[redacted]

Associated Soils Analysis

1141 Batavia Ct. • Tulare, California 93274 • (209) 688-1011

SITE ASSESSMENT STUDY
FOR PETROLEUM CONSTITUENTS
PRESENT IN THE SOIL AND GROUNDWATER AT
E-Z SERVE PETROLEUM MARKETING
LOCATION NO. 100877
LOCATED AT
525 WEST "A" STREET
HAYWARD, CALIFORNIA

MARCH 2, 1992

Associated Soils Analysis

March 2, 1992
File No. 238-91

Amy Stites
E-Z Serve Petroleum Marketing Co.
10700 North Freeway, Suite 500
Houston, Texas 77037

Project: E-Z Serve Petroleum Marketing Site, location No. 100877, located at 525 West "A" Street, Hayward, California

Subject: Installation of six groundwater monitoring wells and the abandonment of two previously installed groundwater monitoring wells in continuing the site investigation for petroleum constituents present in soil and groundwater.

Dear Ms. Stites:

In accordance with the approved workplan dated October 2, 1991, approved by your office, two monitoring wells were abandoned and six monitoring wells were drilled at 525 West "A" Street, Hayward, California. These monitoring wells were installed to determine the lateral and vertical extent of petroleum constituents in the soil and impact on groundwater. Several of the groundwater monitoring wells scheduled for destruction could not be located due to current site conditions. The field investigation was conducted on January 28 and 29, 1991.

Our field investigation and laboratory analyses were conducted in accordance with approved A.S.T.M. test methods, EPA regulations and Alameda County Requirements 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:cm

cc: Eddie So, CRWQCB
Thomas F. Peacock, Alameda County Department of Environmental Health

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FINDINGS

The findings that follow are a result of the field investigation conducted on January 28 & 29, 1992, and February 5, 1992 and the laboratory soil and groundwater analyses of selected soil and groundwater samples.

A. Field Investigation (APPENDIX A):

1. The site lithology is generally comprised of laterally continuous horizontal layers of well graded and poorly graded sands and silty sand interbedded with medium to stiff clayey silt, silty clay and clay.

2. The depth to groundwater is approximately 21 feet below surface grade.

3. Petroleum odors were noted in soils encountered drilling and sampling of Monitoring Wells MW1-MW6 from approximately 7 feet below grade to the bottom of the boring at 30 feet below grade.

4. HNU 101 Photoionization Meter (P.I.M.) readings indicate volatile petroleum constituents were present in soil samples from all Monitoring Wells (MW1 through MW6). Meter readings ranged from 10 ppm to 180 ppm. The highest levels generally were associated with soil samples collected just above the groundwater level.

5. Soil stains were observed in all the monitoring well borings, generally beginning at approximately 7 feet below grade.

6. Groundwater was encountered at approximately 21 feet below grade. The site specific gradient is approximately 0.02 feet per foot radiating away from MW4 located near the center of the site.

7. During the groundwater sampling phase of the site investigation, petroleum odors were detected at Monitoring Wells MW1 through MW6.

8. Floating product was not observed on the groundwater surface in monitoring wells installed during this site investigation.

9. Floating product, petroleum odor and petroleum sheen were detected and observed on the groundwater surface of previously installed MW1a during the sampling phase conducted on February 5, 1992.

B. Laboratory Analyses of Soil and Groundwater Samples (APPENDIX B):

1. Petroleum constituents were present in soil samples collected from all monitoring well borings during this investigation. Levels of Benzene ranged from .0076 ppm to 2.7 ppm, Toluene ranged from non-detect to 1.2 ppm, and Total Petroleum Hydrocarbons (gasoline) ranged from non-detect to 28 ppm.

2. Laboratory analyses of groundwater samples indicated detectable levels of petroleum constituents in all the groundwater monitoring wells installed during this investigation. The highest levels were present in the sample collected from Monitoring Well MW5. Benzene levels ranged from 1100 ppb to 13,000 ppb, and Total Petroleum Hydrocarbons as gasoline ranged from 5,900 ppb to 67,000 ppb.

CONCLUSIONS

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

1. Petroleum constituents have impacted soil and groundwater at the subject site.

2. The lateral extent of petroleum constituents impacting soil and groundwater has not been defined.

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 and installing six on-site groundwater monitoring wells using a Mobile B-80 drilling rig with 6.25 inch inside diameter hollow stem augers.

3. Visually classifying and continuously logging substrata encountered at monitoring well locations (APPENDIX A).

4. Collecting soil samples at 5-foot intervals and a groundwater sample at each monitoring well location.

5. Field screening soil samples using a HNU 101 Photoionization Meter (APPENDIX A).

6. Conducting laboratory tests on soil and groundwater samples collected from the testhole borings/monitoring wells (**APPENDIX B**).
7. Analyzing and interpreting field data and laboratory results.
8. Surveying the monitoring wells and determining the site specific groundwater gradient and flow direction.
9. Abandoning two and repairing one existing groundwater monitoring wells.
10. Preparing a final report.

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

SITE DESCRIPTION

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

SITE BACKGROUND

The subject was formerly a Mobile Station having four 10,000 gallon underground storage tanks. These tanks were removed on June 15, 1990. A fuel system leak was discovered in November 1986, as a result of a discrepancy in inventory reconciliation, prior to the removal of the tanks, . Converse Environmental Consultants of California (CECC) conducted a Phase I site assessment as an initial step in assessing the extend of gasoline contamination at the site. During this phase, soil borings were drilled on the station property to 30 feet below ground surface. The borings were converted into Monitoring Wells designated MW1 through MW3.

A Phase II investigation was implemented in June 1987, to assess: (1) the potential threat of contamination of groundwater, and, (2) the potential for off-site migration of the groundwater contamination. During the Phase II investigation, three additional monitoring wells (MW4 through MW6), were installed to a depth of 30 to 31 feet below ground surface. The six wells were purged and sampled at that time. In 1990, during the removal of the tanks and grading of the property, Monitoring Wells MW2, MW5 and MW6 were destroyed and Monitoring Wells MW1, MW3 and MW4 were damaged.

A workplan prepared by Associated Soils Analysis, Inc., dated October 2, 1991, was approved by Alameda County and the investigation was conducted on January 28 and 29, 1992. Six groundwater monitoring wells were drilled, sampled and installed. Two previously installed groundwater monitoring wells were abandoned and one well-head closure was reconstructed in accordance with the approved workplan. Previously installed Monitoring Wells MW3, MW5 and MW6 could not be located for abandonment due to previous grading procedures conducted at the site.

SITE CONDITIONS

The following conditions were noted at the site at the time of the field investigation conducted on January 28 and 29, 1992:

1. The site is located at the northwest corner at the intersection of West "A" Street and Garden street, Hayward, California.
2. The site has undergone extensive grading and remains unpaved. It is essentially flat with a slight undulating surface except for the former fuel tank area.
3. The site has interior drainage with located ponding.

4. The fuel tank excavation, located in the northwest corner of the site, has not been backfilled to grade.

5. A 13 foot canopy covers the fuel island on site, although the fuel dispensers have been removed.

6. Numerous small businesses are located adjacent to West "A" Avenue. Single family residences, apartments and a trailer park lie beyond the businesses to the north and south.

7. Potable water is supplied by the City of Hayward.

8. An underground water line lies on the north side of "A" Street in a utility easement.

9. The site is enclosed by a seven foot chain link fence on 3 sides (north, east and south).

SUBSURFACE LITHOLOGY

Subsurface soils were logged during the drilling and sampling of the testhole borings/monitoring wells. The soils consist of interbedded sand, silt and clay combinations to a depth of 30 feet where the borings were terminated (APPENDIX A). A subsurface profile of the soils beneath the site is shown in FIGURE 4.

A medium dense, highly cohesive clay was encountered in Monitoring Wells MW1 and MW5 below the approximate depth of 29 feet below ground surface. This soil unit is overlain below a depth of 23 feet by loose to medium dense, poorly graded and well graded sands and silty sands in gradational contact. A moderately to highly cohesive, medium dense clay was encountered between the approximate depth of 14 feet to 23 feet below grade. A loose, very fine to fine silty sand overlies the clay layer below the approximate depth of 10 feet below grade. A medium dense to stiff moderately cohesive clayey silts overlie the silty sands to surface grade. A gravelly sand backfill material was encountered in the centrally located Monitoring Well MW4 from the ground surface to two feet below grade.

GEOLOGY

The site 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 closest major faults in the vicinity of the site are the Hayward Fault, the San Andreas and the Calaveras Fault. 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 associated with the Morgan Hill, Coyote Lake and the San Andreas Faults (Wesnousky, 1986). A large magnitude earthquake along the San Andreas, Calaveras and the Hayward Faults could produce strong ground 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 6-21 feet below the ground surface. The average annual rainfall is approximately 20 inches (Hornbeck, 1983).

FIELD INVESTIGATION

The field investigation consisted of drilling, logging and sampling six (6) testhole boring monitoring wells. The six borings were drilled on January 28 and 29, 1992, and were positioned to determine the presence and extent of petroleum constitutents in the soil and groundwater associated with four (4) 10,000 gallon underground fuel storage tanks, fuel lines and product dispensers (FIGURE 3).

Previously installed groundwater Monitoring Wells MW2 and MW4 were abandoned as outlined in the workplan. Because of grading procedures at the site, previously installed Monitoring Wells MW3, MW5 and MW6 could not be located for demolition and abandonment. The wellhead closure on the previously installed groundwater Monitoring Well MW1 (designated herein as MW1a) was reconstructed for possible remediation use. The monitoring wells installed during this investigation are designated as Monitoring Wells MW1 through MW6 and supercede any previous numbering system (FIGURE 3).

Monitoring Well MW1 was drilled in the southwest corner of the site to assess the southwestern extent of petroleum constituents impacting soil and groundwater.

Monitoring Well MW2 was drilled near the northwest corner of the property adjacent to the fuel tank excavation. This well was drilled to assess the northwestern extent of petroleum constituents impacting soil and groundwater.

Monitoring Well MW3 was drilled near the northeast corner of the property to assess the northeastern extent of petroleum constituents impacting soil and groundwater.

Monitoring Well MW4 was drilled in the approximate center of the site where levels of petroleum constituents were detected during the sampling of the product lines. This boring/monitoring well was used to determine the vertical extent of petroleum constituents impacting soil and groundwater at the site.

Monitoring Well MW5 was drilled in the south central portion of the site to determine the southern extent of petroleum constituents impacting soil and groundwater.

Monitoring Well MW6 was drilled in the southeastern corner of the site to determine the southeastern extent of petroleum constituents impacting soil and groundwater.

All groundwater monitoring wells installed during this investigation were located in the vicinity of previously installed monitoring well locations, now abandoned or lost.
Soil samples were collected at 5 foot intervals beginning at 10 feet below grade and terminated at the groundwater interface at aproximately 21 feet, except in centrally located Monitoring Well MW4, where sampling began at 5 feet below grade. Monitoring Wells MW1 through MW5 were drilled to a maximum depth of 30 feet below ground surface.

An HNU 101 Photoionization Meter was used to measure levels of volatile petroleum hydrocarbons omitted from soil samples collected during this investigation. Volatile hydrocarbon constituents were detected in all soil samples collected from all borings with levels ranging from 5 ppm to 180 ppm.

Petroleum odors were detected in soil samples collected from all the testhole borings/monitoring wells below an approximate depth of 6.5 feet below grade.

Stained soil was also observed in all monitoring wells below an approximate depth of 7.5 feet below grade.

Groundwater samples were collected from the monitoring wells installed during this investigation on February 5, 1992. Petroleum odors were detected in groundwater samples collected from Monitoring Wells MW1 through MW6. Floating product was not present on any of the groundwater samples collected from monitoring wells installed during this investigation. Floating product was, however, observed in the previously installed Monitoring Well MW1a on January 28, 1992.

PRELIMINARY SITE INVESTIGATION

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

TESTHOLE SOIL BORINGS AND FIELD SAMPLING GUIDELINES

Drilling Method

A truck mounted Mobile B-80 drill rig with 6.25 inch inside diameter hollow stem auger (AASHTO Designation T251-77) was used to drill and abandon the testhole boring/monitoring wells. The drilling equipment was pre-cleaned by steam prior to and between each testhole boring, by placing augers on racks in a tub. The rinsate was collected into 55 gallon drums with bolt-on lids and stored at the site.

Field Soil Sampling Procedures and Soil Classification

Undisturbed soil samples were collected at 5 foot depth intervals. The soil samples were collected using a 2.5 inch inside diameter by 18 inch long split spoon sampler. Three 2.5 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 before insertion into the sampler. The split spoon sampler was also cleaned using the same methods, as previously described, between each sample interval.

After each soil sample is collected, the sample tube from the bottom of the sampler is 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 cloth tape is placed around the plastic caps to insure that the caps are secured and remain sealed.

The middle tube sample from the split spoon sampler or the soil from the sampler shoe was placed in sealable plastic bags. 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 determine the levels of fuel contamination encountered in the testhole sample and also assist in selecting the soil samples for laboratory analysis.

Soils encountered in the monitoring well borings were logged and classified in accordance with the Unified Soil Classification System during drilling operations. Standard penetration blow counts were recorded during the soil sampling (APPENDIX A). 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, HNU 101 Photoionization Meter readings, sample numbers and 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 the project engineer 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 containing blue ice. The temperature inside the storage container was maintained at 4 degrees Celsius/39.2 degrees Fahrenheit and monitored with a thermometer to ensure that the temperature remained constant.

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 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 Trace Analysis Laboratory, Inc., a State certified hazardous waste testing laboratory, within 12 hours after the samples were collected. The temperature was maintained at or below 4 degrees Celsius in the insulated storage container prior to

was maintained at or below 4 degrees Celsius in the insulated storage container 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.

GROUNDWATER MONITORING WELL CONSTRUCTION

The six groundwater monitoring wells were completed using thread jointed 4 inch diameter Schedule 40 PVC casing. No chemicals, glues, or solvents were used in the well construction. The screened portion of the well was 14 feet in length and consisted of factory perforated 0.020 inch slots.

The slotted pipe was installed within the approximate depth interval of 15 to 29 feet below the ground surface. The water table is at a depth of approximately 21 feet below the surface. This placed the top screen perforation approximately 6 feet above the soil groundwater interface.

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 Number 3 silica sand filter packing. The filter pack extended approximately 1 to 2 feet above the top slot of the screen. A 2 to 3 foot bentonite pellet seal was placed above the filter pack and hydrated. The remaining annular space was sealed with a bentonite-cement grout. A locking PVC well

cap was installed on the top of the well enclosed in a metal housing with a steel bolt down cover. Information concerning the construction of monitoring wells is included in APPENDIX A.

TESTHOLE BORING CONTAINMENT

The soil cuttings generated from the drilling of the monitoring wells were stored in Model 17H, steel, hazardous waste storage barrels with bolt on steel lids, and retained on the fenced site. The soil cuttings will remain on site until laboratory test results on soil samples are available. After review of the laboratory test results, appropriate disposal of boring soil cuttings can be determined.

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 formation adjacent to the well screen was removed. The development process, time intervals and amount of well development water removed varied depending on the aquifer formation encountered. Waste water produced during the development was place in Model 17H, 55 gallon, hazardous waste storage barrels and stored on site.

METHOD AND CONTAINER USED TO COLLECT GROUNDWATER SAMPLES

Water samples were collected to determine if groundwater had been impacted by petroleum constituents. The samples were collected using a disposable 1.7 inch x 36 inch disposable Teflon bailer. The wells were purged of groundwater 3 to 4 times the well volume. The wells were allowed to stabilize for 30 minutes prior to inserting the disposable bailer into the well and

sample. The representative sample was placed into two 40 ml. V.O.A. glass containers. The samples were transported in a sealed ice chest maintained with blue ice at a temperature of 4 degrees Celsius/39.2 degrees Fahrenheit, along with a thermometer and laboratory prepared travel blanks.

GROUNDWATER GRADIENT

Following the installation and development of the monitoring wells, the depth to groundwater was measured from the top of the well casing on the north side. On February 4, 1992, the monitoring well casing was surveyed from a temporary bench mark to an elevation measurement of within 0.01 feet. The coordinates and elevations of the monitoring wells, as well as, the depth to groundwater measured on February 5, 1992 are as follows:

Well Designation	Northing (FT)	Easting (FT)	Elevation (FT)	Depth To Groundwater (FT)	Groundwater Elevation
MW1	989.8536	936.5557	99.91	20.84	79.07
MW 2	1063.4981	929.2717	101.45	22.34	79.11
MW 3	1045.0369	1036.5787	101.05	21.96	79.09
MW 4	1020.5841	999.1912	100.50	20.325	80.17
MW5	975.1602	976.5648	100.12	20.95	79.17
MW6	954.0810	1034.7073	100.48	21.29	79.19

The groundwater level in Monitoring Well MW4 is anomalously high constituting the interpretation of the mounding of groundwater near the center of the site. The groundwater gradient is essentially radially away from the site in all directions as indicated by groundwater measurements and the well casing elevations.

The temporary benchmark was "X" on the top of the curb on Garden Street located at the northwest corner of the cut intersection. An elevation of 100 feet was assumed at this temporary bench mark.

The groundwater is contained within the sand strata underlying the clay layer beneath the subject site. As a result, confining conditions exist for the groundwater and the observed groundwater elevations represent the pizeometric surface of the groundwater (FIGURE 4).

LABORATORY TESTS

Soil and groundwater samples collected from the monitoring wells were transferred to Trace Analysis Laboratories, Inc. of Hayward, California, a State certified laboratory. Selected samples collected from the testholes were tested for the following constituents:

TEST METHODS AND DETECTION LIMITS
FOR LABORATORY ANALYSES

SOIL

DESCRIPTION	MINIMUM REPORTING LEVEL MICROGRAMS PER GRAM, PPM
TPH (GAS) DHS (GC-FID)	1.0
BTX&E (GASOLINE) EPA 5030\8020	0.005

WATER

	MINIMUM REPORTING LEVEL MICROGRAMS PER LITER, PPB
TPH (GASOLINE) DHS (GC-FID)	50
BTX&E (GASOLINE) EPA 602	0.5

Laboratory testing was performed in accordance with approved Regional Water Quality Control Board and EPA Test Methods.

GEOLOGIST'S NOTE

This report has been prepared for the E-Z Serve Petroleum Marketing Company as it pertains to property located at 525 W. "A" Street, Hayward, California. The findings and 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.

ASSOCIATED SOILS ANALYSIS, INC.

DAVID J. CRANE
R.G.,#4639, Exp. 6-30-92

REGISTERED PROFESSIONAL GEOLOGIST
DAVID JACKSON CRANE
No. 4639
STATE OF CALIFORNIA

Written By:
GREGORY M. SULLIVAN
Environmental Geologist

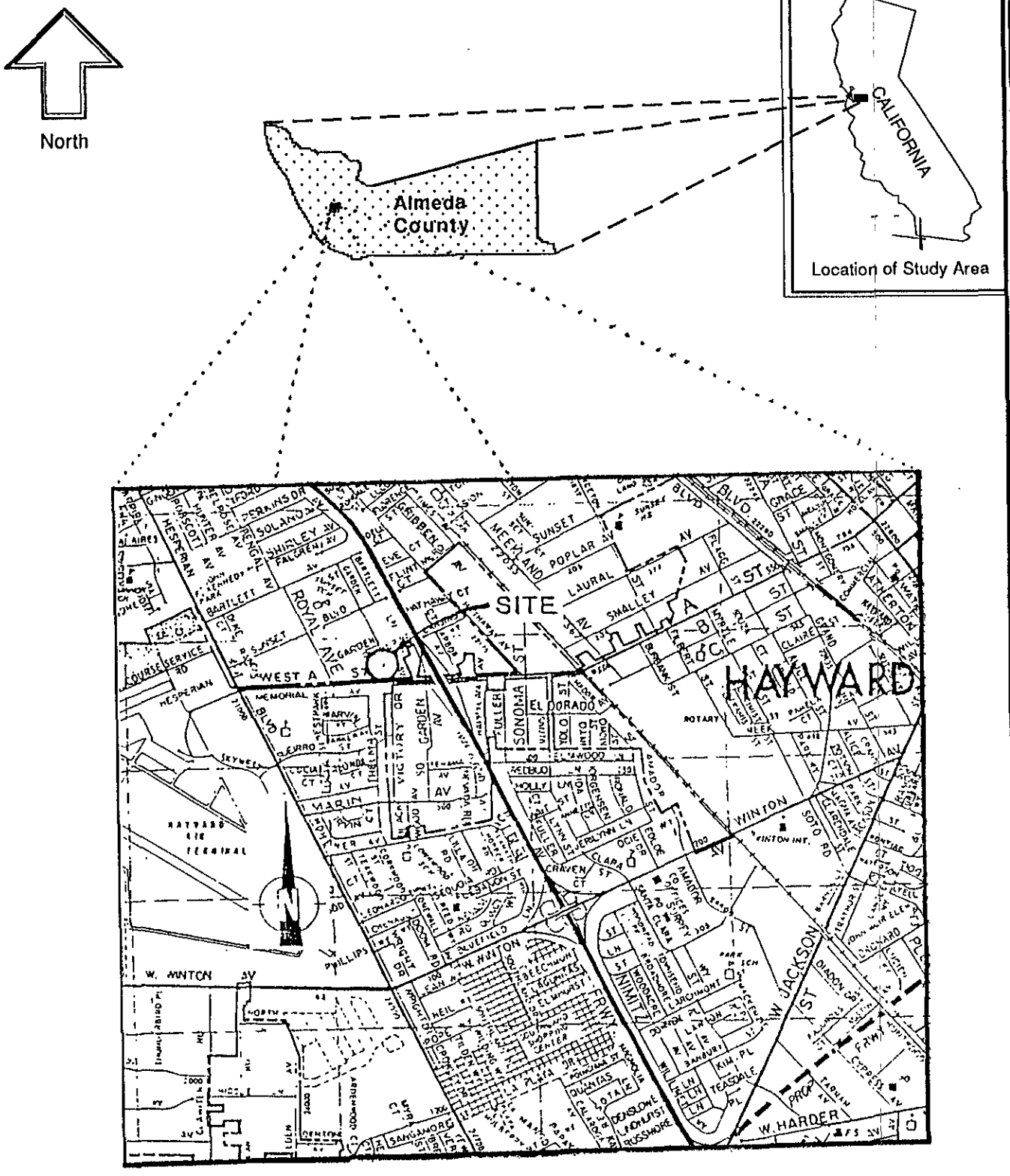
REFERENCES CITED

CECC, 1988, Site Assessment Reports on file with the Alameda County Dept. of Environmental Health

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

Wesnousk, Steven, 1986, Earthquakes, Quaternary Faults and Seismic Hazards in California; Journal of Geophysical Research Vol. 91, No. B12, p. 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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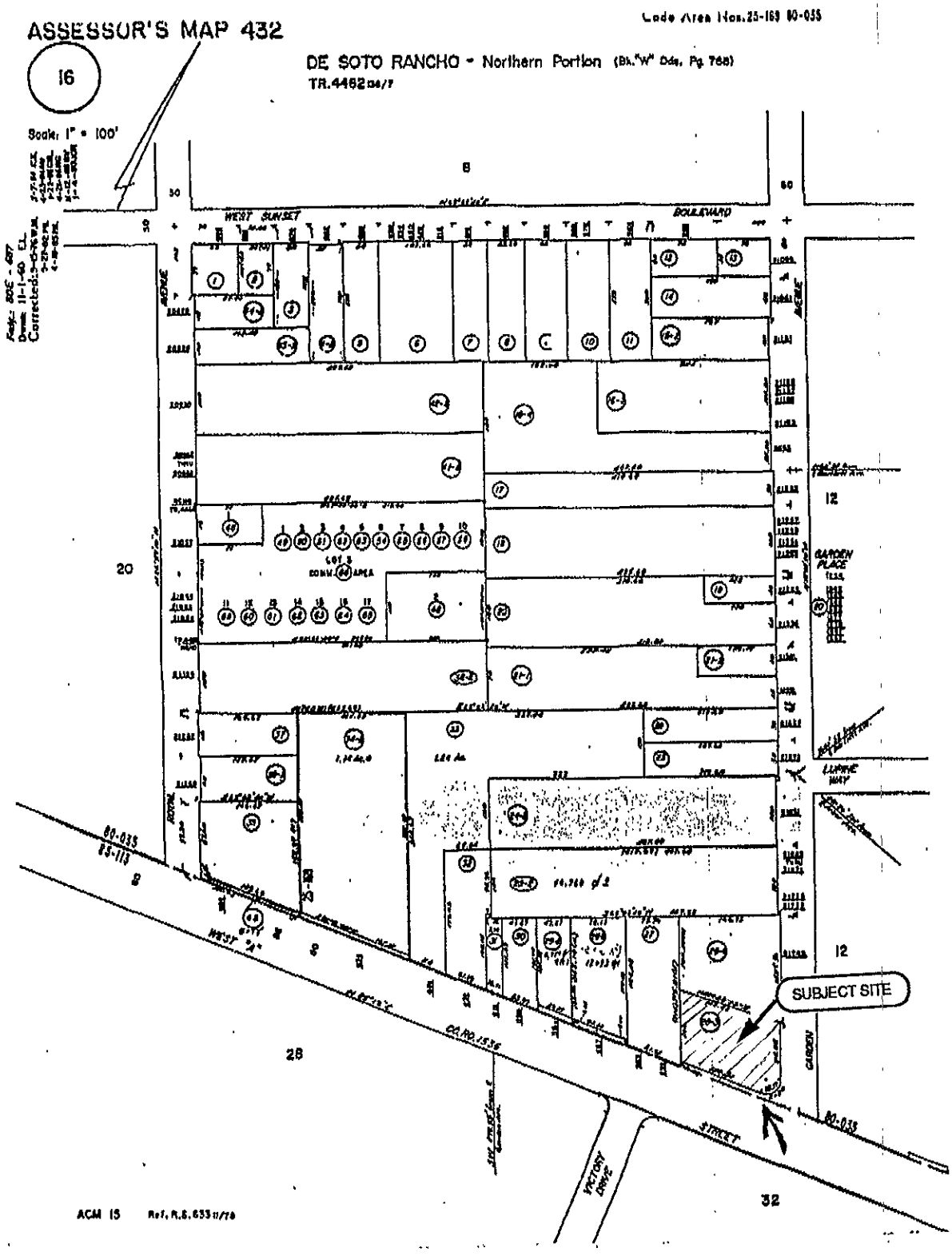

ASSESSOR'S PARCEL MAP

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

JOB NUMBER: 238-91 ASA

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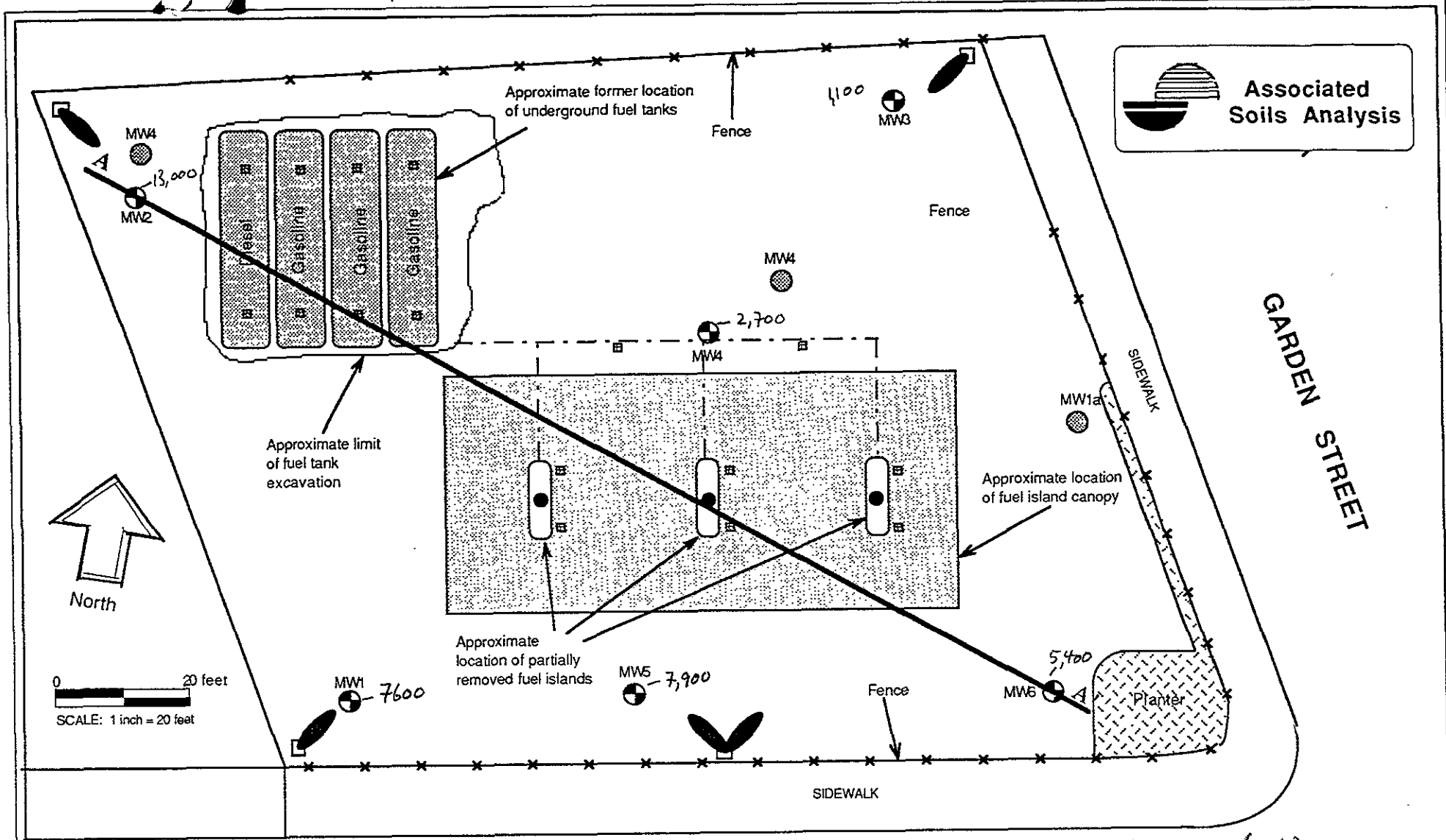
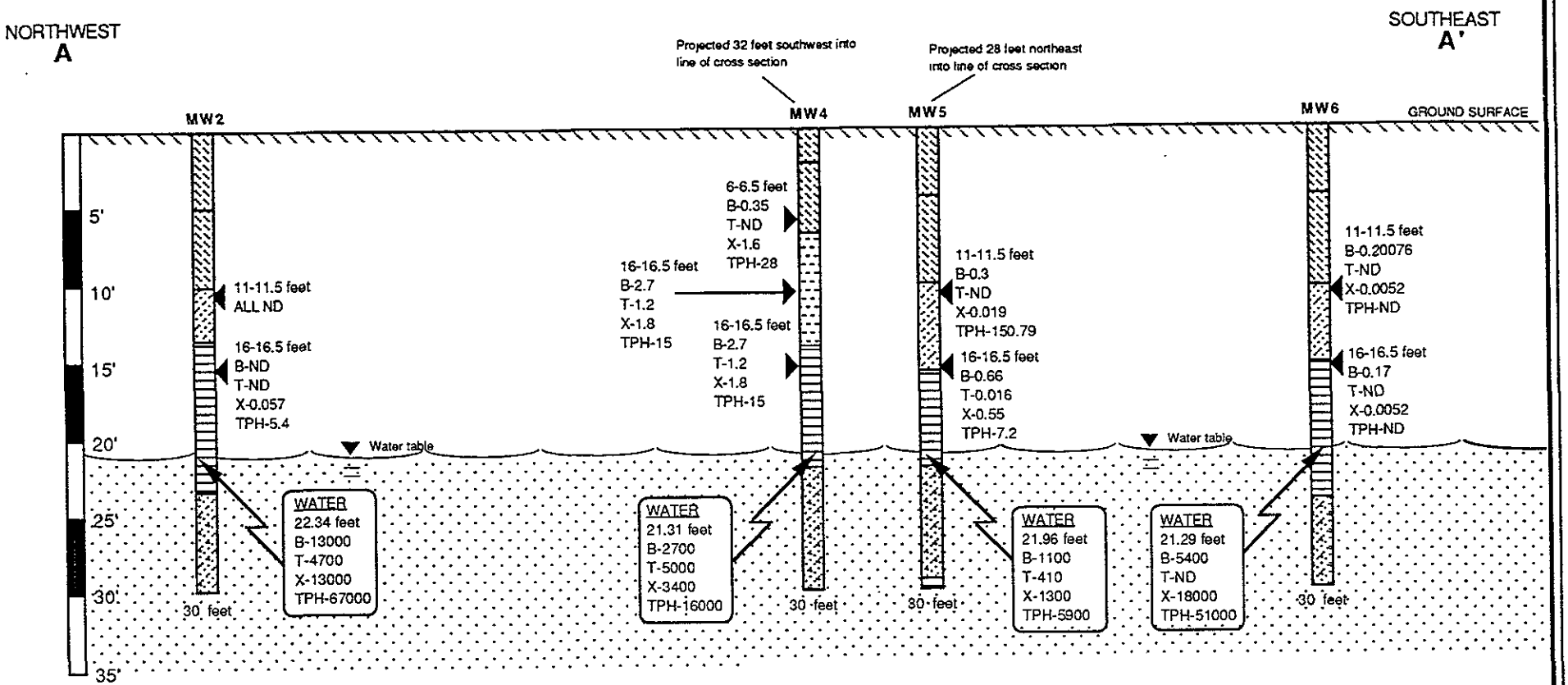
FIGURE 2



TESTHOLE BORING LOCATION MAP

FIGURE 3

SOIL PROFILE AND GROUNDWATER PETROLEUM CONSTITUENTS OF CROSS SECTION A-A'



Soil Classification

Sand (SW)	Silty Clay (CH)	High plasticity Clay (CH)
Sand (SP)	Silty Sand (SM)	Clayey Silt (ML)
Gravelly Sand (SW)		

0 — 20 feet

Horizontal scale
1 inch = 30 feet
Vertical scale
1 inch = 10 feet

LEGEND

WATER
21.31 feet
B-2700
T-5000
X-3400
TPH-16000
— Location of water sample showing depth to groundwater at time of sampling and petroleum constituent values.

16-16.5 feet
B-0.66
T-0.016
X-0.55
TPH-7.2
— Location of soil sample showing depth to sample and petroleum constituent values.

B - Benzene
T - Toluene
X - Xylene
ND - Non-detectable
TPH - Total Petroleum Hydrocarbons

Soil samples are in parts per million. Water samples are in parts per billion.

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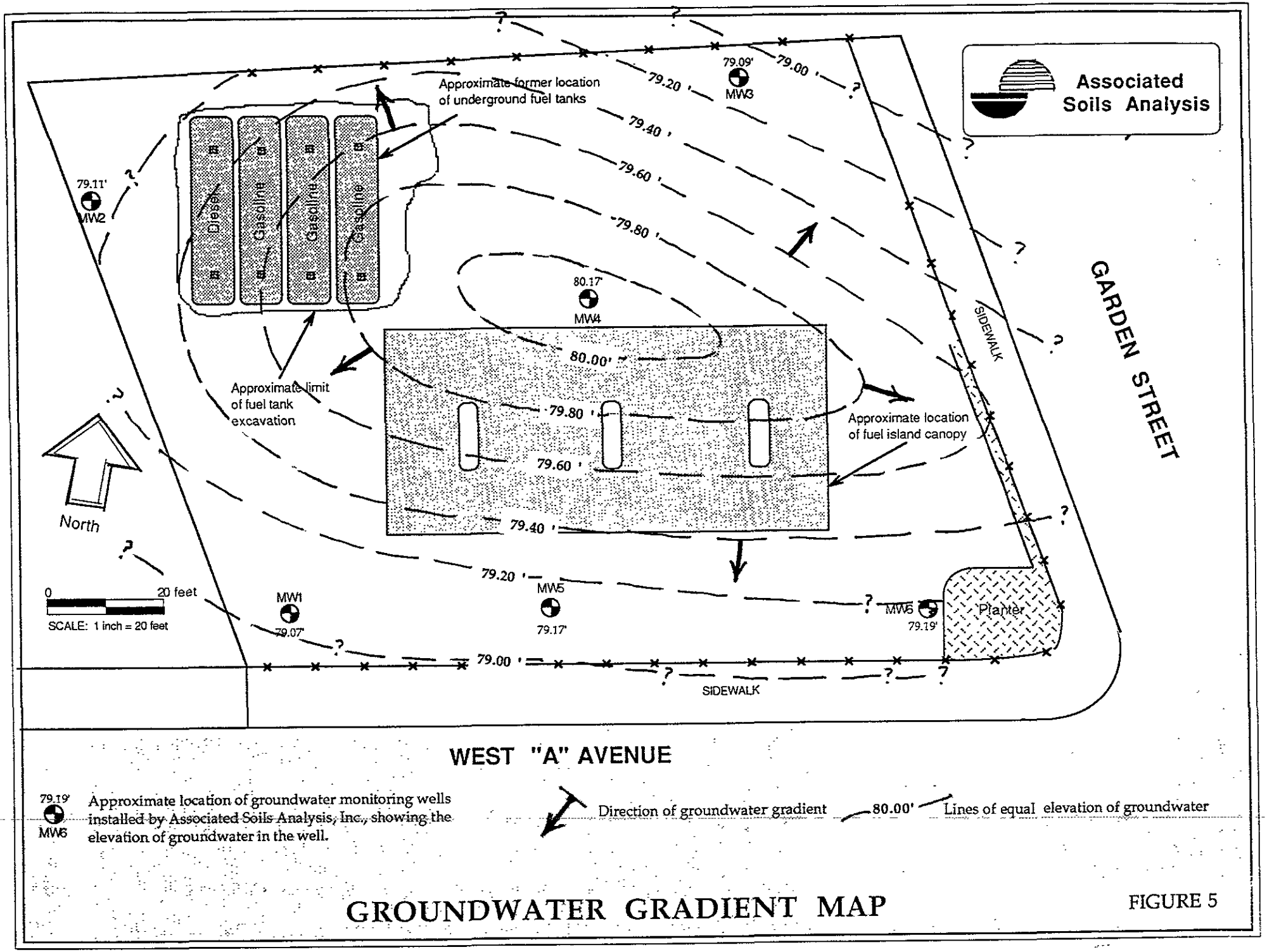
E-Z Serve
HMC Location 100877741
525 West A Street
Hayward, California

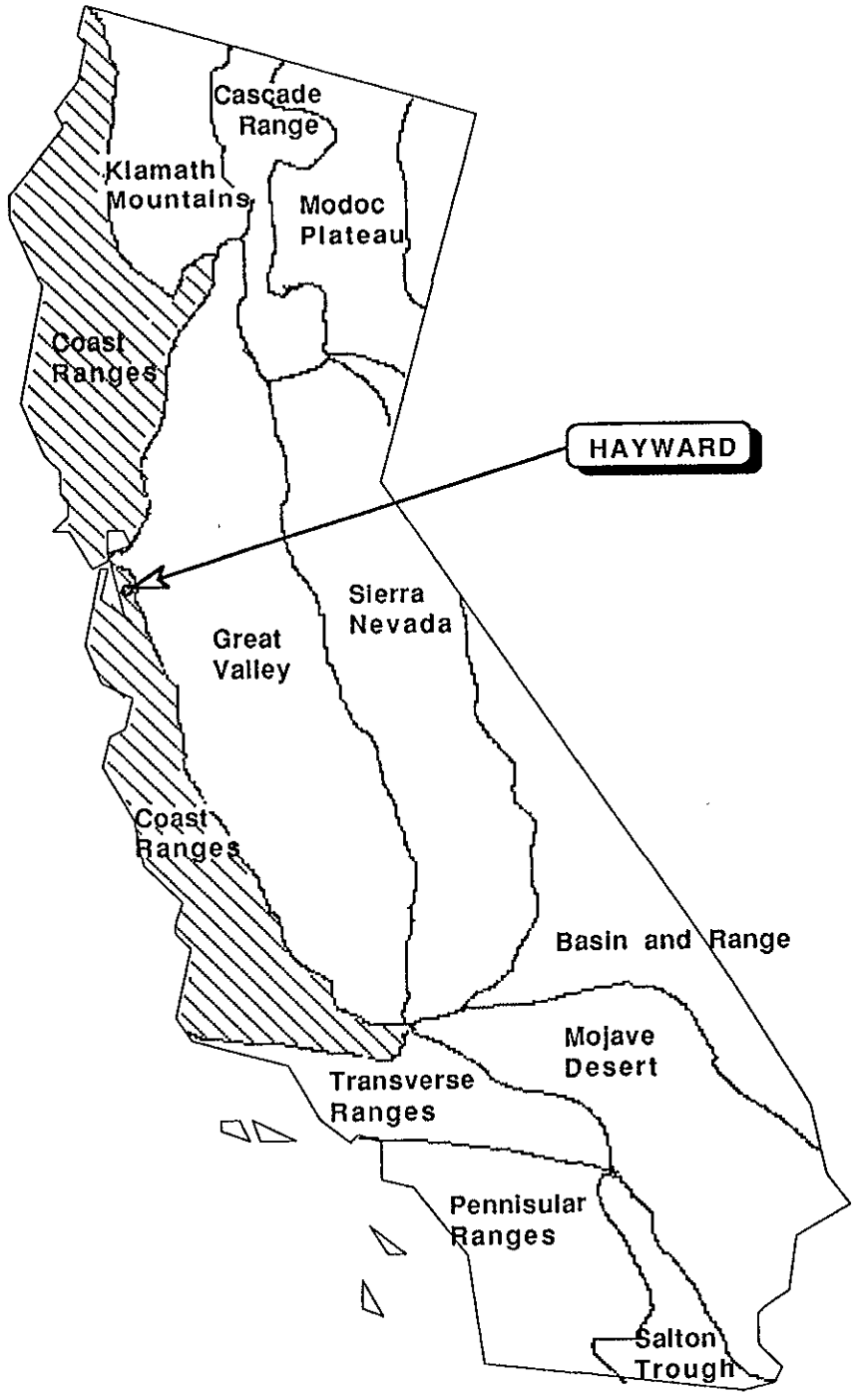
ASA# 238-91

FIGURE 4



GROUNDWATER GRADIENT MAP

FIGURE 5



GEOMORPHIC PROVINCE MAP OF CALIFORNIA

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FIGURE 6

APPENDIX A

Unified Soil Classification System

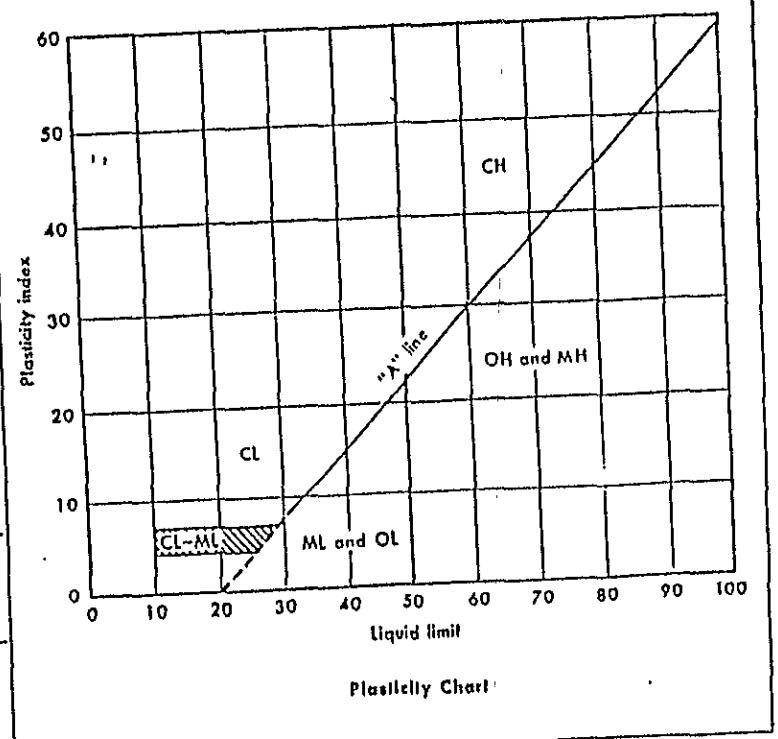
Major divisions			Group symbols		Typical names	Laboratory classification criteria
Coarse-grained soils (More than half of material is larger than No. 200 sieve size)	Gravels (More than half of coarse fraction is larger than No. 4 sieve size)	Clean gravels (Little or no fines)	GW		Well-graded gravels, 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	Atterburg limits below "A" line or P.I. less than 4
				u		Above "A" line with P.I. between 4 and 7 are *borderline* cases requiring use of dual symbols
			GC		Clayey gravels, gravel-sand-clay mixtures	Atterburg 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	Atterburg limits below "A" line or P.I. less than 4
				u		Limits plotting in hatched zone with P.I. between 4 and 7 are *borderline cases* requiring use of dual symbols.
			SC		Clayey sands, sand-clay mixtures	Atterburg 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**



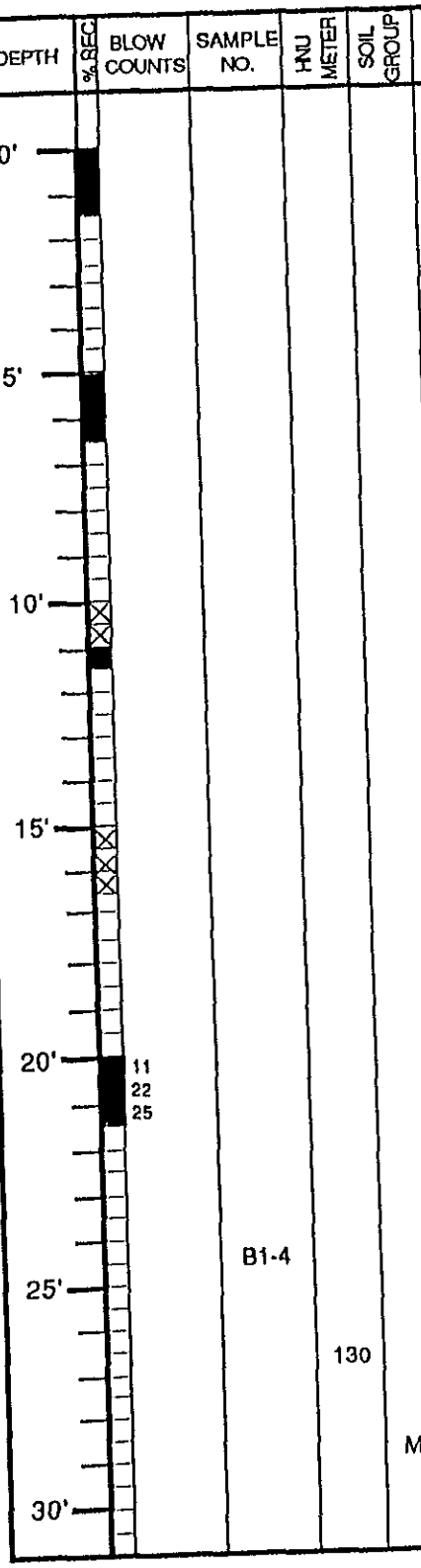
Plasticity Chart

*Division of GM and SM groups into subdivisions of d and u are for roads and airfields only. Subdivision is based on Atterburg 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



DESCRIPTION

UNDISTURBED SPLIT SPOON SAMPLER 2" OR 2.5" INSIDE DIAMETER OR 1.5" INSIDE DIAMETER STANDARD PENETRATION SAMPLER (SPILT BARREL SAMPLER)

FULL RECOVERY

PARTIAL RECOVERY

NO RECOVERY

STANDARD PENETRATION BLOW COUNTS: NUMBER OF BLOW TO DRIVE THE SAMPLER EACH 6" INCREMENT INTO THE UNDISTURBED SOIL USING A 140 LB. DOWNHOLE HAMMER WITH A 30" DROP.

SOIL SAMPLE NUMBER

HNU 101 PHOTOIONIZATION METER READING

SOIL GROUP DESIGNATER: UNIFIED SOILS CLASSIFICATION SYSTEM

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

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

Job No. 238-91

SUMMARY OF HNU 101 PHOTOIONIZATION ANALYZER
(Results of field investigation conducted on January 28-29, 1992)

(Soil in p.p.m.)

Boring Number	Depth	Meter Reading
MW1	10.5'-11'	50
"	15.5'-16'	10
"	20.5'-21'	18
MW2	10.5'-11'	15
"	15.5'-16'	55
"	20.5'-21'	130
MW3	10.5'-11'	10
"	15.5'-16'	40
"	20.5'-21'	25
MW4	5.5'-6'	5
"	10.5'-11'	20
"	15.5'-16'	180
"	20.5'-21'	150
MW5	10.5'-11'	15
"	15.5'-16'	70
"	20.5'-21'	130
MW6	10.5'-11'	25
"	15.5'-16'	40
"	20.5'-21'	110

PROJECT: E-Z Serve, Loc # 100877
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Hayward, California

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

JOB NO.: 238-91
DATE: 01/28/92
BY: G. Sullivan
ELEV.: 99.91'

BORING LOG NUMBER MW1

DEPTH	% REC	BLOW COUNTS	SAMPLE NO.	HNU METER	SOIL GROUP		SOIL DESCRIPTION
0'						0" - 1"	Baserock
					ML	1" - 4'	Clayey silt: dark brownish grey, moist, dense to hard, moderately cohesive, moderately plastic silt with moderately plastic clay, highly organic. No petroleum odor.
5'					ML	4' - 10'	Clayey silt: moderate yellowish brown, moist, medium dense, slight to moderate cohesive, moderately plastic silt with moderately cohesive clay. Soil is stained light olive grey below 8 feet. Slight petroleum odor below 8 feet.
10'		5 7 8	1	50	SP	10'-14'	Sand: light yellowish brown, moist , medium dense very fine to fine, poorly graded, sub-rounded to rounded sand. Stained light olive grey. Slight to moderate petroleum odor.
15'		5 9 19	2	10	CH	14'-23'	Clay: moderate yellowish brown, moist, stiff, moderate to highly cohesive, moderate to highly plastic clay. Slight petroleum odor. Localized dark grey petroleum staining.
20'		7 15 15	3	18	▼ SW	23'-28'	Sand: light yellowish brown, moist, medium dense, very fine to medium, well graded, sub-rounded to rounded sand, slightly silty. Slight to moderate petroleum odor.
25'					CH	28'-30'	Clay: moderate yellowish brown, very moist to saturated, medium dense, highly cohesive, highly plastic clay. Slight to moderate petroleum odor.
30'							*Boring terminated at 30 feet . Freestanding groundwater encountered at 21 feet.*

LOCATION: See testhole boring location map
EQUIPMENT: Mobile B80 drill rig with11 inch O.D. and 6.25 I.D and 2.5 inch split spoon sampler.

NOTES:

PROJECT: E-Z Serve, Loc # 100877
525 W. "A" Street
Hayward, California

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

JOB NO.: 238-91
DATE: 01/28/92
BY: G. Sullivan
ELEV.: 101.45'

BORING LOG NUMBER MW2

DEPTH	% REC	BLOW COUNTS	SAMPLE NO.	HNU METER	SOIL GROUP		SOIL DESCRIPTION
0'						0" - 1"	Baserock
					ML	1" - 5'	Clay silt: dark grey, moist, dense, moderately cohesive, moderately plastic silt, with moderately plastic clay. No *petroleum odor.*
5'					ML	5' - 10'	Clayey silt: moderate yellowish brown, moist, medium dense, moderately cohesive, moderately plastic silt with approximately 20-30% moderately cohesive clay. Soil is stained light grey below 9 feet. Slight petroleum odor below 9 feet.
10'		2 3 6	4	15	SM	10'-13'	Silty sand: *light yellow brown, moist,* loose, very fine to fine, poorly graded, rounded sand with approximately 5-15% very slight cohesive silt. Soil is stained light olive gray. Slight to *moderate petroleum* odor.
15'		4 9 9	5	55	CH	13'-23'	Clay: dark yellowish brown, moist to saturated, medium dense to stiff, highly cohesive, moderately to highly plastic clay. *Locally stained light olive grey.* Slight to moderate petroleum odor.
20'		8 15 19	6	130	SM	23'-30'	Silty sand: light olive grey, saturated, loose to medium dense, very fine to fine, poorly graded, rounded sand, with *approximately 25-35% slight cohesive silt.* Moderate petroleum odor.
25'							
30'							Boring terminated at 30 feet . Freestanding groundwater encountered at 21 feet.

LOCATION: See testhole boring location map
EQUIPMENT: Mobile B80 drill rig with 11 inch O.D. and 6.25 I.D and 2.5 inch split spoon sampler.

NOTES:

PROJECT: E-Z Serve, Loc # 100877
525 W. "A" Street
Hayward, California

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JOB NO.: 238-91
DATE: 01/28/92
BY: G. Sullivan
ELEV.: 101.5'

BORING LOG NUMBER MW3

DEPTH	% REC	BLOW COUNTS	SAMPLE NO.	HNU METER	SOIL GROUP		SOIL DESCRIPTION
0'						0" - 2"	Baserock
					ML	1" -3.5'	Clayey silt: dark greyish brown, moist, medium dense, silght to moderately cohesive, slight to medium plastic silt, with medium cohesive clay. No petroleum odor.
5'					ML/ MH	3.5' - 10.5'	Clayey silt: moderate yellowish brown, moist, medium dense, moderate to highly cohesive, moderate to highly plastic silt with highly cohesive clay. Soil is stained light olive grey below 6 feet. Slight to moderate petroleum odor below 7 feet.
10'		4 5 7	7	10	SM	10.5'-14'	Silty sand: light yellowish brown, moist, loose, very fine to fine, poorly graded, rounded sand with approximately 10-20% slight cohesive silt. Slight petroleum odor. Soil is stained light olive grey.
15'		6 11 13	8	40	CL /CH	14'-22'	Silty clay: moderate yellowish brown, moist, stiff, moderately to highly cohesive, moderately to highly plastic clay with silt. Slight petroleum odor.
20'		10 18 25	9	25	▼ SM	22'-30'	Silty sand: light olive grey, saturated, loose to medium density, very fine to fine, poorly graded, rounded sand, with approximately 23-30% slight cohesive silt. Moderate petroleum odor.
25'							
30'							Boring terminated at 30 feet . Freestanding groundwater encountered at 21 feet.

LOCATION: See testhole boring location map
EQUIPMENT: Mobile B80 drill rig with11 inch O.D. and 6.25 I.D and 2.5 inch split spoon sampler.

NOTES:

PROJECT: E-Z Serve, Loc # 100877
525 W. "A" Street
Hayward, California

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JOB NO.: 238-91
DATE: 01/28/92
BY: G. Sullivan
ELEV.: 100.50'

BORING LOG NUMBER MW4

DEPTH	% REC	BLOW COUNTS	SAMPLE NO.	HNU METER	SOIL GROUP		SOIL DESCRIPTION
0'						0" - 2"	Baserock
					SW	2" -2'	Gravelly sand: light yellowish brown, moist, medium density, very fine to very coarse, well graded, sub-rounded sand, with granules to 3 cm. No petroleum odor. (Backfill?).
					ML	2'-7'	Clayey silt: Moderate yellowish brown, moist, medium density, moderately cohesive, moderately plastic silt, with moderately cohesive clay. Slight petroleum odor below 6 feet.
5'		4 16 14	10	5			
					SM	7'-14'	Silty sand: Light yellowish brown, moist very fine to fine, poorly graded, rounded sand, with approximately 5-15% very slightly cohesive silt. Slight petroleum odor. Stained light olive grey from 8 feet and below.
10'		4 3 5	11	20			
					CH	14'-22'	Clay: dark yellowish brown, moist to saturated, medium dense, highly cohesive, highly plastic clay. Locally stained medium olive grey. Slight to moderate petroleum odor.
15'		5 8 13	12	180			
20'		7 15 18	13	150	▼ SM	22'-30'	Silty sand: light olive grey, saturated, loose to medium dense, very fine to medium, well graded, sub rounded sand. Slight petroleum odor.
25'							
30'							Boring terminated at 30 feet . Freestanding groundwater encountered at 21 feet.

LOCATION: See testhole boring location map
EQUIPMENT: Mobile B80 drill rig with 11 inch O.D. and 6.25 I.D and 2.5 inch split spoon sampler.

NOTES:

PROJECT: E-Z Serve, Loc # 100877
525 W. "A" Street
Hayward, California

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JOB NO.: 238-91
DATE: 01/29/92
BY: G. Sullivan
ELEV.: 100.48'

BORING LOG NUMBER MW5

DEPTH	% REC.	BLOW COUNTS	SAMPLE NO.	HNU METER	SOIL GROUP		SOIL DESCRIPTION
0'						0" - 2"	Baserock
					ML	2"-4.5'	Clayey silt: dark brownish grey, moist, medium dense, moderately cohesive, moderaetly plastic silt with clay, highly organic. No petroleum odor.
5'					ML	4.5'-10'	Clayey silt: Moderate yellowish brown, moist, medium to stiff, moderately cohesive, moderately plastic silt with clay. Soil is stained light olive grey below 6.5 feet. Slight petroleum odor below 6.5 feet.
10'		4 6 8	14	15	SM	10'-16'	Silty sand: light yellowish brown, moist, loose to medium dense, very fine to fine, poorly graded, rounded sand, with approximately 5-20% slightly cohesive silt. Soil is stained a light olive grey. Slight to moderate petroleum odor.
15'		7 12 18	15	70	CH	16'-22'	Clay: moderate yellowish brown, moist to very moist, stiff, moderate to highly cohesive, moderate to highly plastic clay. Slight to moderate petroleum odor. Localized staining (medium gray).
20'		7 10 18	16	130	SM	22'-29'	Silty sand: light yellowish brown, very moist to saturated, very fine to medium, well graded, sub-rounded sand with approximately 10-20% slightly cohesive silt. Slight to moderate petroleum odor, stained light olive grey.
25'					CH	29'-30'	Clay: moderate yellowish brown, saturated, stiff, highly cohesive, highly plastic clay. Slight petroleum odor. Stained light olive grey.
30'							Boring terminated at 30 feet . Freestanding groundwater encountered at 21 feet.

LOCATION: See testhole boring location map
EQUIPMENT: Mobile B80 drill rig with 11 inch O.D. and 6.25 I.D and 2.5 inch split spoon sampler.

NOTES:

PROJECT: E-Z Serve, Loc # 100877
525 W. "A" Street
Hayward, California

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JOB NO.: 238-91
DATE: 01/29/92
BY: G. Sullivan
ELEV.: 100.97'

BORING LOG NUMBER MW6

DEPTH	% REC	BLOW COUNTS	SAMPLE NO.	HNU METER	SOIL GROUP		SOIL DESCRIPTION
0'						0" - 1"	Baserock
					ML	1"-4'	Clayey silt: dark brownish grey, moist, medium dense to dense, moderately cohesive, moderatly plastic, sity with clay.. No petroleum odor.
5'					ML	4'-10.5'	Clayey silt: Moderate yellowish brown, moist, medium dense, slight to moderately plastic, moderate cohesive silt with clay. Stained light olive grey below 7.5 feet. Slight petroleum odor below 7.5 feet.
10'		4 7 10	17	25	SM	10.5'-15.5'	Silty sand: light yellowish brown, moist, loose to medium dense, very fine to fine, poorly graded, rounded sand, with approximately 15-20% slightly cohesive silt. Soil is stained a moderate olive grey. Slight to moderate petroleum odor.
15'		6 9 20	18	40	CL / CH	15.5'-24'	Clay: moderate yellowish brown, moist to saturated, stiff, moderate to highly cohesive, moderate to highly plastic. Slight to moderate petroleum odor. Localized petroleum staining.
20'		7 8 18	19	110	▼		
25'					SM	24'-30'	Silty sand: light yellowish brown, saturated, medium dense, very fine to medium, well-graded, sub-rounded to rounded sand with slight cohesive silt. Slight petroleum odor. Soil is stained light olive grey.
30'							Boring terminated at 30 feet . Freestanding groundwater encountered at 21 feet.

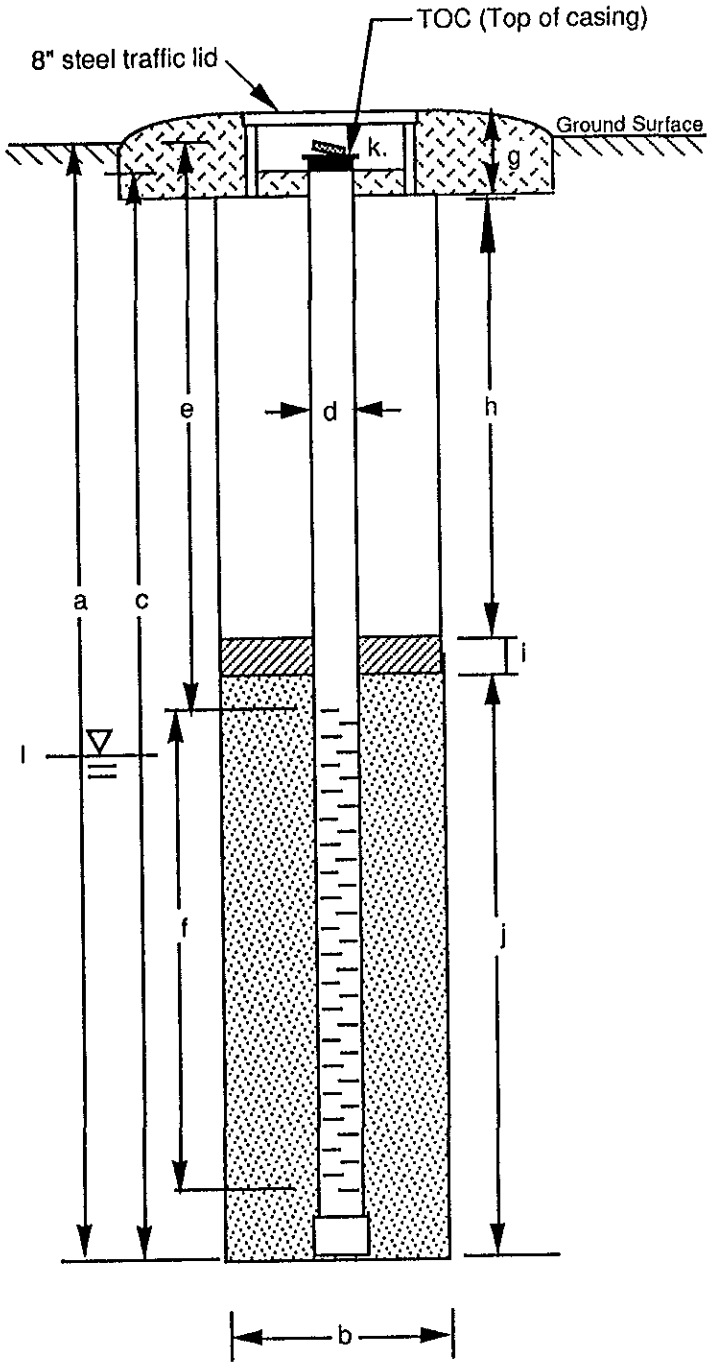
LOCATION: See testhole boring location map
EQUIPMENT: Mobile B80 drill rig with 11 inch O.D. and 6.25 I.D and 2.5 inch split spoon sampler.

NOTES:

WELL DETAILS

PROJECT NUMBER 238-91
PROJECT NAME EZ Serve location #100877
525 West A Street, Hayward, California
LOCATION See Testhole Boring location map
WELL PERMIT NO. N/A

BORING / WELL NO. MW1
TOP OF CASING ELEV. 99.91'
GROUND SURFACE ELEV. NA
DATUM Temporary Bench Mark
INSTALLATION DATE 1/28/92



EXPLORATORY BORING

a. Total depth 30 ft.
b. Diameter 11 in.
Drilling method Hollow stem auger

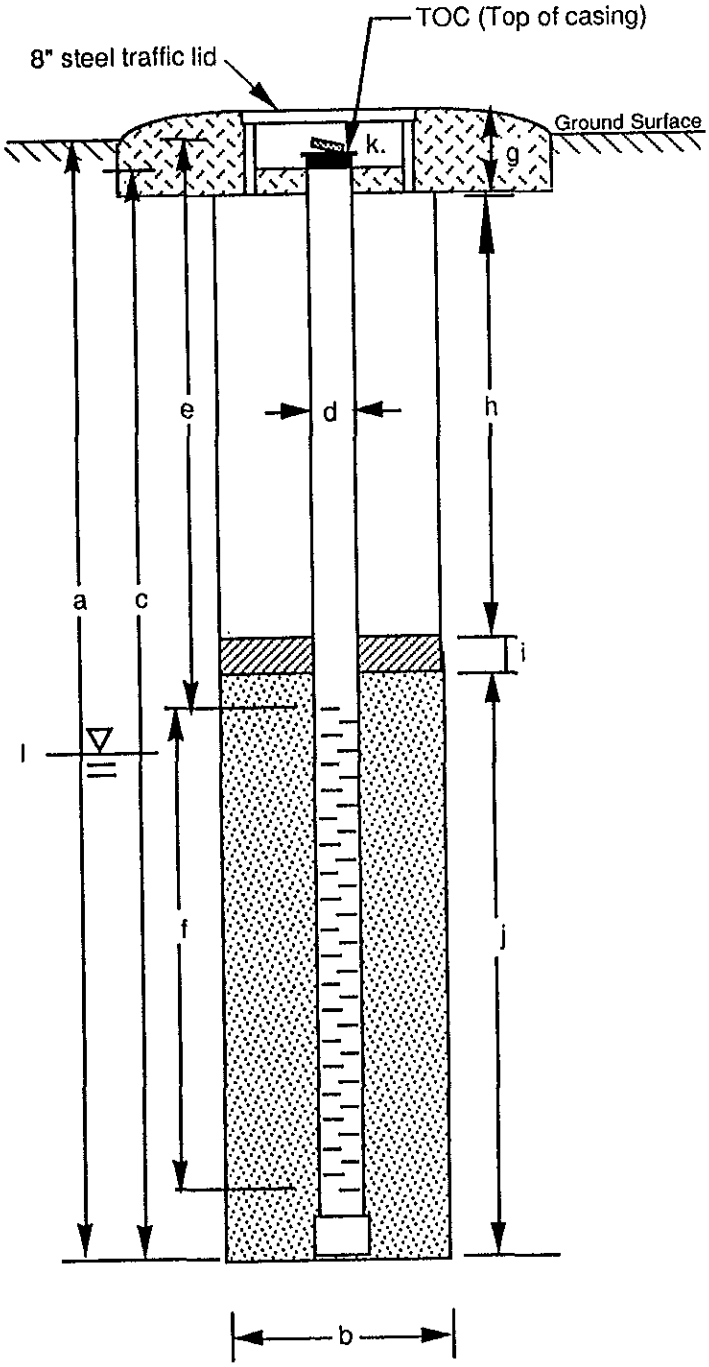
WELL CONSTRUCTION

c. Total casing length 29.5 ft.
Material Schedule 40 PVC
d. Diameter 4 in.
e. Depth to top perforations 14.5 ft.
f. Perforated length 14 ft.
Perforated interval from 14.5 to 28.5 ft.
Perforation type Slotted
Perforation size 0.02 in.
g. Surface seal 0.5 ft.
Material Concrete
h. Backfill 10.5 ft.
Material 7 sack cement slurry with 3% bentonite
i. Seal 2.5 ft.
Material 3/8" Bentonite pellets
J. Gravel pack 16.5 ft.
Gravel pack interval from 13.5 to 30 ft.
Material #3 Silica Sand
k. Locking wellcap
l. Depth to groundwater 20.82 ft.

WELL DETAILS

PROJECT NUMBER 238-91
PROJECT NAME EZ Serve location #100877
525 West A Street, Hayward, California
LOCATION See Testhole Boring location map
WELL PERMIT NO. N/A

BORING / WELL NO. MW2
TOP OF CASING ELEV. 101.45'
GROUND SURFACE ELEV. NA
DATUM Temporary Bench Mark
INSTALLATION DATE 1/28/92



EXPLORATORY BORING

a. Total depth 30 ft.
b. Diameter 11 in.
Drilling method Hollow stem auger

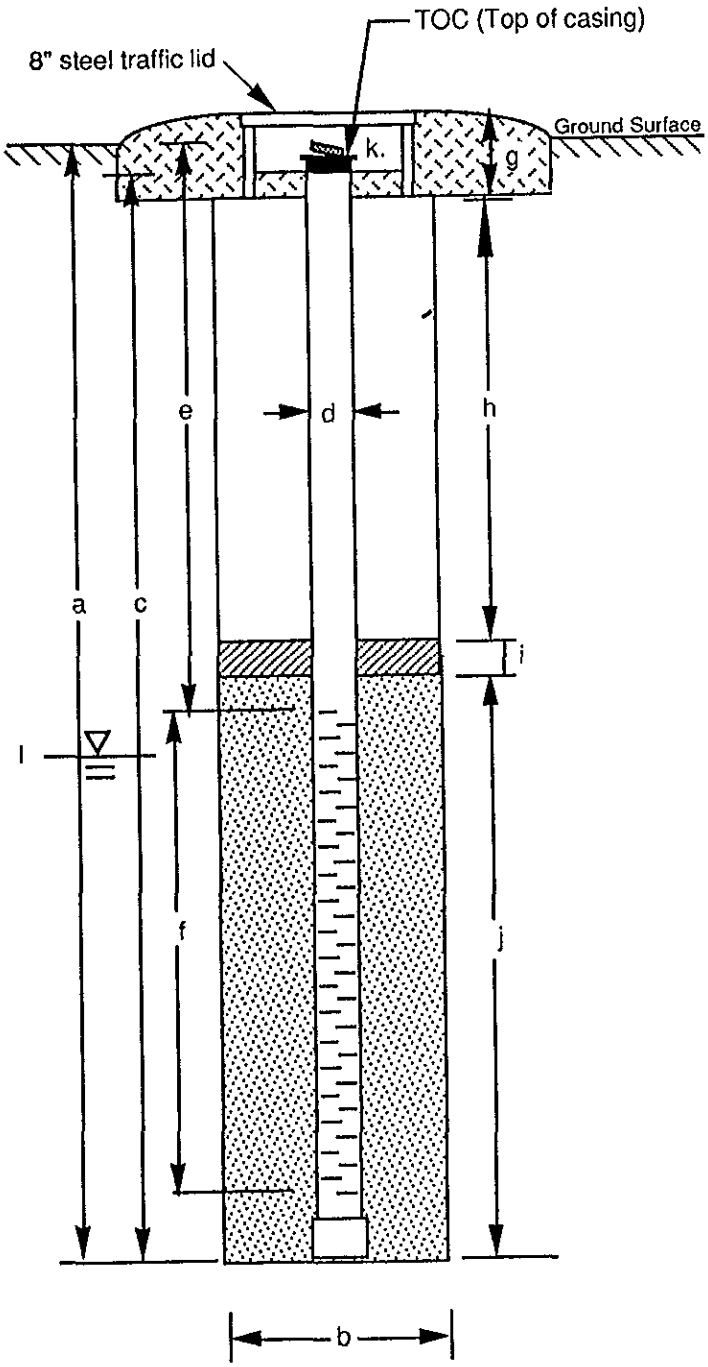
WELL CONSTRUCTION

c. Total casing length 30 ft.
Material Schedule 40 PVC
d. Diameter 4 in.
e. Depth to top perforations 15 ft.
f. Perforated length 14 ft.
Perforated interval from 15 to 29 ft.
Perforation type Slotted
Perforation size 0.02 in.
g. Surface seal 0.5 ft.
Material Concrete
h. Backfill 10.5 ft.
Material 7 sack cement slurry with 3% bentonite
i. Seal 3 ft.
Material 3/8" Bentonite pellets
J. Gravel pack 16 ft.
Gravel pack interval from 14 to 30 ft.
Material #3 Silica Sand
k. Locking wellcap
l. Depth to groundwater 22.35 ft.

WELL DETAILS

PROJECT NUMBER 238-91
PROJECT NAME EZ Serve location #100877
525 West A Street, Hayward, California
LOCATION See Testhole Boring location map
WELL PERMIT NO. N/A

BORING / WELL NO. MW3
TOP OF CASING ELEV. 101.05'
GROUND SURFACE ELEV. NA
DATUM Temporary Bench Mark
INSTALLATION DATE 1/28/92



EXPLORATORY BORING

a. Total depth 30 ft.
b. Diameter 11 in.
Drilling method Hollow stem auger

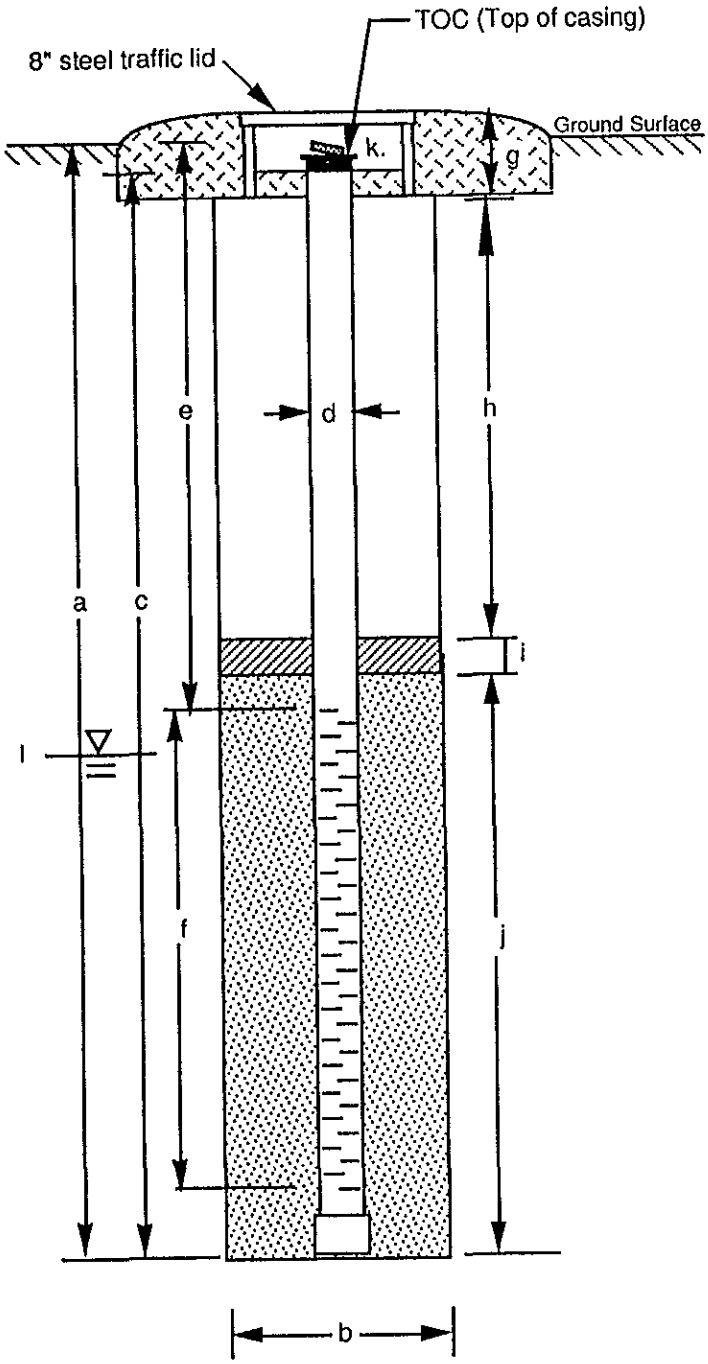
WELL CONSTRUCTION

c. Total casing length 30 ft.
Material Schedule 40 PVC
d. Diameter 4 in.
e. Depth to top perforations 15 ft.
f. *Perforated length* 14 ft.
Perforated interval from 15 to 29 ft.
Perforation type Slotted
Perforation size 0.02 in.
g. Surface seal 0.5 ft.
Material Concrete
h. Backfill 10.5 ft.
Material 7 sack cement slurry with 3% bentonite
i. Seal 3 ft.
Material 3/8" Bentonite pellets
J. Gravel pack 16 ft.
Gravel pack interval from 14 to 30 ft.
Material #3 Silica Sand
k. Locking wellcap
l. Depth to groundwater 21.85 ft.

WELL DETAILS

PROJECT NUMBER 238-91
PROJECT NAME EZ Serve location #100877
525 West A Street, Hayward, California
LOCATION See Testhole Boring location map
WELL PERMIT NO. N/A

BORING / WELL NO. MW4
TOP OF CASING ELEV. 100.50'
GROUND SURFACE ELEV. NA
DATUM Temporary Bench Mark
INSTALLATION DATE 1/28/92



EXPLORATORY BORING

a. Total depth 30 ft.
b. Diameter 11 in.
Drilling method Hollow stem auger

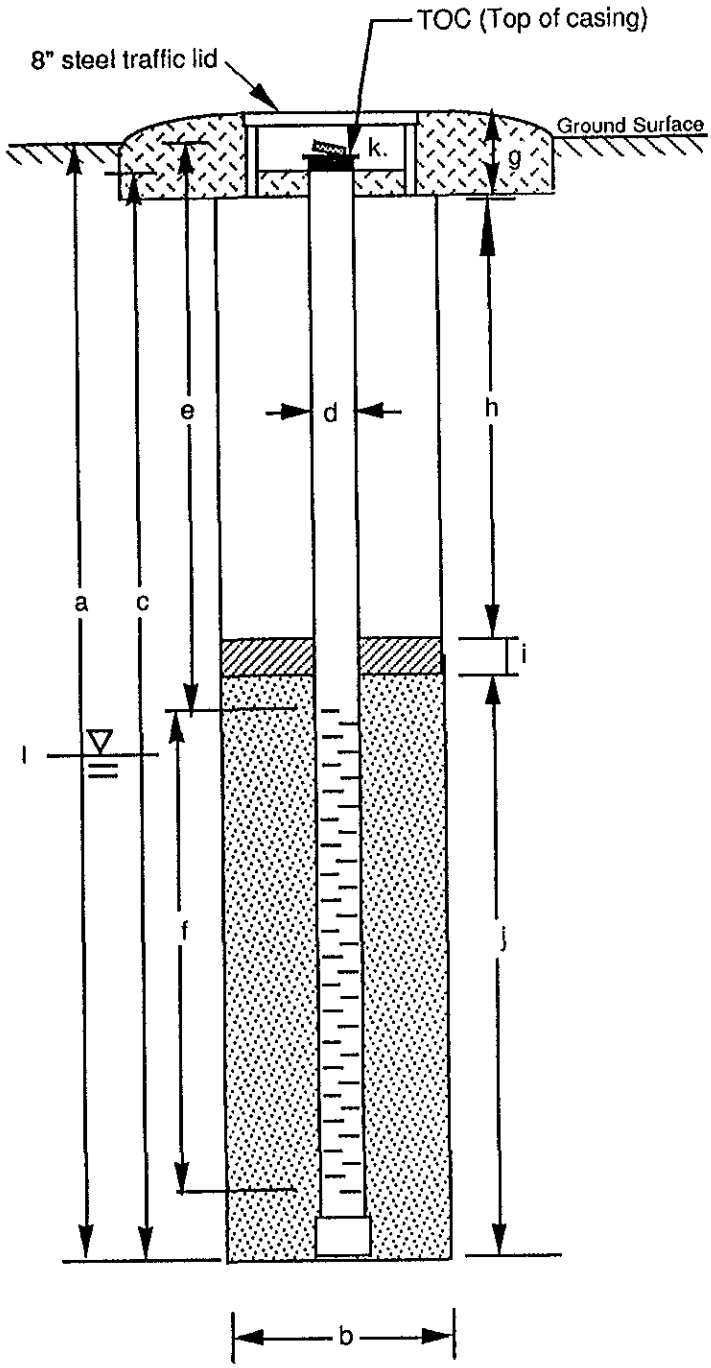
WELL CONSTRUCTION

c. Total casing length 30 ft.
Material Schedule 40 PVC
d. Diameter 4 in.
e. Depth to top perforations 15 ft.
f. Perforated length 14 ft.
Perforated interval from 15 to 29 ft.
Perforation type Slotted
Perforation size 0.02 in.
g. Surface seal 0.5 ft.
Material Concrete
h. Backfill 9.5 ft.
Material 7 sack cement slurry with 3% bentonite
i. Seal 3 ft.
Material 3/8" Bentonite pellets
J. Gravel pack 17 ft.
Gravel pack interval from 13 to 30 ft.
Material #3 Silica Sand
k. Locking wellcap
l. Depth to groundwater 21.31 ft.

WELL DETAILS

PROJECT NUMBER 238-91
PROJECT NAME EZ Serve location #100877
525 West A Street, Hayward, California
LOCATION See Testhole Boring location map
WELL PERMIT NO. N/A

BORING / WELL NO. MW5
TOP OF CASING ELEV. 100.12'
GROUND SURFACE ELEV. NA
DATUM Temporary Bench Mark
INSTALLATION DATE 1/29/92



EXPLORATORY BORING

a. Total depth 30 ft.
b. Diameter 11 in.
Drilling method Hollow stem auger

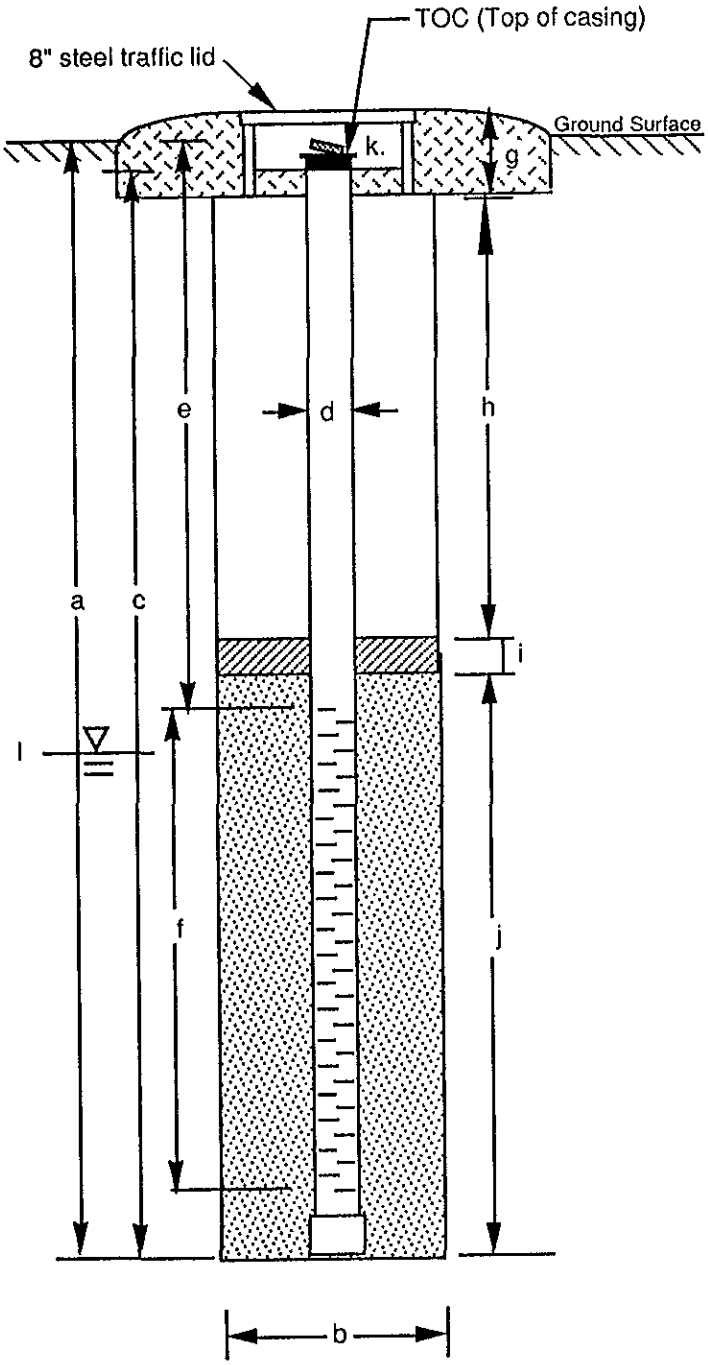
WELL CONSTRUCTION

c. Total casing length 30 ft.
Material Schedule 40 PVC
d. Diameter 4 in.
e. Depth to top perforations 15 ft.
f. Perforated length 14 ft.
Perforated interval from 15 to 29 ft.
Perforation type Slotted
Perforation size 0.02 in.
g. Surface seal 0.5 ft.
Material Concrete
h. Backfill 10.5 ft.
Material 7 sack cement slurry with 3% bentonite
i. Seal 3 ft.
Material 3/8" Bentonite pellets
J. Gravel pack 16 ft.
Gravel pack interval from 14 to 30 ft.
Material #3 Silica Sand
k. Locking wellcap
l. Depth to groundwater 20.93 ft.

WELL DETAILS

PROJECT NUMBER 238-91
PROJECT NAME EZ Serve location #100877
525 West A Street, Hayward, California
LOCATION See Testhole Boring location map
WELL PERMIT NO. N/A

BORING / WELL NO. MW6
TOP OF CASING ELEV. 100.48'
GROUND SURFACE ELEV. NA
DATUM Temporary Bench Mark
INSTALLATION DATE 1/29/92



EXPLORATORY BORING

a. Total depth 30 ft.
b. Diameter 11 in.
Drilling method Hollow stem auger

WELL CONSTRUCTION

c. Total casing length 30 ft.
Material Schedule 40 PVC
d. Diameter 4 in.
e. Depth to top perforations 15 ft.
f. Perforated length 14 ft.
Perforated interval from 15 to 29 ft.
Perforation type Slotted
Perforation size 0.02 in.
g. Surface seal 0.5 ft.
Material Concrete
h. Backfill 10.5 ft.
Material 7 sack cement slurry with 3% bentonite
i. Seal 3 ft.
Material 3/8" Bentonite pellets
J. Gravel pack 16 ft.
Gravel pack interval from 14 to 30 ft.
Material #3 Silica Sand
k. Locking wellcap
l. Depth to groundwater 21.29 ft.

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

FILE NO.: 238-91
DATE: 2-5-92

MONITORING WELL PURGING FOR SAMPLING RECORD

PROJECT LOCATION: EZ Serve Location #100877, 525 West A Street, Hayward, California

SAMPLER NAME (Print): Shannon Bennett

PRIOR TO PURGING	SAMPLE LOCATION	MW1	MW2	MW3	MW4	MW5
	TIME	7:19	7:15	7:11	7:08	7:05
	HNU READING (From top of casing)	50	35	11	50	80
	TEMPERATURE (C)	17.3° C	16.8° C	16.6° C	17.1° C	17.2° C
	DEPTH TO WATER (From top of casing)	20.82'	22.35'	21.85'	21.31'	20.93'
	VOLUME OF WATER IN WELL	9.1	7.6	8.1	8.6	9.0
	ELECTRICAL CONDUCTIVITY	1520	1580	1760	1426	1510
	pH READING	6.85	6.83	6.88	6.87	6.82
	TOTAL SUSPENDED SOLIDS	----	----	----	----	----
	THICKNESS OF STANDING PRODUCT	0	0	0	0	0
DURING PURGING	SAMPLE LOCATION	MW1	MW2	MW3	MW4	MW5
	TIME	7:40	7:48	8:30	8:45	8:50
	HNU READING (From top of casing)	----	----	----	----	----
	TEMPERATURE (F)	17.1° C	17.0° C	16 8° C	16.9° C	17.1° C
	DEPTH TO WATER (From top of casing)	23.45'	23.68'	22.92'	24.02'	22.01'
	VOLUME OF WATER IN WELL	----	----	----	----	----
	ELECTRICAL CONDUCTIVITY	1600	1710	1700	1580	1590
	pH READING	7.01	6.90	6.90	7.09	7.03
	TOTAL SUSPENDED SOLIDS	----	----	----	----	----
	THICKNESS OF STANDING PRODUCT	0	0	0	0	0
END OF PURGING	SAMPLE LOCATION					
	TIME					
	HNU READING (From top of casing)					
	TEMPERATURE (F)					
	DEPTH TO WATER (From top of casing)					
	VOLUME OF WATER IN WELL					
	ELECTRICAL CONDUCTIVITY					
	pH READING					
	TOTAL SUSPENDED SOLIDS					
	THICKNESS OF STANDING PRODUCT					
SAMPLE	SAMPLE LOCATION	MW1	MW2	MW3	MW4	MW5
	TIME	8:10	8:15	9:15	9:50	10:20
	HNU READING (From top of casing)	----	----	----	----	----
	TEMPERATURE (F)	17.0° C	16.9° C	17.1° C	16.9° C	17.2° C
	DEPTH TO WATER (From top of casing)	20.83'	22.35'	21.87'	21.33'	21.00'
	VOLUME OF WATER IN WELL	----	----	----	----	----
	ELECTRICAL CONDUCTIVITY	1620	1630	1750	1580	1600
	pH READING	7.05	7.00	7.05	7.09	7.04
	TOTAL SUSPENDED SOLIDS	----	----	----	----	----
	THICKNESS OF STANDING PRODUCT	0	0	0	0	0

NOTES: A petroleum odor was noted at the top of each well casing when the locking well cap was removed. The well caps were removed and allowed to stabalize before measuring the depth to water.

EZ Serve Location #100877
525 West A Street
Hayward, California

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

FILE NO.: 238-91
DATE: 2-5-92

MONITORING WELL PURGING FOR SAMPLING RECORD

PROJECT LOCATION: 7-Eleven Store #16329, 1701 Pacheco Rd, Bakersfield, California

SAMPLER NAME (Print): Shannon Bennett

PRIOR TO PURGING	SAMPLE LOCATION	MW6				
	TIME	7:00				
	HNU READING (From top of casing)	60				
	TEMPERATURE (C)	17.0° C				
	DEPTH TO WATER (From top of casing)	21.29'				
	VOLUME OF WATER IN WELL	8.9				
	ELECTRICAL CONDUCTIVITY	1700				
	pH READING	7.01				
	TOTAL SUSPENDED SOLIDS	----				
	THICKNESS OF STANDING PRODUCT	0				
DURING PURGING	SAMPLE LOCATION	MW6				
	TIME	10:30				
	HNU READING (From top of casing)	----				
	TEMPERATURE (F)	16.8° C				
	DEPTH TO WATER (From top of casing)	24.45'				
	VOLUME OF WATER IN WELL	----				
	ELECTRICAL CONDUCTIVITY	1750				
	pH READING	6.90				
	TOTAL SUSPENDED SOLIDS	----				
	THICKNESS OF STANDING PRODUCT	0				
END OF PURGING	SAMPLE LOCATION					
	TIME					
	HNU READING (From top of casing)					
	TEMPERATURE (F)					
	DEPTH TO WATER (From top of casing)					
	VOLUME OF WATER IN WELL					
	ELECTRICAL CONDUCTIVITY					
	pH READING					
	TOTAL SUSPENDED SOLIDS					
	THICKNESS OF STANDING PRODUCT					
SAMPLE	SAMPLE LOCATION	MW16				
	TIME	11:09				
	HNU READING (From top of casing)	----				
	TEMPERATURE (F)	17.2° C				
	DEPTH TO WATER (From top of casing)	21.30'				
	VOLUME OF WATER IN WELL	----				
	ELECTRICAL CONDUCTIVITY	1800				
	pH READING	7.04				
	TOTAL SUSPENDED SOLIDS	----				
	THICKNESS OF STANDING PRODUCT	0				

NOTES: A petroleum odor was noted at the top of each well casing when the locking well cap was removed. The well caps were removed and allowed to stabalize before measuring the depth to water.

APPENDIX B

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.

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 CRANE
Sampler Name (Print): Gregory M SULLIVAN
Project Address: 525 West "A" Street, HAYWARD, CA
Project Number: 238-91
Project Name: EZ Serve of Hayward
Sampler Signature: Gregory M. Sullivan

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

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	BTX&E (EPA 5030/8020)	EPA 601	EPA 602	TPH GASOLINE (EPA 8020)	TPH GASOLINE (DHS GC-FID)	TPH GASOLINE (MODIFIED EPA 8015 GC/FID)	TPH DIESEL (DHS 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 413.1 413.2 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)
MW5-14	11'-11½'	32°	1	✓					✓				1/29/91	9:15	✓				✓																			
MW5-15	16'-16½	32°	1	✓					✓				"	9:25	✓				✓																			
MW5-16	21'-21½	32°	1	✓					✓				"	9:37	H	O	L	D																				
MW6-17	11'-11½	32°	1	✓					✓				"	11:09	✓				✓																			
MW6-18	16'-16½	32°	1	✓					✓				"	11:19	✓				✓																			
MW6-19	21'-21½	32°	1	✓					✓				"	11:40	H	O	L	D																				

ANALYSIS REQUEST

CUSTODY RECORD

	Received by:	Received by:	Transport Chest Temp. / Received by Laboratory:
Time			4:58 PM
Date			1/29/92

Relinquished by Sampler: Gregory M. Sullivan
Received by:
Relinquished by:
Received by:

SPECIAL HANDLING

- ☐ 24 HOURS
- ☐ EXPEDITED 48 HOURS
- ☐ SEVEN DAY
- ☐ FAX
- ☒ OTHER 15 (#) of BUSINESS DAYS
- ☐ QA/QC
- ☐ CLP Level
- ☐ Blue Level

SPECIAL DETECTION LIMITS (Specify)

SPECIAL REPORTING REQUIREMENTS (Specify)

REMARKS: report to David Crane and to E-Z Serve

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

1740

SEND RESULTS TO: [redacted]

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 CRANE
Sampler Name (Print): Gregory M. SULLIVAN
Project Address: 525 WEST "A" STREET, HAYWARD, CA
Project Number: 238-91
Project Name: EZ SERVE of HAYWARD
Sampler Signature: Gregory M. Sullivan

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

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	BTX&E (EPA 5030/8020)	EPA 601	EPA 602	TPH GASOLINE (EPA 8020)	TPH GASOLINE (DHS GC-FID)	TPH GASOLINE (MODIFIED EPA 8015 GC/FID)	TPH DIESEL (DHS 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 413.1	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)
mw1-1	11'-11½'	32°	1	✓					✓				1/28/92	8:23	✓				✓																						
mw1-2	16'-16½'	32°	1	✓					✓				"	8:39	✓				✓																						
mw1-3	21'-21½'	32°	1	✓					✓				"	8:49	H	O	L	D	✓																						
mw2-4	11'-11½'	32°	1	✓					✓				"	11:05	✓				✓																						
mw2-5	16'-16½'	32	1	✓					✓				"	11:16	✓				✓																						
mw2-6	21'-21½'	32	1	✓					✓				"	11:28	H	O	L	D																						
mw3-7	11'-11½'	33°	1	✓					✓				"	2:38	✓				✓																						
mw3-8	16'-16½'	33°	1	✓					✓				"	2:51	✓				✓																						
mw3-9	21'-21½'	33°	1	✓					✓				"	2:59	H	O	L	D																						
MW4-10	6'-6½'	33°	1	✓					✓				"	4:18	✓				✓																						
mw4-11	11'-11½'	33°	1	✓					✓				"	4:28	✓				✓																						
mw4-12	16'-16½'	33°	1	✓					✓				"	4:37	✓				✓																						
mw4-13	21'-21½'	34°	1	✓					✓				"	4:48	H	O	L	D																						

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

SPECIAL DETECTION LIMITS (Specify)
BTX&E - 0.005 ppm
TPH - 1.0 ppm.

SPECIAL REPORTING REQUIREMENTS (Specify)

REMARKS:
SEE SPECIAL DETECTION LIMITS
Petroleum constituents were detected with the P.I. meter on all samples.

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

CUSTODY RECORD

Relinquished by Sampler:	Received by:	Relinquished by:	Received by:	Relinquished by:	Received by:
Gregory M. Sullivan	Gregory M. Sullivan				
Date: 1/28/92	Time: 5:20	Date:	Time:	Date:	Time:

Transport Chest Temp.

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

TAL

LOG NUMBER: 1740
DATE SAMPLED: 01/28/92
DATE RECEIVED: 01/28/92
DATE EXTRACTED: 02/03/92
DATE ANALYZED: 02/06/92
DATE REPORTED: 02/19/92

CUSTOMER: E-Z Serve Petroleum Marketing Company

REQUESTER: Amy Stites

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

Sample Type: Soil

Method and Constituent:	Units	MW1-1 Concentration	MW1-1 Reporting Limit	MW1-2 Concentration	MW1-2 Reporting Limit	MW2-4 Concentration	MW2-4 Reporting Limit
DHS Method:							
Total Petroleum Hydrocarbons as Gasoline	mg/kg	ND	0.50	19	0.50	ND	0.50
EPA Method 8020 for:							
Benzene	mg/kg	0.12	0.0050	0.98	0.0050	ND	0.0050
Toluene	mg/kg	ND	0.0050	0.013	0.0050	ND	0.0050
Ethylbenzene	mg/kg	0.0073	0.0050	0.17	0.0052	ND	0.0050
Xylenes	mg/kg	0.0053	0.0050	0.35	0.014	ND	0.0050

Method and Constituent:	Units	MW2-5 Concentration	MW2-5 Reporting Limit	MW3-7 Concentration	MW3-7 Reporting Limit	MW3-8 Concentration	MW3-8 Reporting Limit
DHS Method:							
Total Petroleum Hydrocarbons as Gasoline	mg/kg	5.4	0.50	5.6	0.50	6.4	0.50
EPA Method 8020 for:							
Benzene	mg/kg	ND	0.0050	0.69	0.0050	1.0	0.0050
Toluene	mg/kg	ND	0.0050	ND	0.0050	ND	0.0050
Ethylbenzene	mg/kg	1.1	0.0050	0.048	0.0050	0.13	0.0052
Xylenes	mg/kg	0.057	0.0050	0.013	0.0070	0.078	0.014

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

TAL. Trace Analysis Laboratory, Inc.

LOG NUMBER: 1740
DATE SAMPLED: 01/28/92
DATE RECEIVED: 01/28/92
DATE EXTRACTED: 02/03/92
DATE ANALYZED: 02/06/92
DATE REPORTED: 02/19/92
PAGE: Two

Sample Type: Soil

Method and Constituent:	Units	MW4-10 Concentration	MW4-10 Reporting Limit	MW4-11 Concentration	MW4-11 Reporting Limit	MW4-12 Concentration	MW4-12 Reporting Limit
DHS Method:							
Total Petroleum Hydrocarbons as Gasoline	mg/kg	28	0.50	5.7	0.50	15	0.50
EPA Method 8020 for:							
Benzene	mg/kg	0.035	0.024	0.22	0.012	2.7	0.024
Toluene	mg/kg	ND	0.024	0.076	0.012	1.2	0.024
Ethylbenzene	mg/kg	0.40	0.026	0.17	0.013	0.39	0.026
Xylenes	mg/kg	1.6	0.070	0.64	0.035	1.8	0.070

Method and Constituent:	Units	Method Blank Concentration	Method Blank Reporting Limit
DHS Method:			
Total Petroleum Hydrocarbons as Gasoline	mg/kg	ND	0.50
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	0.0050

QC Summary:

% Recovery: 87*
% RPD: 39*

Concentrations reported as ND were not detected at or above the reporting limit.
* The Recovery is for the Laboratory Control Sample and the RPD exceeds our control limits, due to the high concentration of the spiked sample.

Louis W. DuPuis

Trace Analysis Laboratory, Inc.
3423 Investment Boulevard, #6 • Hayward, California 94545
Telephone (510) 783-6960
Facsimile (510) 783-1512

TAL

LOG NUMBER: 1742
DATE SAMPLED: 01/29/92
DATE RECEIVED: 01/29/92
DATE EXTRACTED: 02/03/92
DATE ANALYZED: 02/06/92
DATE REPORTED: 02/19/92

CUSTOMER: E-Z Serve Petroleum Marketing Company

REQUESTER: Amy Stites

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

Sample Type: Soil

Method and Constituent:	Units	MW5-14 Concentration	MW5-14 Reporting Limit	MW5-15 Concentration	MW5-15 Reporting Limit	MW6-17 Concentration	MW6-17 Reporting Limit
DHS Method:							
Total Petroleum Hydrocarbons as Gasoline	mg/kg	0.79	0.50	7.2	0.50	ND	0.50
EPA Method 8020 for:							
Benzene	mg/kg	0.30	0.0050	0.66	0.0050	0.0076	0.0050
Toluene	mg/kg	ND	0.0050	0.016	0.0050	ND	0.0050
Ethylbenzene	mg/kg	0.049	0.0052	0.16	0.0052	ND	0.0050
Xylenes	mg/kg	0.019	0.014	0.55	0.014	0.0052	0.0050

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

TAL Trace Analysis Laboratory, Inc.

LOG NUMBER: 1742
DATE SAMPLED: 01/29/92
DATE RECEIVED: 01/29/92
DATE EXTRACTED: 02/03/92
DATE ANALYZED: 02/06/92
DATE REPORTED: 02/19/92
PAGE: Two

Sample Type: Soil

Method and Constituent:	Units	MW6-18 Concentration	MW6-18 Reporting Limit	Method Blank Concentration	Method Blank Reporting Limit
DHS Method:					
Total Petroleum Hydrocarbons as Gasoline	mg/kg	0.55	0.50	ND	0.50
EPA Method 8020 for:					
Benzene	mg/kg	0.17	0.0050	ND	0.0050
Toluene	mg/kg	ND	0.0050	ND	0.0050
Ethylbenzene	mg/kg	0.016	0.0050	ND	0.0050
Xylenes	mg/kg	0.021	0.0050	ND	0.0050

QC Summary:

% Recovery: 87*
% RPD: 39*

Concentrations reported as ND were not detected at or above the reporting limit.
* The Recovery is for the Laboratory Control Sample, and the RPD exceeds our control limits, due to the high concentration in the spiked sample.

Louis W. DuPuis
Quality Assurance/Quality Control Manager

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 February 5, 1992

WATER IN PPB

Monitoring Well No.	Depth (feet)	Benzene	Ethyl Benzene	Toluene	Total Xylenes	TPH
MW1	20.84	7600	2400	2300	6500	46000
MW2	22.34	13000	820	4700	13000	67000
MW3	21.96	1100	ND	ND	1300	5900
MW4	21.31	2700	ND	410	3400	16000
MW5	20.97	7900	2900	5000	18000	78000
MW6	21.29	5400	3600	3500	10000	51000
TB	20.97	ND	ND	ND	ND	ND
MB	21.29	ND	ND	ND	ND	ND

TB = Travel Blank
MB = Method Blank

Soil values are in ppm

Test method for BTX&E = EPA 602
Test method for TPH = DOHS/GC-FID
ND = Non-detected
Refer to laboratory reporting forms for specific reporting information.

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 W. "A" Street, Hayward CA
Project Number: 238-91
Project Name: E-Z Serve #100877
Sampler Signature:
I attest that the proper field sampling proceedures were used during the collection of these samples

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
Point 1	20'10 1/3	32	2		✓				✓				1-5-92	8:10
Point 2	22'4 1/3	33	2		✓				✓				"	8:35
Point 3	21'11 1/2	33	2		✓				✓				"	9:15
Point 4	21'3 3/4	34	2		✓				✓				"	9:50
Point 5	20'11 3/4	35	2		✓				✓				"	10:20
Point 6	21'3 1/2	35	2		✓				✓				"	11:07
Travel Blank	—	35	2		✓				✓				"	11:30

ANALYSIS REQUEST

BTX&E (EPA 5020/8020)	BTX&E (EPA 5030/8020)	☐EPA 601 ■EPA 602	TPH GASOLINE (EPA 8020)	TPH GASOLINE (DHS GC-FID)	TPH DIESEL (EPA 8015 GC/FID)	TPH DIESEL	TPH Diesel 3510 GC/FID	TPH Diesel 3550 GC/FID	TPH as Aviation Fuel	TCLP: ☐Metals ☐VOA ☐Semi VOA	TOTAL OIL AND GREASE ☐413.1 ☐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)
	✓	✓															
	✓	✓															
	✓	✓															
	✓	✓															
	✓	✓															
	✓	✓															
	✓	✓															

SPECIAL HANDLING
- ☐ 24 HOURS
- ☐ EXPEDITED 48 HOURS
- ■ SEVEN DAY 1 week
- ☐ FAX
- ☐ OTHER ____ (#) of BUISNESS DAYS
- ☐ QA/QC
- ☐ CLP Level
- ☐ Blue Level

SPECIAL DETECTION LIMITS (Specify)

SPECIAL REPORTING REQUIREMENTS (Specify)

REMARKS:
SEND INVOICE TO E-Z SERVE
TEST TRAVEL BLANK ONLY IF Detected IS Found in Samples

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

CUSTODY RECORD

Relinquished by Sampler:	Received by:	Relinquished by:	Received by:	Relinquished by:	Received by Laboratory:
Date: 1-5-92	Date:	Date:	Date:	Date:	Date: 1-6-92
Time: 12:10	Time:	Time:	Time:	Time:	Time: 12:10

Transport Chest Temp: TAL

LOG NUMBER: 1762
DATE SAMPLED: 02/05/92
DATE RECEIVED: 02/05/92
DATE ANALYZED: 02/08/92
DATE REPORTED: 02/12/92
PAGE: Two

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
EPA Method 602:							
Benzene	ug/l	7,600	95	13,000	95	1,100	95
Chlorobenzene	ug/l	ND	70	ND	70	ND	70
1,2-Dichlorobenzene	ug/l	ND	140	ND	140	ND	140
1,3-Dichlorobenzene	ug/l	ND	70	ND	70	ND	70
1,4-Dichlorobenzene	ug/l	ND	130	ND	130	ND	130
Ethylbenzene	ug/l	2,400	120	820	120	ND	120
Toluene	ug/l	2,300	130	4,700	130	ND	130
Xylenes	ug/l	6,500	320	13,000	320	1,300	320

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
EPA Method 602:							
Benzene	ug/l	2,700	95	7,900	95	5,400	95
Chlorobenzene	ug/l	ND	70	ND	70	ND	70
1,2-Dichlorobenzene	ug/l	ND	140	ND	140	ND	140
1,3-Dichlorobenzene	ug/l	ND	70	ND	70	ND	70
1,4-Dichlorobenzene	ug/l	ND	130	ND	130	ND	130
Ethylbenzene	ug/l	ND	120	2,900	120	3,600	120
Toluene	ug/l	410	130	5,000	130	3,500	130
Xylenes	ug/l	3,400	320	18,000	320	10,000	320

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

Trace Analysis Laboratory, Inc.
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Telephone (510) 783-6960
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TAL

LOG NUMBER: 1762
DATE SAMPLED: 02/05/92
DATE RECEIVED: 02/05/92
DATE ANALYZED: 02/08/92
DATE REPORTED: 02/12/92

CUSTOMER: E-Z Serve Petroleum Marketing Company

REQUESTER: Amy Stites

PROJECT: C.T.L.-2209-91, Hayward City Parks & Recreation Yard

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	46,000	1,500	67,000	1,500	5,900	1,500

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	16,000	1,500	78,000	1,500	51,000	1,500

Method and Constituent:	Units	Travel Blank Concentration	Travel Blank Reporting Limit	Method Blank Concentration	Method Blank Reporting Limit
DHS Method:					
Total Petroleum Hydrocarbons as Gasoline	ug/l	ND	50	ND	50

QC Summary:

% Recovery: 118
% RPD: 28

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PAGE: Three

Sample Type: Water

Method and Constituent	Units	Travel Blank Concentration	Travel Blank Reporting Limit	Method Blank Concentration	Method Blank Reporting Limit
EPA Method 602:					
Benzene	ug/l	ND	0.50	ND	0.50
Chlorobenzene	ug/l	ND	0.50	ND	0.50
1,2-Dichlorobenzene	ug/l	ND	0.50	ND	0.50
1,3-Dichlorobenzene	ug/l	ND	0.50	ND	0.50
1,4-Dichlorobenzene	ug/l	ND	0.50	ND	0.50
Ethylbenzene	ug/l	ND	0.50	ND	0.50
Toluene	ug/l	ND	0.50	ND	0.50
Xylenes	ug/l	ND	1.5	ND	0.50

QC Summary:

% Recovery: 118
% RPD: 28

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Louis W. DuPuis
Quality Assurance/Quality Control Manager