E-Z SERVE
MANAGEMENT COMPANY

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August 04, 1993

Ms. Juliet Shin
Hazardous Materials Specialist
Alameda County Health Care Services
80 Swan Way, RM 200
Oakland, California 94621

Re: Transmittal of the Site Assessment Study
E-Z Serve #100877
525 West A Street
Hayward, CA

Dear Ms. Shin:

Attached is a Site Assessment Study prepared by E-Z Serves consultant Associated Soils Analsis. This report was prepared in accordance with the requirements set-forth by Alameda County Health Care Services and the California Regional Water Quality Control Board. The findings indicate that petroleum hydrocarbons have been detected off-site. Upon your review and approval of this report E-Z Serve will transmit a work plan for the next phase of investigation.

If you have questions or need additional information please feel free to contact myself or Bart Racca of Associated Soils Analysis.

Sincerely,

Brian Cobb, P.E.
Environmental Manager

cc: Bart Racca - Associated Soils Analysis
Eddy So - Regional Water Quality Control Board(w/encl)
Jonathan Redding - Fitzgerald, Abbott and Beardsley(w/encl)
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SITE ASSESSMENT STUDY FOR PETROLEUM CONSTITUENTS IN SOIL AND GROUNDWATER AT E-Z SERVE LOCATION #100877 525 WEST "A" STREET HAYWARD, CALIFORNIA

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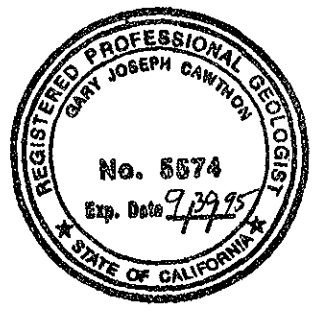

JULY 20, 1993

238-SA-LL/tp

Associated Soils Analysis

July 20, 1993
File No. 238-91

Mr. Brian Cobb
E-Z Serve Management Company
Houston, TX 77092

Project: Site investigation for petroleum constituents present in soil and groundwater at E-Z Serve Location #100877, 525 West "A" Street, Hayward, California

Dear Mr. Cobb:

In accordance with our work plan, four testhole borings were drilled and developed into groundwater monitoring wells within the vicinity of the subject site. The monitoring wells were drilled to determine the lateral extent of petroleum constituents in the soil and groundwater. The results of the field investigation and subsequent laboratory analyses are presented herein. The field investigation was conducted on June 21 & 22, 1993, with groundwater sampling on June 23 & 24, 1993.

Our field investigation and laboratory analyses were conducted in accordance with approved ASTM and EPA Standards. This report presents the results and conclusions of the investigative work performed during the site investigation.

Sincerely,
Associated Soils Analysis, Inc.

Bartalome J. Racca
President

BJR:tp

pc: Ms. Juliet Shin, Hazardous Materials Specialist, Alameda County Department of Environmental Health
Mr. Eddy So, Regional Water Quality Control Board

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238-SA-LL/tp

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ANUARY 28-29, 1992 Field Investigation

FINDINGS

The findings that follow are a result of the field investigation conducted on June 21 & 22, 1993, groundwater sampling conducted on June 23 & 24, 1993, and the subsequent laboratory analysis.

A. **Field Investigation (APPENDIX A):**

1. Four testhole borings were drilled to 30 feet below grade and developed into groundwater monitoring wells MW7 through MW10.

2. Soils encountered in the subsurface during drilling are predominantly composed of moist, medium dense clayey silts, silty clay and clays. The clay units tend to form thicker continuous units.

3. Groundwater was encountered at approximately 16 to 18 feet below the ground surface during drilling and groundwater sampling. Groundwater has risen approximately 3 feet since the March 3, 1993 groundwater monitoring event. The calculated site specific gradient is 0.0015 ft/ft to the west-southwest.

4. Petroleum odors were present in the groundwater samples collected from monitoring wells MW1-MW7, MW9 and MW10. Neither free floating product nor a petroleum sheen were observed.

5. The HNU 101 Photoionization Meter measured volatile hydrocarbons ranging between 0 to 6 ppmv in soils from the monitoring wells.

B. **Laboratory Analyses of Soil Samples (APPENDIX B):**

1. Detectable levels of petroleum constituents were measured in soil samples collected at 15 feet below grade in monitoring well MW7, and at 10 and 15 feet in monitoring wells MW9 and MW10. Benzene concentrations ranged from non-detectable to 0.13 ppm and Total Petroleum Hydrocarbons concentrations ranged from non-detectable to 9 ppm. Petroleum constituents were not detected in the soil samples collected from MW8.

2. Groundwater samples were collected for laboratory analyses from all existing and newly installed monitoring wells during this investigation. Petroleum constituents were detected in the all the water samples. Benzene levels ranged from 43 to 23,000 ppb and TPH concentrations ranged from 350 to 60,000 ppm. The highest concentrations were detected in MW2.

CONCLUSIONS

Based upon the field investigation and laboratory analyses conducted during the site assessment, we conclude:

1. Groundwater on and off the subject property has been impacted with petroleum constituents. Soils at the groundwater interface contain minimal detectable levels of the petroleum constituents. The lateral extent of petroleum constituents in groundwater remains undefined.

RECOMMENDATIONS

Based on the findings and conclusions we recommend the following:

1. Continue the quarterly groundwater monitoring program. This will further define the groundwater contamination by monitoring changes in petroleum constituent levels with fluctuating groundwater conditions. The samples should be analyzed for EPA Method 601 and one round for TPH as diesel, as requested by Alameda County, in addition to EPA Method 602 and TPH as gasoline.

2. Consider further assessment work to define the extent of soil and groundwater contamination.

3. Dispose of soil cuttings and well water as follows:

   MW7-MW10 Dispose and remediate soil cuttings from the monitoring wells on site by aeration. Aeration should be conducted in accordance with Air Pollution Control District Guidelines.

   Water - Dispose of well development and rinsate water from the monitoring wells by manifest to a hazardous waste recycling facility.

SCOPE OF WORK

The scope of work for the investigation included the following tasks:

1. Researching geological/soil maps, seismic maps, water supply maps and reports.
2. Drilling four testhole borings using a Mobile B-80 drill rig with 4.25 inch inside, 8.5 inch outside diameter hollow stem augers.
3. Developing the borings into 2-inch diameter groundwater monitoring wells.
4. Visually classifying and continuously logging substrata encountered at the testhole boring locations (**APPENDIX A**).
5. Collecting soil samples during drilling at 5-foot intervals beginning at 5 feet below the ground surface. Collecting water samples after the installation and development of the monitoring wells.
6. Field screening soil samples using a HNU 101 Photoionization Meter (**APPENDIX A**).
7. Conducting laboratory analyses of soil and water samples collected from the testhole borings and monitoring wells (**APPENDIX B**).
8. Analyzing and interpreting field data and laboratory results.
9. Surveying the monitoring wells and determining the site specific groundwater gradient and flow direction.
10. Preparing an environmental site assessment report for submittal to the oversight agencies.

The work was conducted in accordance with the California LUFT Manual Guidelines, EPA Regulations, ASTM Test Methods, and Regional Water Quality Control Board and Alameda County Department of Environmental Health requirements.

SITE DESCRIPTION

The subject property is located at 525 West "A" Street, Hayward, California (**FIGURE 1**). The site is located on the northwest corner of West "A" Street and Garden Avenue in an unsurveyed section of Township 3 South, Range 2 West, Mount Diablo Base and Meridian, City of Hayward, County of Alameda, State of California. The Assessor's Parcel Number 432-0016-026-03.

SITE HISTORY

The subject property formerly operated as a Mobile Station with one 10,000 gallon diesel and three 10,000 gallon gasoline underground fuel tanks. A discrepancy in inventory reconciliation in November 1986 revealed a fuel system leak in the products lines. Repairs were subsequently made on the product lines, correcting the leak. Neither the volume of product lost nor the duration of the leak are known. The following list of events pertains to subsequent investigations conducted to determine the extent of the fuel release:

December 1986 — Converse Environmental Consultants California (CECC) conducted a Phase I site assessment as an initial step in assessing the extent of gasoline contamination at the site. Three soil borings which were converted into monitoring wells MW1 through MW3, were drilled on the station property to a depth of 30 feet below the ground surface. Static groundwater was encountered at 10 to 15 feet below the ground surface at the time of drilling. Laboratory analyses of soil and groundwater samples collected during the investigation detected the presence of petroleum constituents. CECC concluded that gasoline impacted soil near the previously repaired fuel piping leak.

June 1987 — CECC implemented a Phase II investigation to assess the potential threat of petroleum constituents to groundwater on and off the property. Three additional monitoring wells MW4 through MW6 were installed to a depth of 30 to 31 feet below the ground surface. All six wells were then purged and sampled. Laboratory analyses of the collected samples detected the presence of the petroleum constituents. The highest concentrations were detected at the southern portion of the property.

June 15, 1990 — The underground fuel tanks, dispenser islands and associated piping were excavated and removed from the property. Laboratory analyses of soil samples collected during the tank removal project detected the presence of fuel constituents at all locations. Monitoring wells MW2, MW5 and MW6 were destroyed and MW1, MW3 and MW4 were damaged during the tank removal and property grading projects.

October 2, 1991 — Associated Soils Analysis, Inc. (ASA) prepared a workplan for E-Z Serve to address the repair and replacement of the damaged and destroyed monitoring wells. The workplan was submitted to Alameda County Department of Environmental Heath for approval. The workplan was approved by Alameda County on December 4, 1991.

January 28-29, 1992 — The October 2, 1991 workplan was implemented by ASA. Six testhole borings were drilled and installed as monitoring wells. Two of the previously installed monitoring wells were abandoned and one well-head closure was reconstructed. Previously installed monitoring wells MW3, MW5 and MW6 could not be located for abandonment due to the grading project conducted at the site. ASA prepared a Site Assessment Report dated March 2, 1992 which summarized the investigation. The report concluded petroleum constituents were detected in soil and groundwater samples collected during the investigation. The lateral extent of petroleum constituents impacting soil and groundwater remained undefined.

December 15, 1992 — ASA prepared a workplan to further assess the extent of fuel constituents impacting the property and migrating off-site. The workplan was submitted to Alameda County Department of Environmental Heath for approval. The workplan was approved by Alameda County on December 31, 1992.

February 5, 1992 Through March 3, 1993 — Environmental Oversight, Inc. conducted quarterly sampling on the monitoring wells. Groundwater levels have fluctuated between 16 and 22 feet in depth. Fuel constituents have been detected in all samples collected during the groundwater monitoring events.

June 21-24, 1993 — The December 15, 1992 workplan was implemented by ASA and is summarized herein.

SITE CONDITIONS

The following conditions were noted at the site at the time of the field investigation conducted on June 21 & 23, 1993:

1. The site is situated on the northwest corner of West "A" Street and Garden Avenue.
2. The site has been graded and remains unpaved, except for the former tank excavation area. The property is essentially flat with a slightly undulating surface .
3. The site has interior drainage with localized ponding.
4. A 13 foot canopy previously covering the fuel islands remains on site.
5. The site is enclosed on the north, east and south sides by a seven foot chain link fence.
6. Numerous small businesses are located adjacent to West "A" Street. Single family residences, apartments and a trailer park lay beyond the business to the north and south.
7. An underground water line lies on the north side of West "A" Street in a utility easement.
8. The City of Hayward supplies potable water to the property.

ENVIRONMENTAL SETTING

Subsurface Lithology

The subsurface lithology encountered during the drilling of the testhole borings consisted predominantly of interbeded silty clay, silty sand and clay to 30 feet, the maximum depth drilled as illustrated in **FIGURE 4**. A moist, saturated, highly cohesive clay was encountered between 10 and 12 feet to 30 feet in depth in monitoring wells MW9 and MW10. A moist to saturated, medium dense silty clay was encountered between 5 and 13 feet to 30 feet in MW7 and MW8. These soils were overlain by a moist, medium dense to dense, moderately to highly cohesive silty clay to just below the ground surface in MW8, MW9 and MW10. Layers of silty sand, clay and clayey silt overlay the silty clay in MW7. MW7 is located to the north of the

site and MW8, MW9 and MW10 to the south. All soils encountered during drilling were classified in accordance with the Unified Soil Classification System and are described in detail on the boring logs in **APPENDIX A.**

Geology

The study area lies within the San Leandro cone, a low gradient alluvial fan which originates at the mouth of Castro Valley and spreads westward onto the Bay Plain (CECC, 1988). This cone consists of alluvial sediments which overlie marine clay, terrigenous sand and silt of intertidal provenances.

Seismic Setting

The Hayward Fault, the San Andreas and the Calaveras Fault are the closest major faults in the vicinity of the site. These faults are seismically active and could produce a large magnitude earthquake. The last major earthquakes in this area were the 1984 Morgan Hill, the 1979 Coyote Lake and the 1906 San Francisco Earthquake associate with the Morgan Hill Coyote Lake and San Andreas Faults (Wesnousky, 1986). A large magnitude earthquake along the San Andreas, Calaveras and the Hayward Faults could produce strong motion, ground rupture and secondary seismic hazards such as liquefaction.

Groundwater Conditions

The shallowest regional aquifer in the area is a permeable, water bearing alluvial sand named the Newark Aquifer. This aquifer is a series of laterally discontinuous saturated lenses of coarse to fine sediments 10 to 100 feet thick at depths less than 200 feet. The regional hydraulic gradient is westward, from the mouth of the Castro Valley towards the San Francisco Bay

(CECC, 1988). The nearest water wells in the area indicate depths to the first water table to be 6 to 21 feet below the ground surface. The average annual rainfall is approximately 20 inches (Hornbeck, 1983).

An inventory of wells within a 1/2 mile radius of the site was compiled from available well logs and permits at the Alameda County Flood Control and Water Conservation District, Hayward Quadrangle files. The inventory consists of 15 wells, five which are within 1,500 feet of the site. Ten of the wells are categorized as shallow (terminating less than 100 feet below ground surface) with the remaining five having greater depths. Of the 10 shallow wells, five are used for water supply, three for groundwater monitoring and two for unspecified uses.

FIELD INVESTIGATION

Four testhole borings were drilled on June 21 and 22, 1993, for the purpose of further defining the lateral and vertical extent of petroleum constituents in soil and groundwater detected during previous site investigations (**FIGURE 3**). The testhole borings were converted into 2-inch groundwater monitoring wells to allow for current and future sampling of the groundwater beneath and within the site vicinity. The testhole borings were drilled to 30 feet below the ground surface.

MW7:

Monitoring well MW7 was drilled approximately 80 to 85 feet north of the subject site in the yard of a trailer park residence. A sewage odor was noted at 11 to 17 feet in depth during drilling. The boring was positioned so as not to interfere with the only access road into the trailer park.

MW8

Monitoring well MW8 was located approximately 20 feet east of the intersection of West "A" Street and Garden Avenue. This boring was used to determine the lateral extent of petroleum constituents in soil and groundwater to the east of the subject property.

MW9

Monitoring well MW9 was drilled approximately 75 to 80 feet west of the monitoring well MW1 at 553 West "A" Street. Overhead utilities prevented the boring from being located further west.

MW10

Monitoring well MW10 was drilled on the south side of West "A" Street southwest of Garden Avenue. This boring was used to determine the lateral extent of petroleum constituents in soil and groundwater to the south of the subject property.

Field screening of soils consisted of petroleum odor detection on samples and soil cuttings, and HNU 101 Photoionization Meter readings on middle tube samples. Soil samples were collected for photoionization analysis during the drilling of the boreholes at 5-foot intervals starting at 5 feet below the ground surface.

A slight petroleum odor was detected from 9 to 11 feet in MW10. No petroleum odors were detected in the remainder of the boreholes. The HNU 101 Photoionization Meter recorded levels of volatile hydrocarbons in soil samples ranging from 0 to 6 ppmv. Stained soils were not observed during the drilling of the boreholes.

Freestanding groundwater was encountered between 16 and 18 feet in depth during the drilling of the boreholes.

FIELD INVESTIGATION PREPARATION

The site underground utilities were located and marked by Underground Services Alert (USA) prior to the drilling operations. The testhole boring locations were probed to a depth of 4 feet to alleviate the possibility of damaging any underground utilities or obstructions. Permission

and access to drill, install and monitor the monitoring wells was obtained from the adjacent property owners and the City of Hayward. Permits to drill and install the monitoring wells were obtained from the Alameda County Flood Control and Water Conservation District.

TESTHOLE SOIL BORINGS AND FIELD SAMPLING GUIDELINES

Drilling Method

A truck-mounted Mobile B-80 drill rig with 8.5 inch outside diameter, 4.25 inch inside diameter hollow stem auger (AASHTO Designation T251-77) was used to drill the testhole borings. The drilling equipment was pre-cleaned by steam prior to drilling and between each soil boring.

Field Soil Sampling Procedures and Soil Classification

Undisturbed soil samples were collected at 5-foot depth intervals beginning at 5 feet below the ground surface. The soil samples were collected using a 2.0 inch inside diameter by 18 inch long split spoon sampler. Three 2.0-inch outside diameter by 6 inch long brass sample tubes were inserted into the sampler prior to use.

The sample tubes were pre-cleaned by steam and Alconox detergent wash and distilled water prior to use and stored in clean plastic bags. The split spoon sampler was also cleaned between each sample interval using the same methods as previously described.

After each soil sample was collected, the sample tube from the bottom of the sampler was immediately sealed in the field by placing Teflon covers over the open ends of the tube and covering the ends with plastic caps. An adhesive tape was placed around the plastic caps to ensure that the caps were secured and remained sealed.

The middle tube sample from the split spoon sampler or the soil from the sampler shoe was placed in a sealed container. After approximately 30 minutes, a field reading was taken using the HNU 101 Photoionization Meter (**APPENDIX A**). The field readings were recorded and used to approximate the levels of fuel contamination encountered in the testhole sample and also to assist in selecting the soil samples that were analyzed by the laboratory.

Soils encountered in the testhole borings were logged and classified in accordance with the Unified Soil Classification System (**APPENDIX A**). Standard penetration blow counts, recorded during the soil sampling provided information on the density of the soils. The standard penetration test consisted of using a 140 pound drop hammer falling a distance of 30 inches to drive the sampler into the undisturbed soil and recording the number of blow counts required to drive the sampler each 6-inch increment.

Lithologic descriptions included in the borehole log were soil type, color, moisture description, grain size and shape, compactness or hardness, cohesiveness, grading, extent of weathering or fracturing, and sample odor. Drilling rates, standard penetration tests, sample numbers and percent recovery of the samples were also noted in the borehole field log.

Personnel involved in collecting the soil samples and classifying the soil were under the supervision of a state registered geologist and fully experienced in the field of environmental and geotechnical drilling.

Soil Sample Field Data, Storage, and Transportation Protocol

All soil samples were labeled appropriately in the field. Labels included sample location, depth, date, time, job number, and field identification number. Samples were placed immediately in an insulated storage container cooled with chemical ice. The temperature

inside the storage container was maintained not to exceed 4 degrees Celsius (39.2 degrees Fahrenheit) and monitored with a thermometer to ensure that the temperature remained consistent.

A chain of custody record (**APPENDIX B**) accompanied the samples. Chain of custody records included sample location, depth, date, job number, field identification number, analysis required and personnel collecting the samples. A field log book was maintained containing essentially the same information as the chain of custody record with the addition of any observations about the sample.

Soil samples were delivered to a State Certified hazardous waste testing laboratory within approximately 24 hours of collection. The temperature of the insulated storage container was maintained below 4 degrees Celsius prior to delivering to the laboratory. Once the samples were delivered to the laboratory, the chain of custody was signed by the laboratory indicating that the possession of the samples had changed. The soil samples were analyzed within the required 14 day period following collection.

TESTHOLE BORING SOIL CONTAINMENT

Soil cuttings were stored on site in 55 gallon hazardous waste steel barrels (model 17H with bolt-on lid). The soil barrels were placed in an area of limited access. Proper disposal of the contaminated soil cuttings is discussed in the Recommendations section of this report.

Construction

The groundwater monitoring wells were completed using thread-jointed, 2-inch diameter, Schedule 40, PVC casing. No chemicals, glues, or solvents were used in the well construction. Well specifications are illustrated in **APPENDIX A.**

The screened portion of the wells are 19 feet in length (constructed from a total screened casing length of 20 feet), and consists of factory perforated 0.020 inch slots. The slotted pipe was installed so that perforations extend from 10 to 29 feet below grade in the monitoring wells. The water table was at a depth of approximately 17 feet below the ground surface during well construction. This placed the top screen perforation approximately 7 feet above the water table. The bottom of the screen was fitted with a screw on end cap and lowered into the boring through the hollow stem auger. The remaining casing was assembled as the pipe was lowered into the boring through the hollow stem auger.

The annular space between the screened casing and the boring wall was filled with a #3 silica sand filter packing. The filter pack extended approximately 1 foot above the uppermost slot of the screen. A 3-foot bentonite pellet seal was placed above the filter pack. The remaining annular space was filled with a volclay grout. A locking PVC well cap was installed on the top of the casing. Each well was enclosed in a metal housing with a steel, bolt-down cover which was surrounded at the base by a 6 inch thick pad.

Groundwater Monitoring Well Development

Following completion of the well construction, the wells were developed. Development of the wells consisted of bailing and swabbing consecutively until it was determined that the majority of sediment and fine-grained soil from the well and substrata adjacent to the well screen was

removed. The development process, time intervals, and amount of well development water removed varied depending on the aquifer encountered. Waste water produced during the development was placed in model 17H, 55 gallon, bolt-on lid, steel drums which remained at the site.

Groundwater Monitoring Well Sampling and Purging Protocol

Prior to collecting a groundwater sample the monitoring wells were opened to the atmosphere for approximately one hour to allow for the groundwater to adjust to the surface barometric pressure. The depth to groundwater, electrical conductivity, pH, and temperature readings of the groundwater were then measured. These parameters, along with the volume of the purged water (described below) and time, were recorded on the field sampling and purging form **(APPENDIX A)**.

The volume of water in the monitoring well was calculated using the following equation:

Feet of water in well x 0.163 for 2 inch diameter well = Volume water in gallons
Feet of water in well x 0.653 for 4 inch diameter well = Volume water in gallons

Where the feet of water in the well was calculated by subtracting the depth to groundwater from the total depth of the well.

The volume of water removed was estimated by multiplying the volume of water in gallons by three to four well volumes. This value was recorded on the field form. The pH, temperature, and electrical conductivity was monitored and recorded between each well volume removed. The groundwater level in the monitoring wells was allowed to recover to 80% of the original depth prior to sampling.

A minimum of four well volumes (where four volumes were available) were removed using a truck-mounted bailer prior to collecting the water sample. The removed water was placed in steel storage barrels with bolt-on lids, which remain on site. After the well had stabilized, each water sample was collected using a disposable 1.7 inch by 36 inch Teflon bailer with a check valve.

The water samples were transferred into two sterilized, glass, 40 ml VOA sample containers. The samples were immediately sealed in the field with Teflon-lined threaded caps ensuring an airtight seal. The samples were labeled appropriately in the field. Labels included sample location, depth, date, time, job number, and field identification number.

Samples were placed immediately in an insulated storage container cooled with chemical ice. The temperature inside the storage container was maintained at or below 4° Celsius (39.2° Fahrenheit) and monitored with a thermometer to ensure that the temperature remained consistent. The storage container also included a laboratory prepared travel blank for quality control purposes and as an indicator of cross contamination. The travel blank was placed with the sample containers and analyzed if the field samples indicated detectable levels of fuel constituents. A chain of custody record accompanied the samples. Chain of custody records included sample location, depth, date, time, job number, field identification number, temperature of sample container, analysis required and personnel collecting samples.

Water samples were delivered to a State certified hazardous waste laboratory within 24 hours of collection. The temperature was maintained below 4° Celsius (39.2° Fahrenheit) in the insulated storage container prior to delivery to the laboratory. Once the samples were delivered to the laboratory, the chain of custody was signed by the laboratory indicating that the possession of the samples had changed.

Well purging equipment was pre-cleaned by steam prior to each purging interval. Cross contamination was prevented by using a different dedicated disposable bailer for each sample.

GROUNDWATER GRADIENT

Following the installation and development of the monitoring wells, the depth to groundwater was measured on the north side of the top of the well casing. On June 23, 1993, the top of the well casings were surveyed from a temporary benchmark to an elevation within 0.01 feet. The temporary benchmark was the top of the fire hydrant located at the northeast corner of West "A" Street and Garden Avenue. The coordinates and elevations of the monitoring wells, depth to groundwater (measured on June 23, 1993) and calculated groundwater elevations are presented below:

Well Designation	Northing (ft)	Easting (ft)	Well Elevation (ft)	Depth to Water (ft)	Elevation of Water (ft)
MW1A	983.2506	903.8652	97.59	17.80	79.79
MW1	919.8474	840.8765	96.73	16.86	79.87
MW2	977.1339	793.5426	98.06	18.42	79.64
MW3	1021.6577	892.7671	97.66	17.88	79.78
MW4	980.4013	875.2964	97.10	17.35	79.75
MW5	910.9567	757.3047	96.73	17.02	79.71
MW6	945.3491	942.0013	97.09	17.30	79.79
MW7	1089.3287	840.8127	97.44	17.67	79.77
MW8	966.4276	1076.0798	97.61	17.64	79.97
MW9	900.4787	766.1292	95.41	15.84	79.57
MW10	847.3513	929.2777	97.11	17.39	79.72

The northing and easting coordinates are measured relative to a north trending baseline through the set-up point located northwest of the fire hydrant (**FIGURE 3**). The set-up point is the location from where the instrument measuring distances and angles was positioned. Elevations are relative to the temporary benchmark assumed to be 100.00 feet.

The groundwater elevations have been contoured and are shown in **FIGURE 3.** The gradient is to the west-southwest with a slope of about .0015 feet per foot. There appears to be a highly localized recharge effect near MW1.

LABORATORY TESTS

Soil samples collected from the testhole borings/monitoring wells were transferred to Trace Analytical Laboratory Inc. of Hayward, California. Selected samples collected from the borings were tested for the following contaminants:

TEST METHODS
FOR LABORATORY ANALYSES

<u>SOIL ANALYSES DESCRIPTION</u>
TPH as Gasoline DHS GC/FID
Benzene, Toluene, Xylenes & Ethylbenzene (BTX&E): EPA 5030/8020
<u>WATER ANALYSES DESCRIPTION</u>
BTX&E and TPH EPA 602/DHS GC-FID

The results of these laboratory analyses are summarized in a table and presented in their original laboratory report form in **APPENDIX B.** A brief discussion of these results follows.

Petroleum constituents were detected in the soil sample collected at 15 feet below grade in monitoring well MW7, and at 10 and 15 feet in MW9 and MW10. Petroleum constituents were not detected in soil samples collected from monitoring well MW8. Petroleum constituents were

detected in clay and silty clay soils at depths which coincide with the historic and current groundwater levels (**FIGURE 4**). Levels of Benzene ranged from non-detectable to 0.13 ppm and Total Petroleum Hydrocarbons as gasoline ranged from non-detected to 9 ppm.

All monitoring wells drilled during this and previous investigations were sampled for detection of petroleum constituents. Laboratory analyses of the groundwater samples resulted in the detection of petroleum constituents. Benzene levels ranged between 43 and 23,000 ppb, and TPH as gasoline was detected at concentrations ranging from 350 ppb to 60,000 ppb (**APPENDIX B**). The highest concentrations were detected in MW2. Petroleum odors were detected in MW1-MW7, MW9 and MW10 during the purging of the monitoring wells. Neither free floating product nor a sheen was noted on any of the groundwater samples collected during this investigation.

CLOSING STATEMENT

This report has been prepared for E-Z Serve Management Company as it pertains to the E-Z Serve Location #100877, located at 525 West "A" Street, Hayward, California. The conclusions rendered in this report are opinions based on the field investigation and laboratory testing of soil and groundwater samples collected during this study. This report does not reflect subsurface variations which may exist between sampling points. These variations cannot be anticipated, nor could they be entirely accounted for, in spite of exhaustive additional testing. Nor should this report be regarded as a guarantee that no further contamination, beyond that which could have been detected within the scope of this investigation, is present beneath the said property. Undocumented, unauthorized releases of hazardous material, the remains of which are not readily identifiable by visual inspection and are of different chemical constituents, are difficult and often impossible to detect within the scope of a chemical specific investigation. All work has been performed in accordance with generally accepted practices in geotechnical/environmental engineering, engineering geology, and hydrogeology. No other warranty, either expressed or implied, is made.

This opportunity to be of service is appreciated. Should you have any questions or comments regarding this report, please contact this office at your convenience.

REFERENCES CITED

CECC, 1988, Site Assessment Reports on File with the Alameda County Department of Environmental Health

Hornbeck, D., 1983, California Climate Stations/Data, in California Patterns, A Geographical and Historical Atlas, Mayfield Publishing Company.

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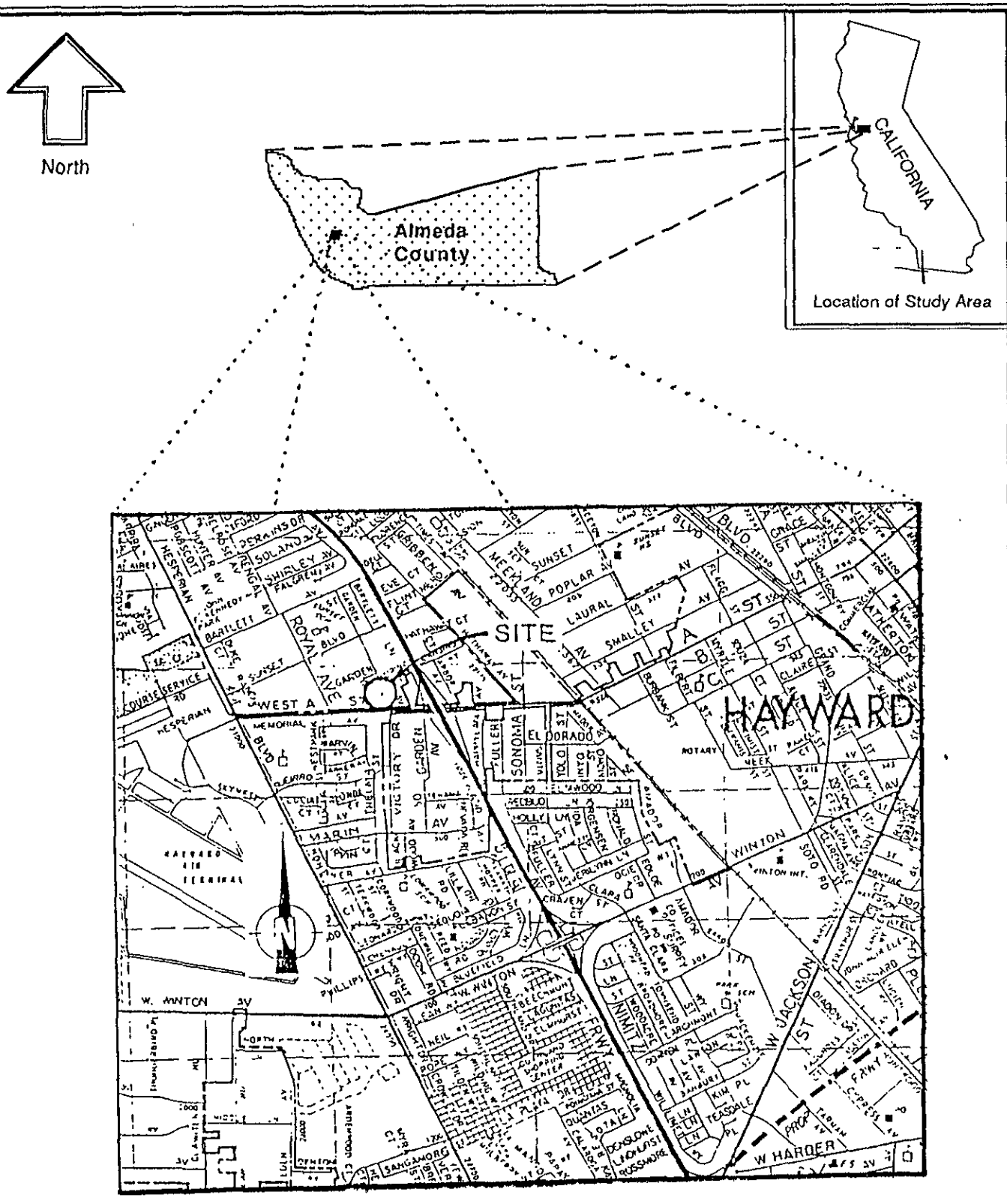
Wesnousky, Steven, 1986, Earthquakes, Quaternary Faults and Seismic Hazards in California; Journal of Geophysical Research, Volume 91, No. B12, page 12, 587-12.

FIGURES



Modified from the Thomas Brothers Map, Almeda, County, 1972

VICINITY MAP

FIGURE 1

JOB LOCATION: EZ Serve location 100877
525 West "A" Street
Hayward, California

JOB NUMBER: ASA# 238-91

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1141 Batavia Court • Tulare, California 93274
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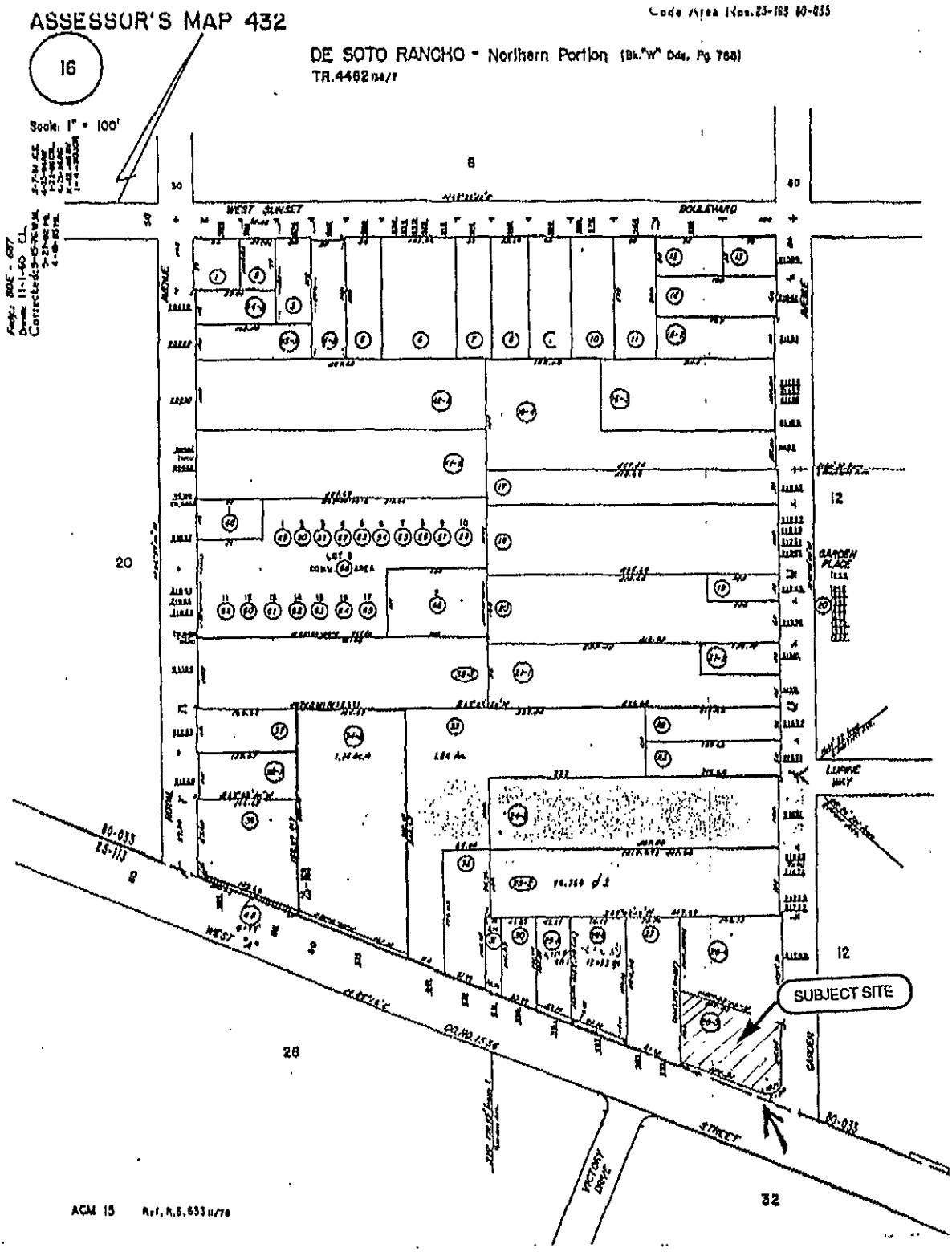

ASSESSOR'S PARCEL MAP

JOB LOCATION: EZ Serve location #100877
525 West A Street
Hayward, California

JOB NUMBER: 238-91 ASA

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FIGURE 2

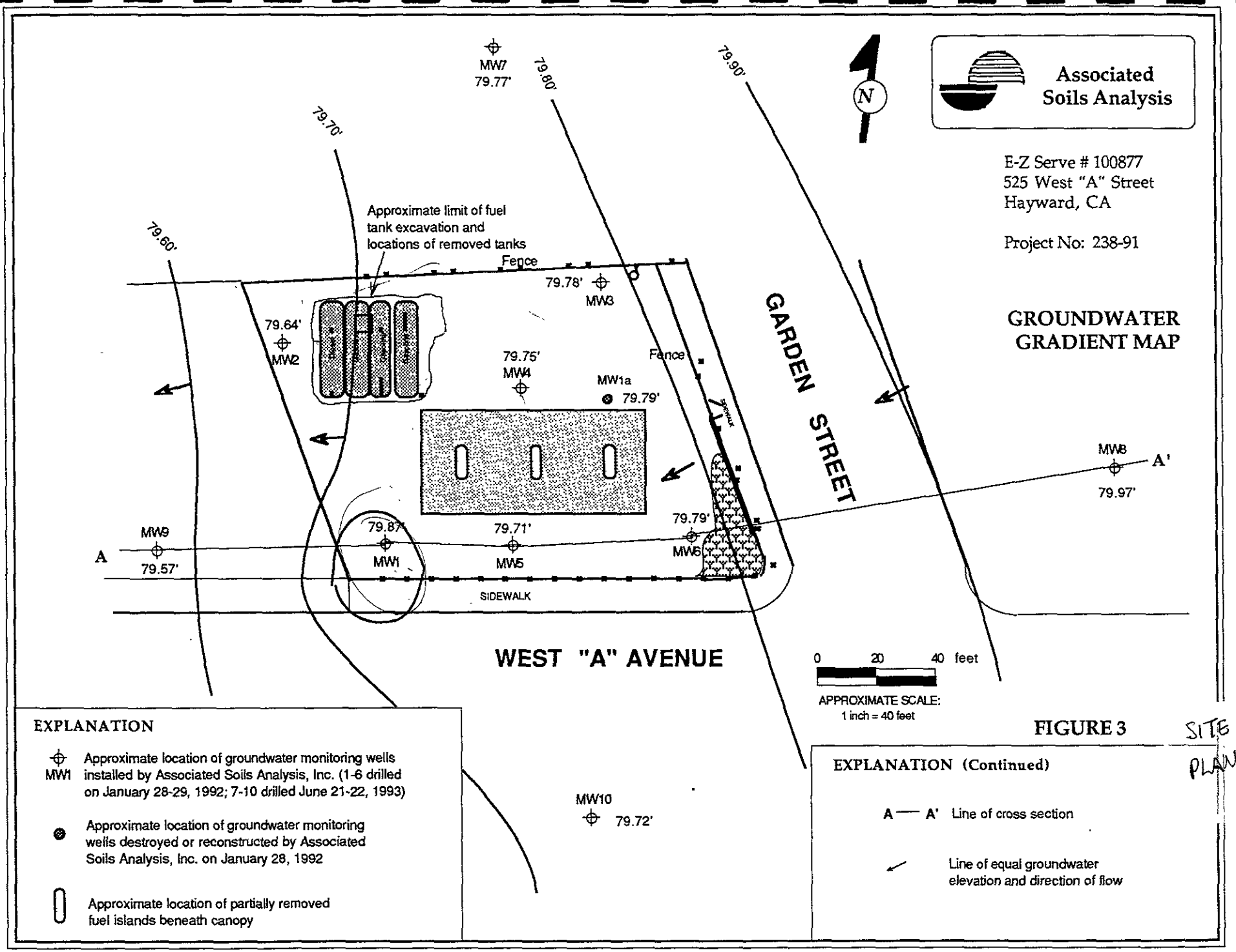


FIGURE 3

SITE PLAN

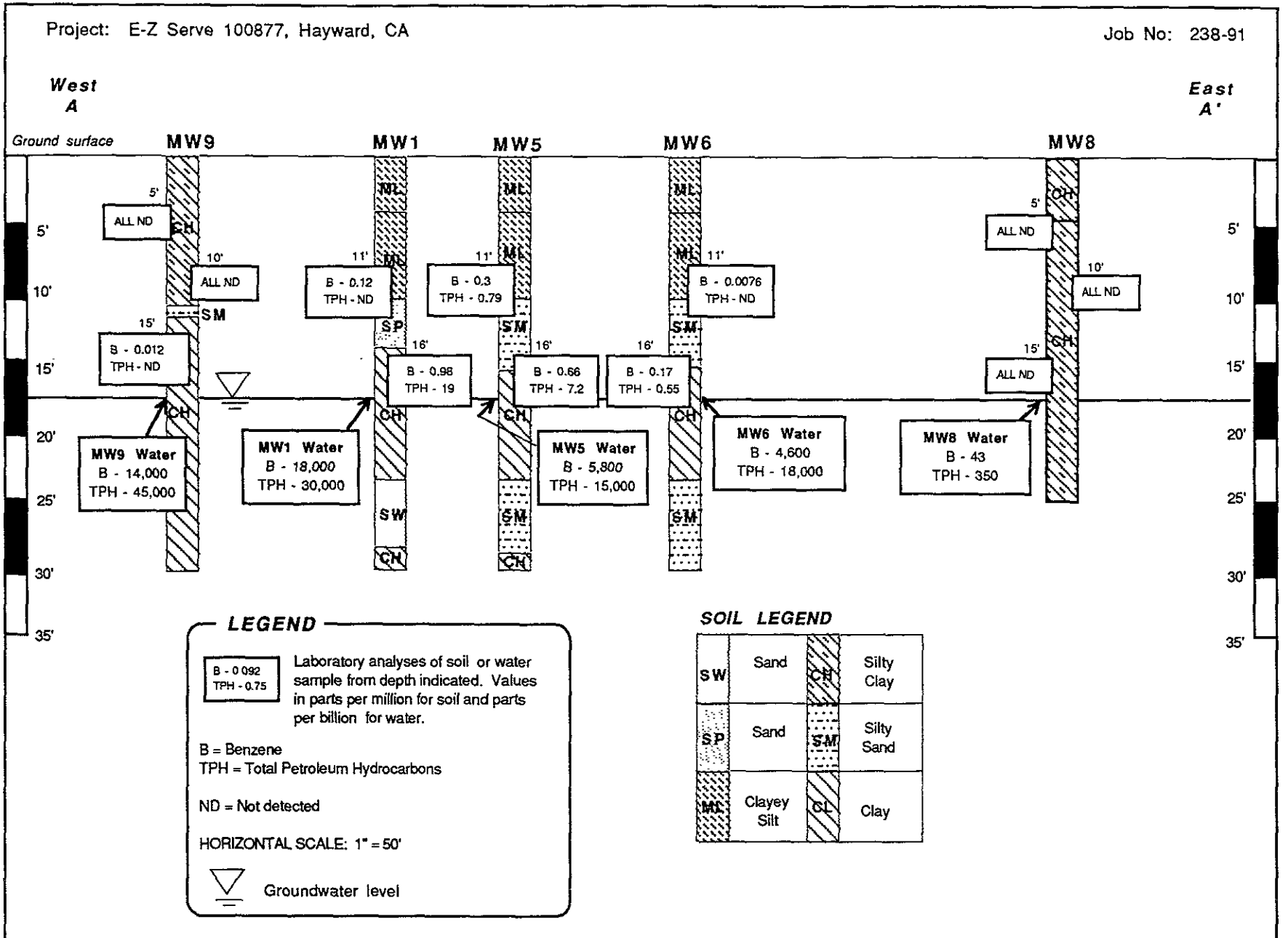


FIGURE 4. Subsurface profile A-A' showing subsurface soil lithologies and analytical

APPENDIX A

Unified Soil Classification System

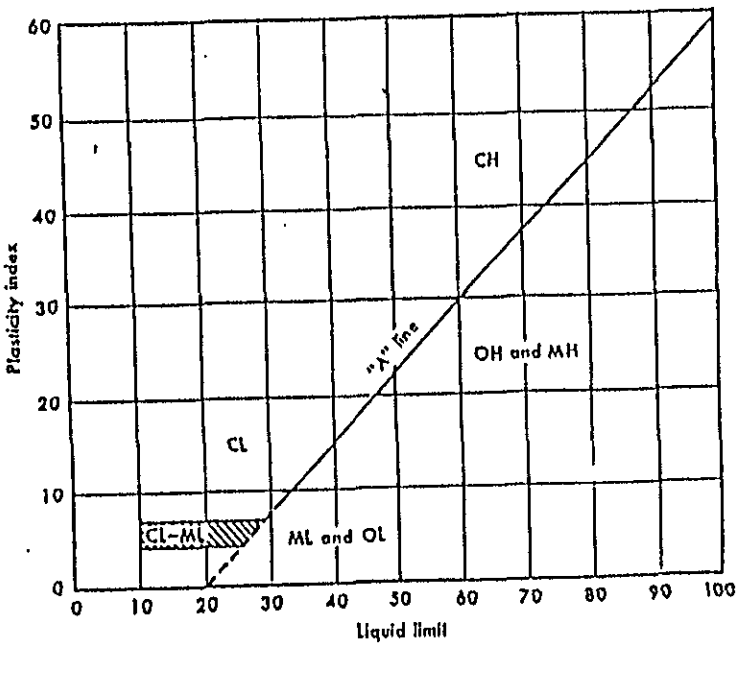
Major divisions			Group symbols		Typical names	Laboratory classification criteria
Coarse-grained soils (More than half of material is larger than No. 200 sieve size)	Gravels (More than half of coarse fraction is larger than No. 4 sieve size)	Clean gravels (Little or no fines)	GW		Well-graded gravels, gravel-sand mixtures, little or no fines	$C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between 1 and 3
			GP		Poorly graded gravels, gravel-sand mixtures, little or no fines	Not meeting all gradation requirements for GW
		Gravels with fines (Appreciable amount of fines)	GM*	d	Silty gravels, gravel-sand-silt mixtures	Atterberg limits below "A" line or P.I. less than 4 — Above "A" line with P.I. between 4 and 7 are borderline cases requiring use of dual symbols
				u		
			GC		Clayey gravels, gravel-sand-clay mixtures	Atterberg limits above "A" line with P.I. greater than 7
	Sands (More than half of coarse fraction is smaller than No. 4 sieve size)	Clean sands (Little or no fines)	SW		Well-graded sands, gravelly sands, little or no fines	$C_u = \frac{D_{60}}{D_{10}}$ greater than 6; $C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ between 1 and 3
			SP		Poorly graded sands, gravelly sands, little or no fines	Not meeting all gradation requirements for SW
		Sands with fines (Appreciable amount of fines)	SM*	d	Silty sands, sand-silt mixtures	Atterberg limits below "A" line or P.I. less than 4 — Limits plotting in hatched zone with P.I. between 4 and 7 are borderline cases requiring use of dual symbols.
				u		
			SC		Clayey sands, sand-clay mixtures	Atterberg limits above "A" line with P.I. greater than 7
Fine-grained soils (More than half of material is smaller than No. 200 sieve)	Silts and clays (Liquid limit less than 50)		ML		Inorganic silts and very fine sands, rock flour, silty or clayey fine sands, or clayey silts with slight plasticity	
			CL		Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays	
			OL		Organic silts and organic silty clays of low plasticity	
	Silts and clays (Liquid limit greater than 50)		MH		Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts	
			CH		Inorganic clays of high plasticity, fat clays	
			OH		Organic clays of medium to high plasticity, organic silts	
	Highly organic soils		Pt		Peat and other highly organic soils	

Determine percentages of sand and gravel from grain-size curve. Depending on percentage of fines (fraction smaller than No. 200 sieve size), coarse-grained soils are classified as follows:

Less than 5 per cent ..... GW, GP, SW, SP

More than 12 per cent ..... GM, GC, SM, SC

5 to 12 per cent ..... Borderline cases requiring dual symbols**



Plasticity Chart

*Division of GM and SM groups into subdivisions of d and u are for roads and airfields only. Subdivision is based on Atterberg limits; suffix d used when L.L. is 28 or less and the P.I. is 6 or less; the suffix u used when L.L. is greater than 28.

**Borderline classifications, used for soils possessing characteristics of two groups, are designated by combinations of group symbols. For example: GW-GC, well-graded gravel-sand mixture with clay binder.

TESTHOLE BORING LOG LEGEND

BORING LOG NUMBER B1 / MW1

DEPTH	% REC	BLOW COUNTS	SAMPLE NO.	HNU METER	SOIL GROUP	DESCRIPTION
0'						UNDISTURBED SPLIT SPOON SAMPLER 2" OR 2.5" INSIDE DIAMETER OR 1.5" INSIDE DIAMETER STANDARD PENETRATION SAMPLER (SPLIT BARREL SAMPLER)
5'						FULL RECOVERY
10'						PARTIAL RECOVERY
15'						NO RECOVERY
20'		11 22 25				STANDARD PENETRATION BLOW COUNTS: NUMBER OF BLOWS TO DRIVE THE SAMPLER EACH 6" INCREMENT INTO THE UNDISTURBED SOIL USING A 140 LB. DOWNHOLE HAMMER WITH A 30" DROP.
25'			B1-4			SOIL SAMPLE NUMBER
				130		HNU 101 PHOTOIONIZATION METER READING
30'					ML	SOIL GROUP DESIGNATER: UNIFIED SOILS CLASSIFICATION SYSTEM

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PROJECT: E-Z Serve #100877
525 West "A" Street
Hayward, CA

Associated Soils Analysis
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JOB NO.: 238-91
DATE: 06/21/93
BY: G. Sullivan
ELEV.: N/A

BORING LOG NUMBER MW7

DEPTH	%REC	BLOW COUNTS	SAMPLE NO.	HNU METER	SOIL GROUP	SOIL DESCRIPTION
0'					MH	0"-4' CLAYEY SILT: Strong brown; dry to moist; dense; moderately to highly cohesive, moderately to highly plastic silt with clay.
					CH	4'-11' CLAY: Moderate yellowish brown; moist; dense; moderately to highly cohesive; moderately to highly plastic clay. No petroleum odor.
5'		15 24 25		1		
10'		4 5 7		2	SM	11'-13' SILTY SAND: Light gray; moist; medium dense; very fine to medium, well graded, sub-rounded sand with approximately 10-20% slightly cohesive silt. No petroleum odor. A "sewage" like odor was detectable from 11 to 17 ft.
					CH	13'-30' SILTY CLAY: Light olive gray; moist to saturated; medium dense; highly cohesive, highly plastic clay with silt. No petroleum odor.
15'		7 7 8	▽	6		
20'						
25'						
30'						Boring terminated at 30' below grade. Freestanding groundwater was encountered at approximately 18' below grade.

LOCATION: See testhole boring location map
EQUIPMENT: Mobile B80 drill rig with 8.5 inch O.D. and 4.25 inch I.D. hollow-stem auger and 2.0 inch split spoon sampler.

NOTES: Drilled approximately 80-85 feet north of site.

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Hayward, CA

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JOB NO.: 238-91
DATE: 06/22/93
BY: G. Sullivan
ELEV.: N/A

BORING LOG NUMBER MW8

DEPTH	% REC	BLOW COUNTS	SAMPLE NO.	HNU METER	SOIL GROUP	SOIL DESCRIPTION
0'						0-3" Asphalt
					CH	3"-5' SILTY CLAY: Dark yellowish brown, moist, medium dense, moderately to highly cohesive, moderately to highly plastic clay with silt.
5'		4 5 8		0	CH	5'-30' SILTY CLAY: moderate yellowish brown, moist, medium dense, highly cohesive, highly plastic clay with silt.
10'		11 11 13		0		
15'		10 11 14	▽	1		
20'						
25'						
30'						Boring terminated at 30' below grade Freestanding groundwater encountered at approximately 17' below grade.

LOCATION: See testhole boring location map
EQUIPMENT: Mobile B80 drill rig with 8.5 inch O.D. and 4.25 inch I.D. hollow-stem auger and 2.0 inch split spoon sampler.

NOTES:

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Hayward, CA

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JOB NO.: 288-91
DATE: 06/22/93
BY: G. Sullivan
ELEV.: N/A

BORING LOG NUMBER MW9

DEPTH	% REC.	BLOW COUNTS	SAMPLE NO.	HNU METER	SOIL GROUP	SOIL DESCRIPTION
0'					CH	0'-11' SILTY CLAY: Moderate yellowish brown; moist; stiff; highly cohesive, highly plastic clay with silt. No petroleum odor. Localized sand and gravel lenses to 1 foot thick.
5'		8 11 15		0		
10'		4 7 9		0	SM	11'-12' SILTY SAND: Light olive gray; moist; medium dense; very fine to fine, poorly graded sand with silt.
					CH	12'-30' CLAY: Moderately yellowish brown; moist to saturated, medium dense to stiff, highly cohesive, highly plastic clay.
15'		8 8 16	▽			
20'						
25'						
30'						Boring terminated at 30' below grade. Freestanding groundwater was encountered at approximately 16' below grade.

LOCATION: See testhole boring location map
EQUIPMENT: Mobile B80 drill rig with 8.5 inch O.D. and 4.25 inch I.D. hollow-stem auger and 2.0 inch split spoon sampler.

NOTES: Drilled approximately 75-80 feet west of monitoring well MW1

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525 West "A" Street
Hayward, CA

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JOB NO.: 238-91
DATE: 06/22/93
BY: G. Sullivan
ELEV.: N/A

BORING LOG NUMBER MW10

DEPTH	% REC.	BLOW COUNTS	SAMPLE NO.	HNU METER	SOIL GROUP	SOIL DESCRIPTION
0'					CH	0"-1" Asphalt 1"-8' SILTY CLAY: Moderate to dark yellowish brown; moist; medium dense to dense; moderate to highly cohesive; moderate to highly plastic clay with silt. No petroleum odor.
5'		7 14 17		0		
					ML	8'-10' SANDY SILT: Light gray, moist; medium dense; moderately cohesive; moderately plastic silt with approximately 5-10% very fine sand. No petroleum odor.
10'		6 6 13		4	CH	10'-30' CLAY: Light yellowish brown to light olive brown; moist to saturated; highly cohesive, highly plastic clay. Slight petroleum odor from 9-11 *feet below grade. No petroleum odor below 11 feet.*
15'		10 10 12		0		
			▽			Boring terminated at 30' below grade. Freestanding groundwater encountered at approximately 18' below grade.
20'						
25'						
30'						

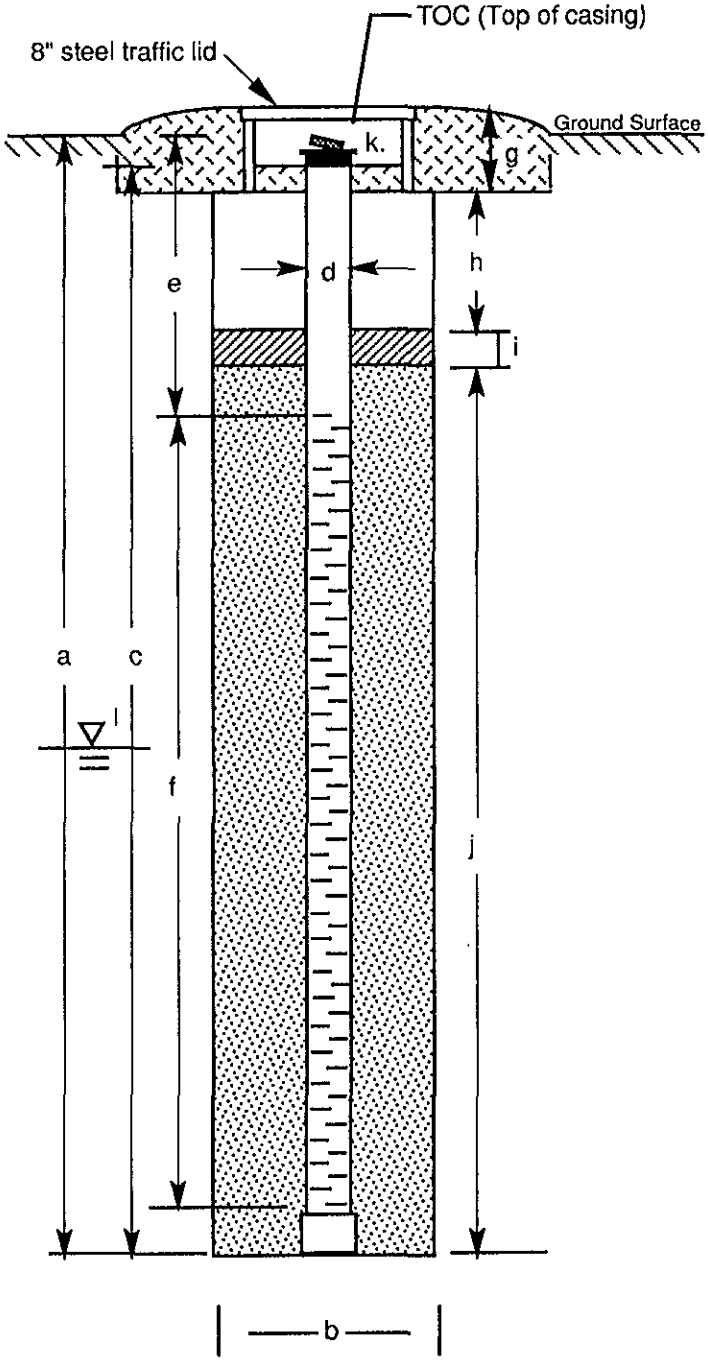
LOCATION: See testhole boring location map
EQUIPMENT: Mobile B80 drill rig with 8.5 inch O.D. and 4.25 inch I.D. hollow-stem auger and 2.0 inch split spoon sampler.

NOTES: Drilled on south side of "A" Street, approximately 2' inside curb.

WELL DETAILS

PROJECT NUMBER 238-91
PROJECT NAME E-Z Serve Hayward
525 W. "A" Street, Hayward, California
LOCATION See monitoring well location map
WELL PERMIT NO. N/A

BORING / WELL NO. MW7
TOP OF CASING ELEV. N/A
GROUND SURFACE ELEV. N/A
DATUM N/A
INSTALLATION DATE 6/21/93



EXPLORATORY BORING

a. Total depth 30 ft.
b. *Diameter* 8.5 in.
Drilling method Hollow stem auger

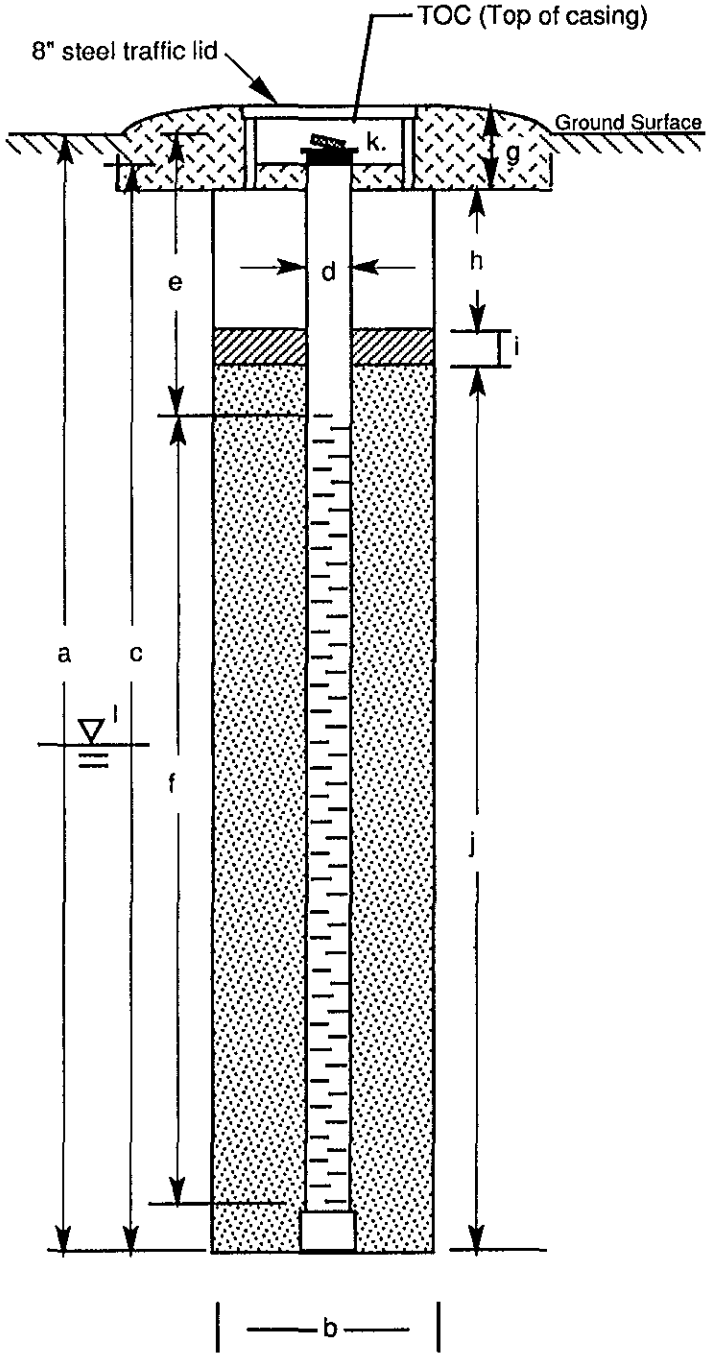
WELL CONSTRUCTION

c. Total casing length 29.5 ft.
Material Schedule 40 PVC
d. Diameter 2 in.
e. Depth to top perforations 10 ft.
f. Perforated length 19 ft.
Perforated interval from 10 to 29 ft.
Perforation type Slotted
Perforation size 0.02 in.
g. Surface seal 0.5 ft.
Material Concrete
h. Backfill 5.5 ft.
Material Volclay grout
i. Seal 3 ft.
Material 3/8" bentonite pellets
J. Gravel pack 21 ft.
Gravel pack interval from 9 to 30 ft.
Material #3 Silica Sand
k. Locking wellcap
l. Depth to groundwater 17.67 ft.

WELL DETAILS

PROJECT NUMBER 238-91
PROJECT NAME E-Z Serve Hayward
525 W. "A" Street, Hayward, California
LOCATION See monitoring well location map
WELL PERMIT NO. N/A

BORING / WELL NO. MW8
TOP OF CASING ELEV. N/A
GROUND SURFACE ELEV. N/A
DATUM N/A
INSTALLATION DATE 6/22/93



EXPLORATORY BORING

a. Total depth 30 ft.
b. Diameter 8.5 in.
Drilling method Hollow stem auger

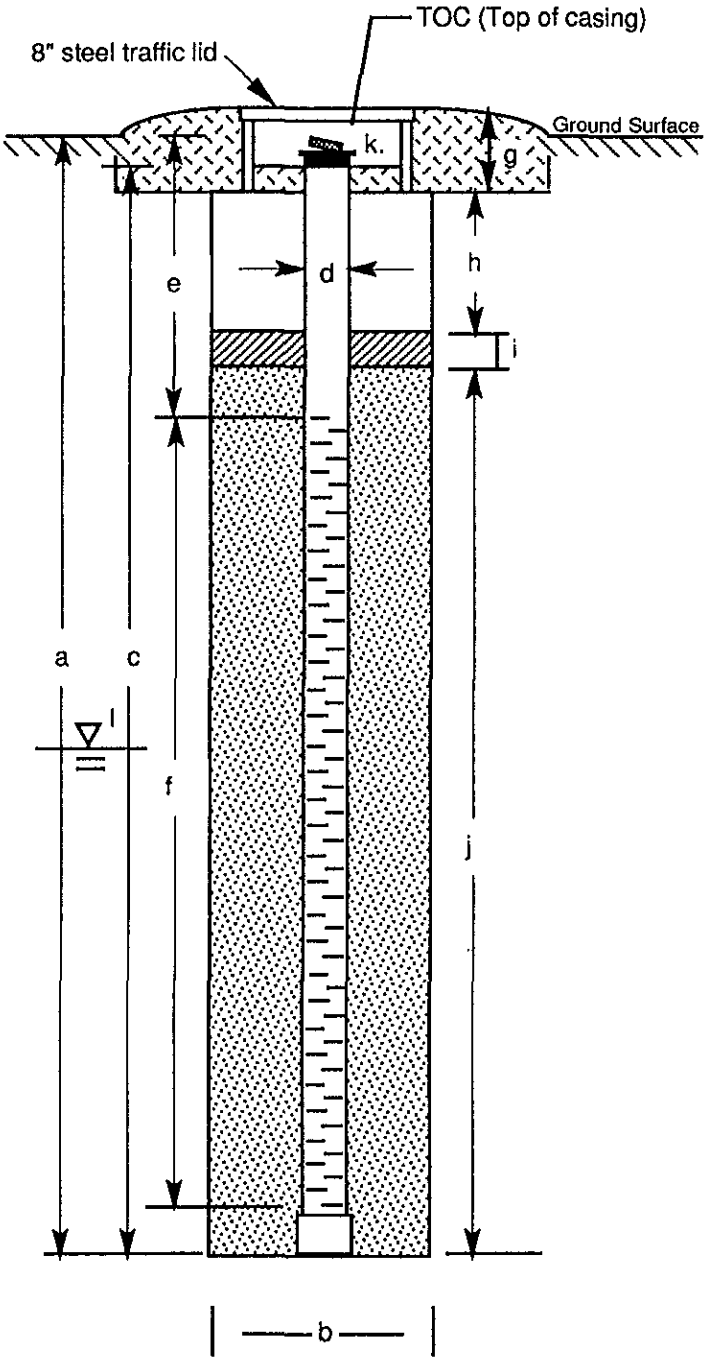
WELL CONSTRUCTION

c. Total casing length 29.5 ft.
Material Schedule 40 PVC
d. Diameter 2 in.
e. Depth to top perforations 10 ft.
f. Perforated length 19 ft.
Perforated interval from 10 to 29 ft.
Perforation type Slotted
Perforation size 0.02 in.
g. Surface seal 0.5 ft.
Material Concrete
h. Backfill 5.5 ft.
Material Volclay grout
i. Seal 3 ft.
Material 3/8" bentonite pellets
J. Gravel pack 21 ft.
Gravel pack interval from 9 to 30 ft.
Material #3 Silica Sand
k. Locking wellcap
l. Depth to groundwater 17.63 ft.

WELL DETAILS

PROJECT NUMBER 238-91
PROJECT NAME E-Z Serve Hayward
525 W. "A" Street, Hayward, California
LOCATION See monitoring well location map
WELL PERMIT NO. N/A

BORING / WELL NO. MW9
TOP OF CASING ELEV. N/A
GROUND SURFACE ELEV. N/A
DATUM N/A
INSTALLATION DATE 6/22/93



EXPLORATORY BORING

a. Total depth 30 ft.
b. Diameter 8.5 in.
Drilling method Hollow stem auger

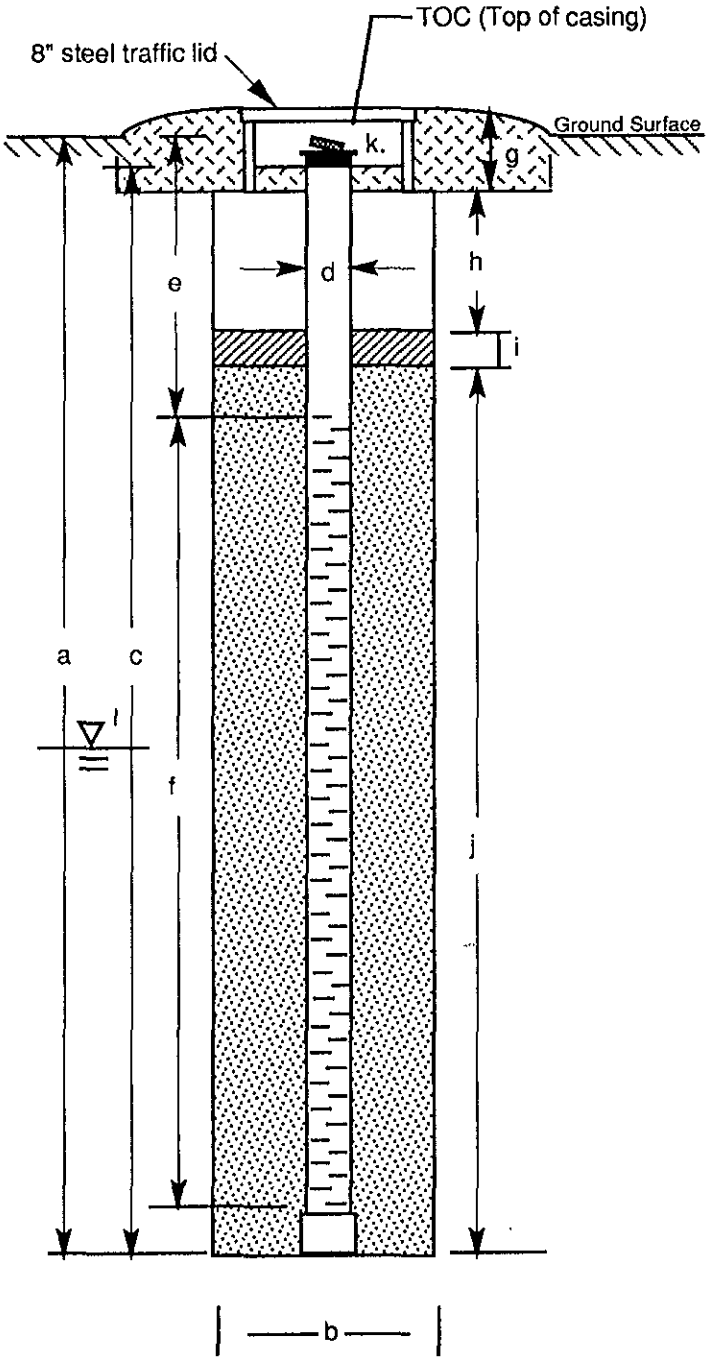
WELL CONSTRUCTION

c. Total casing length 29.5 ft.
Material Schedule 40 PVC
d. Diameter 2 in.
e. Depth to top perforations 10 ft.
f. Perforated length 19 ft.
Perforated interval from 10 to 29 ft.
Perforation type Slotted
Perforation size 0.02 in.
g. Surface seal 0.5 ft.
Material Concrete
h. Backfill 5.5 ft.
Material Volclay grout
i. Seal 3 ft.
Material 3/8" bentonite pellets
J. Gravel pack 21 ft.
Gravel pack interval from 9 to 30 ft.
Material #3 Silica Sand
k. Locking wellcap
l. Depth to groundwater 15.84 ft.

WELL DETAILS

PROJECT NUMBER 238-91
PROJECT NAME E-Z Serve Hayward
525 W. "A" Street, Hayward, California
LOCATION See monitoring well location map
WELL PERMIT NO. N/A

BORING / WELL NO. MW10
TOP OF CASING ELEV. N/A
GROUND SURFACE ELEV. N/A
DATUM N/A
INSTALLATION DATE 6/22/93



EXPLORATORY BORING

a. Total depth 30 ft.
b. Diameter 8.5 in.
Drilling method Hollow stem auger

WELL CONSTRUCTION

c. Total casing length 29.5 ft.
Material Schedule 40 PVC
d. Diameter 2 in.
e. Depth to top perforations 10 ft.
f. Perforated length 19 ft.
Perforated interval from 10 to 29 ft.
Perforation type Slotted
Perforation size 0.02 in.
g. Surface seal 0.5 ft.
Material Concrete
h. Backfill 5.5 ft.
Material Volclay grout
i. Seal 3 ft.
Material 3/8" bentonite pellets
J. Gravel pack 21 ft.
Gravel pack interval from 9 to 30 ft.
Material #3 Silica Sand
k. Locking wellcap
l. Depth to groundwater 17.39 ft.

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FILE NO: 238-91
DATE: 6-23-93

MONITORING WELL PURGING FOR SAMPLING RECORD

PROJECT LOCATION: EZ Serve #100877, 525 West "A" Street, Hayward, CA

SAMPLER NAME (Print): Shannon Bennett

PRIOR TO PURGING	SAMPLE LOCATION	MW1	MW2	MW3	MW4	MW5
	SCREEN INTERVAL (Top/Bottom)	14.5'-29.5'				
	CASING DIAMETER (in)	4"	4"	4"	4"	4"
	ELEVATION OF TOP OF WELL CASING					
	DEPTH TO BOTTOM OF WELL CASING	30'	30'	30'	30'	30'
	TIME	3:15	3:51	4:20	4:53	5:20
	DEPTH TO WATER (From top of casing)	16.86'	18.42'	17.88'	17.45'	17.02'
	WELL SOUNDING DEPTH	30'	30'	30'	30'	30'
	VOLUME OF WATER IN WELL	8.5	7.5	7.9	8.1	8.4
	TEMPERATURE (°F)	70	69	67	66	68
	pH READING	7.00	6.92	7.11	7.00	6.84
	ELECTRICAL CONDUCTIVITY	1360	1486	1381	1310	1390
	THICKNESS OF STANDING PRODUCT	0	0	0	0	0
	PETROLEUM SHEEN	NO	NO	NO	NO	NO
	PETROLEUM ODOR	YES	YES	YES	YES	YES
DURING PURGING	SAMPLE LOCATION	MW1	MW2	MW3	MW4	MW5
	TIME	3:25	4:01	4:29	5:02	5:30
	DEPTH TO WATER (From top of casing)	16.90'	19.21'	18.22'	17.86'	17.27'
	VOLUME OF WATER REMOVED	2	2	2	2	2
	TEMPERATURE (F)	69	68	66	65	68
	pH READING	6.78	6.97	7.01	7.00	6.80
	ELECTRICAL CONDUCTIVITY	1350	1450	1400	1370	1360
END OF PURGING	SAMPLE LOCATION	MW1	MW2	MW3	MW4	MW5
	TIME	3:29	4:10	4:38	5:11	5:39
	DEPTH TO WATER (From top of casing)	16.97'	19.29'	18.36'	17.99'	17.55'
	VOLUME OF WATER REMOVED (gallons)	1	1	1	1	68
	TEMPERATURE (F)	68	68	65	68	6.92
	pH READING	6.81	6.98	7.12	6.97	1381
	ELECTRICAL CONDUCTIVITY	1370	1470	1357	1390	
SAMPLE	SAMPLE LOCATION	MW1	MW2	MW3	MW4	MW5
	TIME	3:35	4:15	4:45	5:16	5:50
	DEPTH TO WATER (From top of casing)	16.92'	18.71'	18.00'	17.67'	17.11'
	TOTAL WATER REMOVED (gallons)	25.7	22.5	23.7	24.5	25.4
	TEMPERATURE (F)	68	68	66	68	68
	pH READING	6.84	6.99	7.10	6.96	6.93
	ELECTRICAL CONDUCTIVITY	1360	1460	1362	1370	1373

NOTES:

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FILE NO: 238-91
DATE: 6-23-93

MONITORING WELL PURGING FOR SAMPLING RECORD

PROJECT LOCATION: EZ Serve #100877, 525 West "A" Street, Hayward, CA

SAMPLER NAME (Print): Shannon Bennett

PRIOR TO PURGING	SAMPLE LOCATION	MW6	MW7	MW8	MW9	MW10
	SCREEN INTERVAL (Top/Bottom)					
	CASING DIAMETER (in)	4	2	2	2	2
	ELEVATION OF TOP OF WELL CASING					
	DEPTH TO BOTTOM OF WELL CASING					
	TIME	5:55	8:00*	8:55*	9:57*	9:30*
	DEPTH TO WATER (From top of casing)	17.30'	17.67'	17.64'	15.84'	17.39'
	WELL SOUNDING DEPTH	30				
	VOLUME OF WATER IN WELL (gallons)	8.2	2.0	2.0	2.3	2.0
	TEMPERATURE (°F)	68	68	69	69	69
	pH READING	6.77	7.14	7.03	7.03	7.08
	ELECTRICAL CONDUCTIVITY	1380	1340	1940	1370	1350
	THICKNESS OF STANDING PRODUCT	0	0	0	0	0
	PETROLEUM SHEEN	NO	NO	NO	NO	NO
	PETROLEUM ODOR	YES	YES	?	YES	YES
DURING PURGING	SAMPLE LOCATION	MW6	MW7	MW8	MW9	MW10
	TIME	6:00	8:12	9:03	10:07	9:39
	DEPTH TO WATER (From top of casing)	17.43'	17.81'	17.73'	17.12'	17.42'
	VOLUME OF WATER REMOVED	2	2	2	2	2
	TEMPERATURE (F)	68	66	69	68	68
	pH READING	6.76	7.16	7.05	7.05	7.09
	ELECTRICAL CONDUCTIVITY	1340	1740	1930	1420	1370
END OF PURGING	SAMPLE LOCATION	MW6	MW7	MW8	MW9	MW10
	TIME	6:14	8:20	9:12	10:15	9:46
	DEPTH TO WATER (From top of casing)	17.58'	17.96'	17.91'	17.20'	17.91'
	VOLUME OF WATER REMOVED	1	2	2	2	2
	TEMPERATURE (F)	67	66	68	68	67
	pH READING	6.83	7.15	7.03	7.00	7.10
	ELECTRICAL CONDUCTIVITY	1360	1760	1780	1440	1380
SAMPLE	SAMPLE LOCATION	MW6	MW7	MW8	MW9	MW10
	TIME	6:18	8:27	9:17	10:20	9:50
	DEPTH TO WATER (From top of casing)	17.53'	17.80'	17.65'	16.91'	17.52'
	TOTAL WATER REMOVED (gallons)	24.8	8.0	8.0	9.2	8.0
	TEMPERATURE (F)	67	67	68	68	68
	pH READING	6.80	7.18	7.04	7.01	7.12
	ELECTRICAL CONDUCTIVITY	1370	1720	1840	1480	1300

NOTES: * MW 7, 8, 9 and 10 sampled on 6/24/93

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FILE NO: 238-91
DATE: 6-23-93

MONITORING WELL PURGING FOR SAMPLING RECORD

PROJECT LOCATION: EZ Serve #100877, 525 West "A" Street, Hayward, CA

SAMPLER NAME (Print): Shannon Bennett

PRIOR TO PURGING	SAMPLE LOCATION	MW1A				
	SCREEN INTERVAL (Top/Bottom)					
	CASING DIAMETER (in)					
	ELEVATION OF TOP OF WELL CASING					
	DEPTH TO BOTTOM OF WELL CASING	17.80'				
	TIME					
	DEPTH TO WATER (From top of casing)					
	WELL SOUNDING DEPTH					
	VOLUME OF WATER IN WELL (gallons)					
	TEMPERATURE (°F)					
	pH READING					
	ELECTRICAL CONDUCTIVITY					
	THICKNESS OF STANDING PRODUCT	2.50"				
	PETROLEUM SHEEN					
	PETROLEUM ODOR	YES				
DURING PURGING	SAMPLE LOCATION					
	TIME					
	DEPTH TO WATER (From top of casing)					
	VOLUME OF WATER REMOVED (gallons)					
	TEMPERATURE (F)					
	pH READING					
	ELECTRICAL CONDUCTIVITY					
END OF PURGING	SAMPLE LOCATION					
	TIME					
	DEPTH TO WATER (From top of casing)					
	VOLUME OF WATER REMOVED (gallons)					
	TEMPERATURE (F)					
	pH READING					
	ELECTRICAL CONDUCTIVITY					
SAMPLE	SAMPLE LOCATION					
	TIME					
	DEPTH TO WATER (From top of casing)					
	TOTAL WATER REMOVED (gallons)					
	TEMPERATURE (F)					
	pH READING					
	ELECTRICAL CONDUCTIVITY					

NOTES:

APPENDIX B

PROJECT: E-Z SERVE LOCATION #100877 JOB NO: 238-91
525 WEST "A" STREET
HAYWARD, CA

SUMMARY OF LABORATORY ANALYSIS

Results of field investigation conducted on June 21 & 22, 1993
and water samples collected on June 23 & 24, 1993

Constituents present in soil in parts per million

Sample I.D.	Depth (feet)	Benzene	Ethyl Benzene	Toluene	Total Xylenes	TPH Gas
MW7-5	5	ND	ND	ND	ND	ND
MW7-10	10	ND	ND	ND	ND	ND
MW7-15	15	0.012	0.038	ND	ND	0.5
MW8-5	5	ND	ND	ND	ND	ND
MW8-10	10	ND	ND	ND	ND	ND
MW8-15	15	ND	ND	ND	ND	ND
MW9-5	5	ND	ND	ND	ND	ND
MW9-10	10	0.015	ND	ND	ND	ND
MW9-15	15	0.13	0.19	0.027	0.76	9
MW10-5	5	ND	ND	ND	ND	ND
MW10-10	10	0.016	ND	ND	ND	ND
MW10-15	15	0.0089	0.051	ND	0.015	0.59
MRL	---	0.005	0.005	0.005	0.015	0.5

Constituents present in water in parts per billion

MW1	16.92	18000	1400	1100	3700	30000
MW2	18.71	23000	4500	1500	17000	60000
MW3	18.00	12000	1300	2700	3500	33000
MW4	17.67	3000	560	120	790	5700
MW5	17.11	5800	1100	120	2100	15000
MW6	17.53	4600	2700	850	3400	18000
MW7	17.80	4200	4400	71	5600	29000
MW8	17.65	43	35	9.3	67	350
MW9	16.91	14000	2800	1200	12000	45000
MW10	17.52	980	3500	640	12000	35000
TB	---	ND	ND	ND	ND	ND
MRL	---	varies	varies	varies	varies	varies

Method of Analysis: BTXE= 5030/8020; TPH gas = DHS:GC/FID
TPH = Total Petroleum Hydrocarbons
ND = Not Detected TB=Travel Blank
MRL = Minimum Reporting Limit

3349

6/22/93 5:35 PM w/ Bart Rocca, ASA: Test for TPH-G/BTEX Standard TAT, report results attn: Lisa Dunn, ASA. to Tulare office

SEND RESULTS AND INVOICE TO:

Associated Soils Analysis
1141 Batavia Court • Tulare, California 93274
(209) 688-1011 • FAX (209) 688-1195

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: David Harris
Sampler Name (Print): Gregory M. Sullivan
Project Address: 525 West "A" Street, Hayward, California
Project Number: 238-91
Project Name: Hayward E-Z Serve

I attest that the proper field sampling proceedures were used during the collection of these samples
Sampler Signature: Gregory M. Sullivan

Sample ID Number	Lab ID Number	Transport Chest Temp	# Containers	Matrix: SOIL	WATER	AIR	SLUDGE	OTHER	Method Preserved: ICE	HNO_3	HCl	OTHER	Sampling: DATE	TIME
MW7-5		32°F	1	✓					✓				6/21/93	1:11
MW7-10		32°F	1	✓					✓					1:22
MW7-15		32°F	1	✓					✓					1:32

ANALYSIS REQUEST

Sample ID Number	BTX&E (EPA 5030/8020)	TPH GASOLINE (DHS GC-FID)	TPH DIESEL (DHS GC-FID)	☐ EPA 601 ☐ EPA 602 plus Xylenes	TPH GASOLINE	TPH GASOLINE (MODIFIED EPA 8015 GC/FID)	TPH Diesel 3510 GC/FID	TPH Diesel 3550 GC/FID	TPH as Jet Fuel	TCLP: ☐ Metals ☐ VOA ☐ Semi VOA	TOTAL OIL AND GREASE ☐ 418.1 ☐ 413.2 ☐ 503A	☐ Total Lead ☐ Organic Lead (State Draft)	CAM Metals: ☐ STLC ☐ TTLC	EPTOX: ☐ Metals ☐ Pesticides ☐ Herbicides	EPA Priority Pollutant: ☐ Metals ☐ HSL	DBCP (EPA 504)	EDB (EPA 504)
MW7-5	X	X															
MW7-10	X	X															
MW7-15	X	X															

CUSTODY RECORD

Relinquished by Sampler:	Received by:	Received by:	Received by Laboratory: TAL 6/22/93 4:55
Time	4:55		
Date	6/22/93		

SPECIAL HANDLING
- ☐ 24 HOURS
- ☐ EXPEDITED 48 HOURS
- ☐ SEVEN DAY
- ☐ FAX
- ☐ OTHER ____ (#) of BUSINESS DAYS
- ☐ QA/QC
- ☐ CLP Level
- ☐ Blue Level

SPECIAL DETECTION LIMITS (Specify)
BTEX - ppm
TPH (gas) - ppm

REMARKS:
See special detection limits
Waiting soil, 3-BT, sf, Y-3, 5-Day

Lab Use Only
Storage Location
Lot No.:
Work Order No.:

3350

6/22/93 5:35pm w/ Bart Racca, ASA; Test for TPHG/BTEX Standard TAT, report results attn: Lisa Ernst, ASA to Tulare office

Associated Soils Analysis
1141 Batavia Court • Tulare, California 93274
(209) 688-1011 • FAX (209) 688-1195

SEND REPORT AND INVOICE TO:

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: David Harris
Sampler Name (Print): Gregory M. Sullivan
Project Address: 525 West "A" Street, Hayward, California
Project Number: 238-91
Project Name: Hayward E-Z Serve
I attest that the proper field sampling proceedures were used during the collection of these samples
Sampler Signature: Gregory M. Sullivan

Sample ID Number	Lab ID Number	Transport Chest Temp	# Containers	Matrix: SOIL	WATER	AIR	SLUDGE	OTHER	Method Preserved: ICE	HNO_3	HCl	OTHER	Sampling: DATE	TIME
MW9-5		32°F	1	✓					✓				6/22/93	8:52
MW9-10		32°F	1	✓					✓				"	9:06
MW9-15		32°F	1	✓					✓				"	9:16
MW10-5		32°F	1	✓					✓				"	12:10
MW10-10		32°F	1	✓					✓				"	12:21
MW10-15		33°F	1	✓					✓				"	12:31
MW8-5		33°F	1	✓					✓				"	3:09
MW8-10		33°F	1	✓					✓				"	3:21
MW8-15		33°F	1	✓					✓				"	3:31

ANALYSIS REQUEST

BTX&E (EPA 5030/8020)	TPH GASOLINE (DHS GC-FID)	TPH DIESEL (DHS GC-FID)	☐ EPA 601 ☐ EPA 602 plus Xylenes	TPH GASOLINE	TPH GASOLINE (MODIFIED EPA 8015 GC/FID)	TPH Diesel 3510 GC/FID	TPH Diesel 3550 GC/FID	TPH as Jet Fuel	TCLP: ☐ Metals ☐ VOA ☐ Semi VOA	TOTAL OIL AND GREASE ☐ 418.1 ☐ 413.2 ☐ 503A	☐ Total Lead ☐ Organic Lead (State Draft)	CAM Metals: ☐STLC ☐TTLC	EPTOX: ☐ Metals ☐ Pesticides ☐ Herbicides	EPA Priority Pollutant: ☐Metals ☐HSL	DBCP (EPA 504)	EDB (EPA 504)
X	X															
X	X															
X	X															
X	X															
X	X															
X	X															
X	X															
X	X															
X	X															

CUSTODY RECORD

Relinquished by Sampler:	Received by:	Received by:	Received by Laboratory:
			Transport Chest Temp. 6/22/93 4:55PM
			Scott T. Freeman TAL
Time	4:55	Time	Time	Time
Date	6/22/93	Date	Date	Date
Received by:		Received by:	Received by:

SPECIAL HANDLING

- ☐ 24 HOURS
- ☐ EXPEDITED 48 HOURS
- ☐ SEVEN DAY
- ☐ FAX
- ☐ OTHER _____ (#) of BUSINESS DAYS
- ☐ QA/QC
- ☐ CLP Level
- ☐ Blue Level

SPECIAL DETECTION LIMITS (Specify)

BTEX - ppm
TPH (gas) - ppm

REMARKS:

See special detection limits
water, soil, 9-BT, SF, Y-3, 5-Day?

Lab Use Only — Storage Location
Lot No.: — Work Order No.:

TAT - 5-Day

Trace Analysis Laboratory, Inc.
3423 Investment Boulevard, #8 • Hayward, California 94545
Telephone (510) 783-6960
Facsimile (510) 783-1512

TAL

LOG NUMBER: 3349
DATE SAMPLED: 06/21/93
DATE RECEIVED: 06/22/93
DATE EXTRACTED: 06/23/93
DATE ANALYZED: 06/24/93 and 06/25/93
DATE REPORTED: 06/29/93

CUSTOMER: E-Z Serve Petroleum Marketing Company

REQUESTER: David Harris of Associated Soils Analysis

PROJECT: No. 238-91, Hayward E-Z Serve

Sample Type: Soil

Method and Constituent:	Units	MW7-5 Concentration	MW7-5 Reporting Limit	MW7-10 Concentration	MW7-10 Reporting Limit	MW7-15 Concentration	MW7-15 Reporting Limit
DHS Method:							
Total Petroleum Hydrocarbons as Gasoline	mg/kg	ND	0.50	ND	0.50	0.50	0.50
Modified EPA Method 8020 for:							
Benzene	mg/kg	ND	0.0050	ND	0.0050	0.012	0.0050
Toluene	mg/kg	ND	0.0050	ND	0.0050	ND	0.0050
Ethylbenzene	mg/kg	ND	0.0050	ND	0.0050	0.038	0.0050
Xylenes	mg/kg	ND	0.015	ND	0.015	ND	0.015

Concentrations reported as ND were not detected at or above the reporting limit.

Trace Analysis Laboratory, Inc.
3423 Investment Boulevard, #8 • Hayward, California 94545
Telephone (510) 783-6960
Facsimile (510) 783-1512

TAL

LOG NUMBER: 3350
DATE SAMPLED: 06/22/93
DATE RECEIVED: 06/22/93
DATE EXTRACTED: 06/23/93
DATE ANALYZED: 06/24/93
DATE REPORTED: 06/29/93

CUSTOMER: E-Z Serve Petroleum Marketing Company

REQUESTER: David Harris of Associated Soils Analysis

PROJECT: No. 238-91, Hayward E-Z Serve

Sample Type: Soil

Method and Constituent:	Units	MW8-5 Concentration	MW8-5 Reporting Limit	MW8-10 Concentration	MW8-10 Reporting Limit	MW8-15 Concentration	MW8-15 Reporting Limit
DHS Method:							
Total Petroleum Hydrocarbons as Gasoline	mg/kg	ND	0.50	ND	0.50	ND	0.50
Modified EPA Method 8020 for:							
Benzene	mg/kg	ND	0.0050	ND	0.0050	ND	0.0050
Toluene	mg/kg	ND	0.0050	ND	0.0050	ND	0.0050
Ethylbenzene	mg/kg	ND	0.0050	ND	0.0050	ND	0.0050
Xylenes	mg/kg	ND	0.015	ND	0.015	ND	0.015

Method and Constituent:	Units	MW9-5 Concentration	MW9-5 Reporting Limit	MW9-10 Concentration	MW9-10 Reporting Limit	MW9-15 Concentration	MW9-15 Reporting Limit
DHS Method:							
Total Petroleum Hydrocarbons as Gasoline	mg/kg	ND	0.50	ND	0.50	9.0	0.50
Modified EPA Method 8020 for:							
Benzene	mg/kg	ND	0.0050	0.015	0.0050	0.13	0.0050
Toluene	mg/kg	ND	0.0050	ND	0.0050	0.027	0.0050
Ethylbenzene	mg/kg	ND	0.0050	ND	0.0050	0.19	0.0050
Xylenes	mg/kg	ND	0.015	ND	0.015	0.76	0.015

Concentrations reported as ND were not detected at or above the reporting limit.

TAL Trace Analysis Laboratory, Inc.

LOG NUMBER: 3350
DATE SAMPLED: 06/22/93
DATE RECEIVED: 06/22/93
DATE EXTRACTED: 06/23/93
DATE ANALYZED: 06/24/93 and 06/25/93
DATE REPORTED: 06/29/93
PAGE: Two

Sample Type: Soil

Method and Constituent:	Units	MW10-5 Concentration	MW10-5 Reporting Limit	MW10-10 Concentration	MW10-10 Reporting Limit	MW10-15 Concentration	MW10-15 Reporting Limit
DHS Method:							
Total Petroleum Hydrocarbons as Gasoline	mg/kg	ND	0.50	ND	0.50	0.59	0.50
Modified EPA Method 8020 for:							
Benzene	mg/kg	ND	0.0050	0.016	0.0050	0.0089	0.0050
Toluene	mg/kg	ND	0.0050	ND	0.0050	ND	0.0050
Ethylbenzene	mg/kg	ND	0.0050	ND	0.0050	0.051	0.0050
Xylenes	mg/kg	ND	0.015	ND	0.015	0.015	0.015

Method and Constituent:	Units	Method Blank Concentration	Method Blank Reporting Limit
DHS Method:			
Total Petroleum Hydrocarbons as Gasoline	mg/kg	ND	0.50
Modified EPA Method 8020 for:			
Benzene	mg/kg	ND	0.0050
Toluene	mg/kg	ND	0.0050
Ethylbenzene	mg/kg	ND	0.0050
Xylenes	mg/kg	ND	0.015

QC Summary

% Recovery:	91	86
% RPD:	2.0	8.7

Concentrations reported as ND were not detected at or above the reporting limit.

Louis W. DuPuis
Quality Assurance/Quality Control Manager

TAL Trace Analysis Laboratory, Inc.

LOG NUMBER: 3349
DATE SAMPLED: 06/21/93
DATE RECEIVED: 06/22/93
DATE EXTRACTED: 06/23/93
DATE ANALYZED: 06/24/93 and 06/25/93
DATE REPORTED: 06/29/93
PAGE: Two

Sample Type: Soil

Method and Constituent:	Units	Method Blank Concentration	Method Blank Reporting Limit
DHS Method:			
Total Petroleum Hydrocarbons as Gasoline	mg/kg	ND	0.50
Modified EPA Method 8020 for:			
Benzene	mg/kg	ND	0.0050
Toluene	mg/kg	ND	0.0050
Ethylbenzene	mg/kg	ND	0.0050
Xylenes	mg/kg	ND	0.015

QC Summary:

% Recovery: 91 86
% RPD: 2.0 8.7

Concentrations reported as ND were not detected at or above the reporting limit.

Louis W. DuPuis
Quality Assurance/ Quality Control Manager

SEND RESULTS AND INVOICE TO:

Associated Soils Analysis
1141 Batavia Court • Tulare, California 93274
(209) 688-1011 • FAX (209) 688-1195

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: David Lamas

Sampler Name (Print): Shannon Bennett

Project Address: 525 WEST "F" ST Hayward Ca.

Project Number: 235-91

Project Name: Hayward E-Z Serve

I attest that the proper field sampling proceedures were used during the collection of these samples

Sampler Signature: Shannon Bennett

Boring Number and Sample ID Number	Depth	Transport Chest Temp	# Containers	Matrix: SOIL	WATER	AIR	SLUDGE	OTHER	Method Preserved: ICE	HNO_3	HCl	OTHER	Sampling: DATE	TIME
MW#1	16.92	33	2		✓				✓		✓		6/23/93	3:35pm
MW#2	18.71	33	2		✓				✓		✓		6/23/93	4:15pm
MW#3	18.00	34	2		✓				✓		✓		6/23/93	4:45pm
MW#4	17.67	34	2		✓				✓		✓		6/23/93	5:16pm
MW#5	17.11	34	2		✓				✓		✓		6/23/93	5:50pm
MW#6	17.53	34	2		✓				✓		✓		6/23/93	6:18pm
TRAVEL BLANK	—	32	1		✓				✓				6/23/93	—

ANALYSIS REQUEST

BTX&E (EPA 5030/8020)	TPH GASOLINE (DHS GC-FID)	TPH DIESEL (DHS GC-FID)	☐ EPA 601 ☒ EPA 602 plus Xylenes	TPH GASOLINE	TPH GASOLINE (MODIFIED EPA 8015 GC/FID)	TPH Diesel 3510 GC/FID	TPH Diesel 3550 GC/FID	TPH as Avialion Fuel	TCLP: ☐ Metals ☐ VOA ☐ Semi VOA	TOTAL OIL AND GREASE ☐ 418.1 ☐ 413.2 ☐ 503A	☐ Organic Lead (State Drall) ☐ Total Lead	CAM Metals: ☐ STLC ☐ TTLC	EPTOX: ☐ Metals ☐ Pesticides ☐ Herbicides	EPA Priority Pollutant: ☐ Metals ☐ ISL	DBCP (EPA 504)	EDB (EPA 504)
	✓		✓								✓					
	✓		✓								✓					
	✓		✓								✓					
	✓		✓								✓					
	✓		✓								✓					
	✓		✓								✓					
	✓		✓													

CUSTODY RECORD

Relinquished by Sampler:	Received by:	Received by Laboratory:
Shannon Bennett	[illegible]	Transport Chest Temp. 6/24/93 TAL
Date: 6/24/93	Date: 6/24/93	Date: 6/24/93
Time: 11:40	Time:	Time:

Received by: [illegible]

Received by: [illegible]

SPECIAL HANDLING

- ☐ 24 HOURS
- ☐ EXPEDITED 48 HOURS
- ☒ SEVEN DAY
- ☐ FAX
- ☐ OTHER ____ (#) of BUSINESS DAYS
- ☐ QA/QC
- ☐ CLP Level
- ☐ Blue Level

SPECIAL DETECTION LIMITS (Specify)

REMARKS:

Lab Use Only — Storage Location

Lot No.: — Work Order No.:

Walkin, ice, preHCl, Conn, 5-Day

3357

2 of 2

SEND RESULTS AND INVOICE TO:

Associated Soils Analysis
1141 Batavia Court • Tulare, California 93274
(209) 688-1011 • FAX (209) 688-1195

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: DAVID HARRIS
Sampler Name (Print): Shannon Bennett
Project Address: 525 WEST "A" ST. Hayward Ca.
Project Number: 238-91
Project Name: Hayward E-Z Serve
I attest that the proper field sampling procedures were used during the collection of these samples
Sampler Signature: Shannon Bennett

Boring Number and Sample ID Number	Depth	Transport Chest Temp	# Containers	Matrix: SOIL	WATER	AIR	SLUDGE	OTHER	Method Preserved: ICE	HNO_3	HCl	OTHER	Sampling: DATE	TIME
B1-E1	17.80	32	2		✓				✓		✓		6/24/93	8:27
B1-E2	17.65	34	2		✓				✓		✓		6/24/93	9:17
B1-E3	16.91	35	2		✓				✓		✓		6/24/93	10:20
B1-E4	17.52	35	2		✓				✓		✓		6/24/93	9:50
Trip Blank	—	33	1		✓				✓		✓		6/24/93	—

ANALYSIS REQUEST

BTX&E (EPA 5030/8020)	TPH GASOLINE (DHS GC-FID)	TPH DIESEL (DHS GC-FID)	☒ EPA 602 plus Xylenes	☐ EPA 601	TPH GASOLINE	TPH GASOLINE (MODIFIED EPA 8015 GC/FID)	TPH Diesel 3510 GC/FID	TPH Diesel 3550 GC/FID	TPH as Aviation Fuel	TCLP: ☐ Metals ☐ VOA ☐ Semi VOA	TOTAL OIL AND GREASE ☐ 418.1 ☐ 413.2 ☐ 503A	☐ Organic Lead (State Draft) ☐ Total Lead	CAM Metals: ☐ STLC ☐ TTLC	EPTOX: ☐ Metals ☐ Pesticides ☐ Herbicides	EPA Priority Pollutant: ☐ Metals ☐ ISL	DBCP (EPA 504)	EDB (EPA 504)
	✓		✓	✓													
	✓		✓	✓													
	✓		✓	✓													
	✓		✓	✓													
	✓		✓	✓													

Relinquished by Sampler: Shannon Bennett — Date 6/24/93 — Time 11:40
Received by: — Date — Time
Received by: — Date — Time

CUSTODY RECORD

Received by: M. Villa — Date — Time
Received by: — Date — Time
Received by Laboratory: TAL — Date 6/24/93 — Time 12:00 PM
Transport Chest Temp.

SPECIAL HANDLING

- ☐ 24 HOURS
- ☐ EXPEDITED 48 HOURS
- ☒ SEVEN DAY
- ☐ FAX
- ☐ OTHER ____ (#) of BUSINESS DAYS
- ☐ QA/QC
- ☐ CLP Level
- ☐ Blue Level

SPECIAL DETECTION LIMITS (Specify)

REMARKS:

Lab Use Only — Storage Location
Lot No.: — Work Order No.:

Trace Analysis Laboratory, Inc.
3423 Investment Boulevard, #8 • Hayward, California 94545
Telephone (510) 783-6960
Facsimile (510) 783-1512

TAL

LOG NUMBER: 3357
DATE SAMPLED: 06/23/93
DATE RECEIVED: 06/24/93
DATE ANALYZED: 06/28/93 and 06/29/93
DATE REPORTED: 07/01/93

CUSTOMER: E-Z Serve Petroleum Marketing Company

REQUESTER: David Harris of Associated Soils Analysis

PROJECT: No. 238-91, Hayward E-Z Serve, 525 West A Street, Hayward, CA

Sample Type: Water

Method and Constituent:	Units	MW#1 Concentration	MW#1 Reporting Limit	MW#2 Concentration	MW#2 Reporting Limit	MW#3 Concentration	MW#3 Reporting Limit
DHS Method:							
Total Petroleum Hydrocarbons as Gasoline	ug/l	30,000	680	60,000	1,400	33,000	2,700
Modified EPA Method 8020 for:							
Benzene	ug/l	18,000	36	23,000	71	12,000	110
Toluene	ug/l	1,100	37	1,500	75	2,700	120
Ethylbenzene	ug/l	1,400	38	4,500	76	1,300	120
Xylenes	ug/l	3,700	100	17,000	200	3,500	310

Method and Constituent:	Units	MW#4 Concentration	MW#4 Reporting Limit	MW#5 Concentration	MW#5 Reporting Limit	MW#6 Concentration	MW#6 Reporting Limit
DHS Method:							
Total Petroleum Hydrocarbons as Gasoline	ug/l	5,700	140	15,000	1,400	18,000	140
Modified EPA Method 8020 for:							
Benzene	ug/l	3,000	7.1	5,800	71	4,600	7.1
Toluene	ug/l	120	7.5	120	75	850	7.5
Ethylbenzene	ug/l	560	7.6	1,100	76	2,700	7.6
Xylenes	ug/l	790	20	2,100	200	3,400	20

Concentrations reported as ND were not detected at or above the reporting limit.

TAL Trace Analysis Laboratory, Inc.

LOG NUMBER: 3357
DATE SAMPLED: 06/24/93
DATE RECEIVED: 06/24/93
DATE ANALYZED: 06/28/93 and 06/29/93
DATE REPORTED: 07/01/93
PAGE: Two

Sample Type: Water

Method and Constituent:	Units	MW#7 Concentration	MW#7 Reporting Limit	MW#8 Concentration	MW#8 Reporting Limit	MW#9 Concentration	MW#9 Reporting Limit
DHS Method:							
Total Petroleum Hydrocarbons as Gasoline	ug/l	29,000	270	350	50	45,000	1,400
Modified EPA Method 8020 for:							
Benzene	ug/l	4,200	14	43	1.1	14,000	71
Toluene	ug/l	71	15	9.3	1.2	1,200	75
Ethylbenzene	ug/l	4,400	15	35	1.2	2,800	76
Xylenes	ug/l	5,600	40	67	3.1	12,000	200

Concentrations reported as ND were not detected at or above the reporting limit.

TAL Trace Analysis Laboratory, Inc.

LOG NUMBER: 3357
DATE SAMPLED: 06/23/93 and 06/24/93
DATE RECEIVED: 06/24/93
DATE ANALYZED: 06/27/93 and 06/28/93
DATE REPORTED: 07/01/93
PAGE: Three

Sample Type: Water

Method and Constituent:	Units	MW#10 Concentration	MW#10 Reporting Limit	Travel Blank Concentration	Travel Blank Reporting Limit	Method Blank Concentration	Method Blank Reporting Limit
DHS Method:							
Total Petroleum Hydrocarbons as Gasoline	ug/l	35,000	1,400	ND	50	ND	50
Modified EPA Method 8020 for:							
Benzene	ug/l	980	71	ND	0.50	ND	0.50
Toluene	ug/l	640	75	ND	0.50	ND	0.50
Ethylbenzene	ug/l	3,500	76	ND	0.50	ND	0.50
Xylenes	ug/l	12,000	200	ND	1.5	ND	1.5

QC Summary

% Recovery:	99	96
% RPD:	2.3	5.7

Concentrations reported as ND were not detected at or above the reporting limit.

Louis W. DuPuis
Quality Assurance/ Quality Control Manager

E-Z Location #100877
525 West A Street
Hayward California

MW #	Date	Well Elev (feet)	Depth to F.P. (feet)	Depth to G.W (feet)	F.P. Thickness (feet)	G.W. Elevation (feet)	(EPA 8015) TPH (ppb)	(EPA 8020) B (ppb)	T (ppb)	E (ppb)	X (ppb)
MW #1											
	5-Feb-92	99.91		20.82	0.00	79.09	46,000	76,000	23,000	2,400	6,500
	11-Sep-92			20.08	0.00	79.83	48,000	9,000	1,200	1,800	4,600
	22-Dec-92			19.79	0.00	80.12	84,000	22,000	1,600	4,800	17,000
	3-Mar-93			16.23	0.00	83.68	54,000	16,000	1,600	1,900	4,300
MW #2											
	5-Feb-92	101.45		22.35	0.00	79.10	67,000	13,000	4,700	820	1,300
	11-Sep-92			21.67	0.00	79.78	57,000	9,000	1,400	1,200	8,400
	22-Dec-92			21.39	0.00	80.06	31,000	9,900	350	2,000	4,100
	3-Mar-93			17.75	0.00	83.70	17,000	5,100	1,300	720	1,900
MW #3											
	5-Feb-92	101.50		21.85	0.00	79.65	5,900	1,100	nd	nd	nd
	11-Sep-92			21.13	0.00	80.37	9,400	1,200	180	550	1,100
	22-Dec-92			20.88	0.00	80.62	12,000	2,800	190	850	1,600
	3-Mar-93			17.29	0.00	84.21	11,000	2,200	360	570	900
MW #4											
	5-Feb-92	100.50		21.31	0.00	79.19	16,000	2,700	410	nd	3,400
	11-Sep-92			20.62	0.00	79.88	43,000	7,600	1,600	1,400	4,100
	22-Dec-92			20.37	0.00	80.13	29,000	8,800	1,200	1,500	3,700
	3-Mar-93			16.78	0.00	83.72	17,000	5,000	1,500	680	1,700

E-Z Location #100877
525 West A Street
Hayward California

MW #	Date	Well Elev (feet)	Depth to F.P. (feet)	Depth to G.W (feet)	F.P. Thickness (feet)	G.W. Elevation (feet)	(EPA 8015) TPH (ppb)	(EPA 8020) B (ppb)	T (ppb)	E (ppb)	X (ppb)
MW #5											
	5-Feb-92	100.48		20.93	0.00	79.55	78,000	7,900	5,000	2,900	1,800
	11-Sep-92			20.27	0.00	80.21	49,000	4,700	400	1,400	4,100
	22-Dec-92			19.99	0.00	80.49	34,000	8,600	340	2,200	4,800
	3-Mar-93			16.49	0.00	83.99	22,000	7,500	640	1,300	3,400
MW #6											
	5-Feb-92	100.97		21.29	0.00	79.68	51,000	5,400	3,500	3,600	10,000
	11-Sep-92			20.56	0.00	80.41	24,000	2,500	830	1,400	2,300
	22-Dec-92			20.31	0.00	80.66	23,000	5,100	630	2,000	3,100
	3-Mar-93			16.83	0.00	84.14	18,000	4,400	820	1,400	2,400

EZ Serve Location # 100877
525 North "A" Street
Hayward, California

JOB # 238-91

SUMMARY OF LABORATORY ANALYSIS
METHOD OF ANALYSIS- CALIFORNIA LUFT MANUAL

Results of field investigation conducted on January 28 and 29, 1992

SOIL IN PPM

Monitoring Well No.	Sample I.D.	Depth (feet)	Benzene	Ethyl Benzene	Toluene	Total Xylenes	TPH	Organic Lead	EDB
MW1	1	11-11.5	0.12	0.0073	ND	0.0053	ND	---	---
MW1	2	16-16.5	0.98	0.17	0.013	0.35	19	---	---
MW2	4	11-11.5	ND	ND	ND	ND	ND	---	---
MW2	5	16-16.5	ND	1.1	ND	0.057	5.4	ND	ND
MW3	7	11-11.5	0.69	0.048	ND	0.013	5.6	---	---
MW3	8	16-16.5	1	0.13	ND	0.078	6.4	ND	ND
MW4	10	6-6.5	0.035	0.4	ND	1.6	28	---	---
MW4	11	11-11.5	0.22	0.17	0.076	0.64	5.7	---	---
MW4	12	16-16.5	2.7	0.39	1.2	1.8	15	---	---
MW5	14	11-11.5	0.3	0.049	ND	0.019	0.79	---	---
MW5	15	16-16.5	0.66	0.16	0.016	0.55	7.2	---	---
MW6	17	11-11.5	0.0076	ND	ND	0.0052	ND	---	---
MW6	18	16-16.5	0.17	0.016	ND	0.021	0.55	---	---

Soil values are in ppm

Test method for BTX&E = EPA 5030/8020
Test method for TPH = DOHS/LUFT Manual
Test method for EDB = EPA 504
Test method for Organic Lead = State draft
ND = Non-detected
Refer to laboratory reporting forms for specific reporting information.