5	ND<0.5
Trichloroethene:	ND<0.5	ND<0.5
Dibromochloromethane:	ND<0.5	ND<0.5
1,1,2-Trichloroethane:	ND<0.5	ND<0.5
t-1,3-Dichloropropene:	ND<0.5	ND<0.5
Bromoform:	ND<1.0	ND<1.0
Tetrachloroethene:	22	ND<0.5
1,1,2,2-Tetracl-ethane:	ND<0.5	ND<0.5
Chlorobenzene:	ND<0.5	ND<0.5
1,3-Dichlorobenzene:	ND<0.5	ND<0.5
1,4-Dichlorobenzene:	ND<0.5	ND<0.5
1,2-Dichlorobenzene:	ND<0.5	ND<0.5
Concentration:	ug/L	ug/L



AUGEAS CORPORATION
 780 PURISSIMA
 HALF MOON BAY, CALIFORNIA 94019
 (415) 726-7700
 (415) 726-1217 (FAX)

9466801

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Client <u>Hilmeare</u>	Contact	Phone # ()	FAX # ()
Address	City	State	Zip
Project Name/Number <u>Youngs Cleaners</u>	Project MGR <u>C. Conway</u>		
Bill (if different than above)	Address <u>10700 MacArthur Blvd.</u>		
Sampler (Print and sign) <u>JASON BARNETT / Jason P. Barnett</u>	Due Date	<input checked="" type="checkbox"/> Circle for RUSH	Copies To: Auth. Init.

Sample Description	Date/Time Col'd	*Matrix	# of Containers	Pres.	Fill. y/n	*Subject to Availability Analysis	Remarks	Lab ID
AMW - 3	11-28-94 2:40	W	2	HCL		EPA 8010		94668
TRIP BLANK	11-28-94 2:40	W	2	HCL		EPA-8010		94668

Relinquished By	Date/Time	Received By	Relinquished By	Date/Time	Received By
<u>Jason P. Barnett</u>	11-28-94 2:40	<u>[Signature]</u>	<u>[Signature]</u>	11-28-94 4:20 AM	<u>[Signature]</u>

Shipping Method	Shipping #	Received By	Date/Time	Condition (See Remarks)
		<u>[Signature]</u>	11-28-94 4:20 PM	Cold Sealed Intact
REMARKS				

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 780 PURISSIMA
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 (415) 726-7700
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Chain of Custody

Page 1 of 1

94563

• PLEASE PRINT IN PEN

Client <u>Jay Phares Corporation</u>	Contact <u>John Jay</u>	Phone # () ()	FAX # () ()
Address <u>MacArthur Blvd.</u> City <u>Oakland</u> State <u>CA</u> Zip			
Project Name/Number <u>Young's Cleaners - Foothill Square</u>		Project MGR	
Bill (If different than above) Address			
Sampler (Print and sign) <u>F. Moss</u>	Due Date	Circle for RUSH*	Copies To: Auth. Init.

Sample Description	Date/Time Coll'd	*Matrix	# of Containers	Pres.	Fit. y/n	* Subject to Availability Analysis	Remarks	Lab ID #
AMW-2 (10 ft.)	9/30	SOIL	1			8015 - TPH as Standard Solvent 8010 - Chlorinated Solvents 8020 - BTEX		94563-01
AMW-2 (15 ft.)	9/30	"	1					94563-02
AMW-2 (20 ft.)	9/30	"	1					94563-03
AMW-2 (25 ft.)	9/30	"	1					94563-04

Relinquished By	Date/Time	Received By	Relinquished By	Date/Time	Received By
<u>F. Moss</u>	1715 hr 9/30/94	<u>Debra</u>			
		1715 9/30/94			

FOR LAB USE ONLY

Shipping Method	Shipping #	Received By	Date/Time	Condition (See Remarks)		
				Cold	Sealed	Intact
REMARKS						

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